Las Chispas Operation

Technical Report

Sonora, Mexico

Effective Date: July 19, 2023

Report Date: September 5, 2023

Prepared for: SilverCrest Metals Inc.

570 Granville St, Suite, 501
Vancouver, British Columbia, Canada, V6C 3P1

Prepared by: Ausenco Engineering Canada Inc.

1050 W Pender St, Suite 1200
Vancouver, British Columbia, Canada, V6E 4T3

List of Qualified Persons:
Kevin Murray, P. Eng., Ausenco Engineering Canada Inc.
Scott Weston, P. Geo., Ausenco Sustainability Inc.
Wynand Marthinus Marx, Fellow SAIMM, BBE Group Canada
Patrick Langlais, P. Eng., Entech Mining Ltd.
Michael Verreault, P. Eng., Hydro-Ressources Inc.
Ben Peacock, P. Eng., Knight Piésold Ltd.
Jarita Barry, P. Geo., P&E Mining Consultants Inc.
David Burga, P. Geo., P&E Mining Consultants Inc.
Eugene J. Puritch, P. Eng., P&E Mining Consultants Inc.
William Stone, P. Geo., P&E Mining Consultants Inc.
Yungang Wu, P. Geo., P&E Mining Consultants Inc.
Christopher Lee, P. Eng., WSP Canada Inc.
Humberto F. Preciado, P.E., WSP USA Inc.

CERTIFICATE OF QUALIFIED PERSON

Kevin Murray, P. Eng.

I, Kevin Murray, P.Eng., certify that I am employed as a Manager Process Engineering with Ausenco Engineering Canada Inc. ("Ausenco"), with an office address of 1050 West Pender Street, Suite 1200, Vancouver, BC, Canada, V6E 3S7.

1. This certificate applies to the technical report titled *"Las Chispas Operation Technical Report"* dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").
2. I graduated from the University of New Brunswick, Fredericton NB, in 1995 with a Bachelor of Science in Chemical Engineering.
3. I am a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Registration number# 32350 and the Northwest Territories Association of Professional Engineers and Geoscientists' Registration# L4940.
4. I have practiced my profession for 23 years. I have been directly involved in all levels of engineering studies from preliminary economic assessments (PEAs) to feasibility studies. I have led preliminary test work design, test work analysis and flowsheet development as well involvement in detailed design and commissioning. I have also developed operating cost estimates and contributed to and reviewed capital cost estimates.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I made a site visit to the Las Chispas Project on March 14 to 16, 2023.
7. I am responsible for Sections 1.1, 1.2, 1.9, 1.13, 1.14.1, 1.14.3, 1.14.5, 1.14.6, 1.15, 1.17, 1.18, 1.19, 1.19.2.2, 1.20, 2, 3.1, 3.4, 3.5, 13, 17, 18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7, 18.8, 18.9, 18.10, 18.11, 18.12, 18.13.2, 18.13.3, 18.14, 18.15, 18.16, 18.17, 18.20, 19, 21.1.3, 21.3.1, 21.3.3, 21.3.4, 22, 24, 25.1, 25.8, 25.9, 25.10, 25.12.1, 25.12.3, 25.13, 25.14, 25.14.3, 25.15, 25.15.3, 25.15.4, 25.15.5, 25.15.6, 25.16, 25.17, 26.1, 26.7 and 27 of the Technical Report.
8. I am independent of SilverCrest Metals Inc. as independence is described by Section 1.5 of the NI 43101.
9. I have had no previous involvement with the Las Chispas Project.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: Sept 5, 2023

"Signed and Sealed"

Kevin Murray, P. Eng.

CERTIFICATE OF QUALIFIED PERSON

Scott Weston, P. Geo.

I, Scott Weston, P. Geo., as co-author of the technical report, do hereby certify that I am currently employed as Vice President, Business Development and Strategy of Ausenco Sustainability Inc., 4515 Central Boulevard, Burnaby, BC, Canada.

1. This certificate applies to the technical report titled "*Las Chispas Operation Technical Report*" dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").
2. I graduated from University of British Columbia, Vancouver, BC, Canada in 1995 with a B.Sc. in Physical Geography, and from Royal Roads University, Victoria, BC, Canada, in 2003 with a M.Sc. in Environmental and Management.
3. I am a professional Geoscientist of Engineers and Geoscientists, British Columbia (#124888).
4. I worked as a geoscientist continuously for 25 years, leading or working on teams advancing multidisciplinary environmental projects related to natural resource development. Examples of projects I've been involved with include Wasamac Project FS, Eskay Creek Mine PFS, Las Chispas Mine FS, and Casino Project FS.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I have not made a site visit to the Las Chispas Project as of the Effective Date of the Technical Report.
7. I am responsible for Sections 1.16, 3.3, 20.1, 20.2, 20.4, 25.11.1, 25.11.2, 25.11.4 and 27 of the Technical Report.
8. I am independent of SilverCrest Metals Inc. as independence is described by Section 1.5 of the NI 43101.
9. I have previously acted as QP for sections of the Las Chispas Project Feasibility Study.
10. I have read the NI 43-101, and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument.
11. 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: September 5, 2023

"Signed and Sealed"

Scott Weston, P.Geo

CERTIFICATE OF QUALIFIED PERSON
Wynand Marthinus, CEO, BBE

I, Wynand Marthinus Marx, certify that:

1. I am employed as CEO with BBE, with an office address of 24 Sloane Street, Bryanston, South Africa, 2191.

2. This certificate applies to the technical report titled "*Las Chispas Operation Technical Report*" (the "Technical Report") dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").

3. I graduated from North West University, South Africa in 1992 with a Masters Degree in Mechanical Engineering. I am a Fellow in good standing of SAIMM, Member# 702441, and the Mine Ventilation Society of South Africa, Member# 60248.

4. I have practiced my profession for 30 years. I have successfully completed numerous projects including concept, pre- feasibility, feasibility and EPCM work in ventilation, refrigeration and main fan station studies covering all commodities in several countries globally.

5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.

6. I have not made a site visit to the Las Chispas Project.

7. I am responsible for Sections 16.8.12, 16.8.13.2, 21.1.2 and 27.

8. I am independent of SilverCrest Metals Inc. as independence is described by Section 1.5 of the NI 43-101.

9. I have had no previous involvement with the Las Chispas Project.

10. I have read the NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument.

11. 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: September 5, 2023

"Signed and Sealed"

Wynand Marthinus, CEO, BBE

CERTIFICATE OF QUALIFIED PERSON
Patrick Langlais, P. Eng.

I, Patrick Langlais, P.Eng., certify that:

1. I am employed as a Senior Mining Engineer with Entech Mining Ltd, with an office address of 100 King St W, Suite 5600, Toronto, Ontario, Canada.
2. This certificate applies to the technical report titled "*Las Chispas Operation Technical Report*" (the "Technical Report") dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").
3. I graduated from Queen's University in 2009 with a Bachelor of Applied Science, Mining Engineering. I am a member in good standing of Professional Engineers Ontario, License number 100186072.
4. I have practiced my profession for 14 years. My relevant experience includes ten years of operational experience in Ontario Canada, composed of eight years in Technical Services and two years in Operations, in addition to four years as a mining engineering consultant with Entech. My various roles included mine design, short-term planning, ventilation, ground control, project and contract management, long term planning and Technical Services management.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I visited the Las Chispas Project on July 10th to 12th 2023.
7. I am responsible for Sections 1.11, 1.12.3, 1.19.1.2, 1.19.2.3, 15, 16.1, 16.4, 16.5, 16.6, 16.7, 16.8.13, 16.8.13.1, 16.8.13.3, 16.8.13.4, 16.9, 16.10, 21.1.1, 21.3.2, 25.6, 25.7.3, 25.14.2, 25.15.2, and 26.6 of the Technical Report.
8. I am independent of SilverCrest Metals Inc. as independence is described by Section 1.5 of the NI 43-101.
9. I have had prior involvement with the property that is the subject of the Technical Report. I have contributed to short-term mine design and planning between March and September 2022.
10. I have read the NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument.
11. 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: September 5, 2023

"Signed and Sealed"

Patrick Langlais, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

Michael Verreault, P. Eng.

I, Michael Verreault, certify that:

1. I am employed as Hydrogeologist with Hydro-Ressources Inc, with an office address of 4174 rue Bonnard, Jonquiere, QC Canada, G7Z1N6.
2. This certificate applies to the technical report titled "*Las Chispas Operation Technical Report*" (the "Technical Report") dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").
3. I graduated from University of Quebec in Chicoutimi in 2000 with a Bachelor of Engineering and in 2003 with a Master Degree in Hydrogeology. I am a member in good standing of Order of Engineer of Quebec, License# 125243.
4. I have practiced my profession for 22 years. I have [been involved in mine dewatering in multiple mines around the world, including mines in the USA and Mexico.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I visited the Las Chispas Project on November 10-12, 2020.
7. I am responsible for Sections 1.12.2, 16.3, 25.7.2 and 27 of the Technical Report.
8. I am independent of SilverCrest Metals Inc. as independence is described by Section 1.5 of the NI 43-101.
9. I have had no previous involvement with the Las Chispas Project.
10. In 2021 SilverCrest Metals Inc. submitted a Feasibility Report for which I was the Qualified Person for hydrogeology and mine dewatering.
11. I have read the NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument.
12. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: September 5, 2023

"Signed and Sealed"

Michael Verreault, P. Eng.

CERTIFICATE OF QUALIFIED PERSON
Ben Peacock, P. Eng.

I, Ben Peacock, P.Eng., certify that:

1. I am employed as a Specialist Engineer with Knight Piésold Ltd., with an office address of 200-1164 Devonshire Avenue, North Bay, Ontario, P1B 6X7.
2. This certificate applies to the technical report titled "*Las Chispas Operation Technical Report*" (the "Technical Report") dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").
3. I graduated from the University of Waterloo in 2008 with a Bachelors of Applied Science. I am a member in good standing of Professional Engineers Ontario (License# 100141409) and a member of Professional Engineers and Geoscientists Newfoundland & Labrador and the Nunavut and Northwest Territories Association of Professional Engineers and Geoscientists.
4. I have practiced my profession in the mining industry for 15 years. My work over that period has focussed on rock mass characterization, stability analyses, input to design studies, and operational rock mechanics support for open pit and underground mines worldwide, including northern Mexico.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I visited the Las Chispas Operation most recently on November 29 to December 2, 2022.
7. I am responsible for Sections 1.12.1, 16.2, 25.7.1, and 27 of the Technical Report.
8. I am independent of SilverCrest Metals Inc. as independence is described by Section 1.5 of the NI 43-101.
9. I have had no previous involvement with the Las Chispas Operation.
10. I have read the NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument.
11. 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: September 5, 2023

"Signed and Sealed"

Ben Peacock, P.Eng.

CERTIFICATE OF QUALIFIED PERSON
Jarita Barry, P. Geo.

I, Jarita Barry, P. Geo., certify that:

1. I am employed as an independent geological consultant contracted by P&E Mining Consultants Inc., with an office address of 4 Creek View Close, Mount Clear, Victoria, Australia, 3350.
2. This certificate applies to the technical report titled, "*Las Chispas Operation Technical Report*", (the "Technical Report") dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").
3. I graduated from RMIT University of Melbourne, Victoria, Australia in 2000, with a B.Sc. in Applied Geology. I am a member in good standing of Engineers and Geoscientists British Columbia (License No. 40875), Professional Engineers and Geoscientists Newfoundland & Labrador (License No. 08399), Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (License No. L3874) and the Australasian Institute of Mining and Metallurgy of Australia (Member No. 305397).
4. I have practiced as a geologist for over 15 years since obtaining my B. Sc. degree. A list of my relevant experience for the purpose of the Technical Report is provided below:
   - Geologist, Foran Mining Corp. 2004
   - Geologist, Aurelian Resources Inc. 2004
   - Geologist, Linear Gold Corp. 2005-2006
   - Geologist, Búscore Consulting 2006-2007
   - Consulting Geologist (AusIMM) 2008-2014
   - Consulting Geologist, P.Geo. (APEGBC/AusIMM) 2014-Present

   My relevant recent silver and gold sampling methods and data verification experience is as follows:
   - Endeavour Silver – Terronera – Mexico
   - GoGold Resources – Los Ricos, Santa Gertrudis – Mexico
   - Zacatecas Silver – Panuco, Esperanza – Mexico
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of this Technical Report that I am responsible for preparing.
6. I have not made a site visit to the Las Chispas Project.
7. I am responsible for Sections 11, 12.1, 12.3, 26.3, and 27 of this Technical Report.
8. I am independent of SilverCrest Metals Inc. ("SilverCrest") as independence is described by Section 1.5 of the NI 43–101.

9. I have previous experience with the project as a contributing author on the 2021 Feasibility Study for the Company.
10. I have read the NI 43–101 and the sections of this Technical Report for which I am responsible have been prepared in compliance with that Instrument.
11. As of the Effective Date of this Technical Report, to the best of my knowledge, information and belief, the sections of this Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of this Technical Report not misleading.

Dated: September 5, 2023

"Signed and Sealed"

Jarita Barry, P. Geo.

CERTIFICATE OF QUALIFIED PERSON
David Burga, P. Geo.

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

1. I am employed as a geological consultant contracted by P&E Mining Consultants Inc., with an office address of 3884 Freeman Terrace, Mississauga, Ontario.
2. This certificate applies to the technical report titled, "*Las Chispas Operation Technical Report*", (the "Technical Report") dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").
3. I graduated from the University of Toronto in 1997 with a Bachelor of Science degree in Geological Science. I am a member in good standing of Professional Geoscientists Ontario, License # 1836.
4. I have practiced my profession for over 20 years since obtaining my B.Sc. Degree. I have been directly involved as:
   - 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 epithermal 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
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of this Technical Report that I am responsible for preparing.
6. I have not made a site visit to the Las Chispas Project.
7. I am responsible for Sections 10, 12.2, and 27 of this Technical Report.
8. I am independent of SilverCrest Metals Inc. as independence is described by Section 1.5 of the NI 43–101.

9. I have previous experience with the project as a contributing author on the 2021 Feasibility for the Company.
10. I have read the NI 43–101 and the sections of this Technical Report for which I am responsible have been prepared in compliance with that Instrument.
11. As of the Effective Date of this Technical Report, to the best of my knowledge, information and belief, the sections of this Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of this Technical Report not misleading.

Dated: September 5, 2023

"Signed and Sealed"

David Burga, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

Eugene J. Puritch, P. Eng.

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

1. I am employed as an independent mining consultant and President of P&E Mining Consultants Inc., with an office address at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7.
2. This certificate applies to the technical report titled, "*Las Chispas Operation Technical Report*", (the "Technical Report") dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").
3. I graduated from The Haileybury School of Mines, with a Technologist Diploma in Mining in 1977, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen's University 1978. In addition, I have also met the Professional Engineers of Ontario Academic Requirement Committee's Examination requirement for a bachelor's degree in Engineering Equivalency 2003. I am a member in good standing of the Professional Engineers and Geoscientists New Brunswick (License No. 4778), Professional Engineers, Geoscientists Newfoundland and Labrador (License No. 5998), Association of Professional Engineers and Geoscientists Saskatchewan (License No. 16216), Ontario Association of Certified Engineering Technicians and Technologists (License No. 45252), Professional Engineers of Ontario (License No. 100014010), Association of Professional Engineers and Geoscientists of British Columbia (License No. 42912), Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (No. L3877).

   I have practiced my profession continuously since 1978. I have been directly involved 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

4. 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 this Technical Report that I am responsible for preparing.
5. I have not made a site visit to the Las Chispas Project.
6. I am responsible for sections 1.10, 1.19.1.1, 14.1, 14.2, 14.11, 14.14, 14.19, 25.5, 25.14.1, 26.4, 26.5, and 27 of this Technical Report.
7. I am independent of SilverCrest Metals Inc. ("SilverCrest") as independence is described by Section 1.5 of the NI 43–101.
8. I have had previous experience with the project as a contributing author on the 2021 Feasibility Study for the Company.
9. I have read the NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument
10. As of the Effective Date of this Technical Report, to the best of my knowledge, information and belief, the sections of this Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of this Technical Report not misleading.

Dated: September 5, 2023

"Signed and Sealed"

Eugene J. Puritch, P.Eng., FEC, CET

CERTIFICATE OF QUALIFIED PERSON
William Stone, P. Geo.

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

1. I am employed as an independent geological consultant with P&E Mining Consultants Inc., with an office address of 4361 Latimer Crescent, Burlington, Ontario, L7M 4R2.

2. This certificate applies to the technical report titled, "*Las Chispas Operation Technical Report*", (the "Technical Report") dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").

3. I graduated from Dalhousie University with a Bachelor of Science (Honours) degree in Geology in 1983. In addition, I earned a Master of Science in Geology in 1985, and a PhD in Geology in 1988 from the University of Western Ontario. I am a member in good standing of Professional Geoscientists Ontario, License #1569.

4. I have practiced my profession for 38 years since I obtained my M.Sc. degree in 1985. I have been directly involved as:

• 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 silver and gold epithermal geology and exploration experience is as follows:

- GoGold Resources – Los Ricos North, Santa Gertrudis - Mexico
- GoGold Resources – Los Ricos South, Santa Gertrudis - Mexico
- P2 Gold – Gabbs, Nevada
- Westhaven Gold – Shovelnose, British Columbia
- Zacatecas Silver – Panuco, Esperanza – Mexico

5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of this Technical Report that I am responsible for preparing.
6. I have not made a site visit to the Las Chispas Project.
7. I am responsible for Sections 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.19.2.1, 3.2, 4, 5, 6, 7, 8, 9, 23, 25.2, 25.3, 25.4, 25.15.1, 26.2 and 27 of this Technical Report.
8. I am independent of SilverCrest Metals Inc. as independence is described by Section 1.5 of the NI 43–101.
9. I have previous experience with the project as a contributing author on the 2021 Feasibility Study for the Company
10. I have read the NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.
11. As of the Effective Date of this Technical Report, to the best of my knowledge, information and belief, the sections of this Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of this Technical Report not misleading.

Dated: September 5, 2023

"Signed and Sealed"

William Stone, PhD., P.Geo.

CERTIFICATE OF QUALIFIED PERSON

Yungang Wu, P. Geo

I, Yungang Wu, P. Geo., certify that:

1. I am employed as an independent consulting geologist contracted by P&E Mining Consultants Inc., with an office address of 3246 Preserve Drive, Oakville, Ontario, L6M 0X3.
2. This certificate applies to the technical report titled, "*Las Chispas Operation Technical Report*", (the "Technical Report") dated September 5, 2023 that has an effective date of July 19, 2023 (the "Effective Date").
3. I graduated from Jilin University, China in 1992 with a Master's Degree in Mineral Deposits. I am a member in good standing of Professional Geoscientists Ontario (Registration No. 1681).
4. I have practiced my profession for more than 25 years. I have been directly involved as a:

• Geologist –Geology and Mineral Bureau, Liaoning Province, China	1992-1993
• Senior Geologist – Committee of Mineral Resources and Reserves of Liaoning, China	1993-1998
• VP – Institute of Mineral Resources and Land Planning, Liaoning, China	1998-2001
• Project Geologist–Exploration Division, De Beers Canada	2003-2009
• Mine Geologist – Victor Diamond Mine, De Beers Canada	2009-2011
• Resource Geologist– Coffey Mining Canada	2011-2012
• Consulting Geologist	2012-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

5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the technical report that I am responsible for preparing.
6. I have not made a site visit to the Las Chispas Project.
7. I am responsible for authoring Sections 14.3, 14.4, 14.5, 14.6, 14.7, 14.8, 14.9, 14.10, 14.12, 14.13, 14.15, 14.16, 14.17, and 14.18 and Section 27 of this Technical Report.
8. I am independent of SilverCrest Metals Inc. ("SilverCrest") as independence is described by Section 1.5 of the NI 43–101.
9. I have previous experience with the project as a contributing author on the 2021 Feasibility Study for the Company.

10. I have read the NI 43–101 and the sections of this Technical Report for which I am responsible have been prepared in compliance with that Instrument.
11. As of the Effective Date of this Technical Report, to the best of my knowledge, information and belief, the sections of this Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of this Technical Report not misleading.

Dated: September 5, 2023

"Signed and Sealed"

Yungang Wu, P.Geo

CERTIFICATE OF QUALIFIED PERSON
Christopher Lee, P. Eng.

I, Christopher Lee, state that:

(a) I am a Mechanical Engineer - Fellow at:
WSP Canada Inc.
33 Mackenzie Street, Suite 100
Sudbury, Ontario, Canada, P3C 4Y1

(b) This certificate applies to the technical report titled "Las Chispas Operation Technical Report" dated September 5, 2023, with an effective date of: July 19, 2023 (the "Technical Report").

(c) I am a "qualified person" for the purposes of National Instrument 43-101 ("NI 43-101"). My qualifications as a qualified person are as follows. I am a graduate of Queen's University of Kingston, Ontario, Canada with Bachelor of Science degrees in both Mechanical Engineering (1993) and Mining Engineering (1994) and hold Professional Engineer's licence in Ontario (PEO, since 1998). My relevant experience after graduation and over a 28-year period in the mining and mineral processing industry for the purpose of the Technical Report includes the duties of Project Manager and Technical Director for the detailed design and construction of backfill and thickened tailings systems as well other underground infrastructure. My experience also includes numerous studies from concept level through feasibility level. Duties included performing design and senior technical review for layouts, equipment specifications, P&ID's, piping and valving design.

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

(e) I am responsible for Item(s) 16.8.1 Portals, 16.8.2 Electrical Services, 16.8.3 Fuel Storage and Distribution, 16.8.4 Mine Process Water Supply, 16.8.5 Mine Dewatering, 16.8.6 Cemented Rockfill, 16.8.7 Compressed Air, 16.8.8 Communications, 16.8.9 Personnel and Material Transport, 16.8.10 Surface Maintenance Shop for Underground Mobile Equipment, 16.8.11 Underground Mobile Equipment Maintenance Bays of the Technical Report, 21.1.2 Underground Mine Infrastructure.

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

(g) My prior involvement with the property that is the subject of the Technical Report is as follows. I was involved in a concept-level study in 2021 to suggest options for Cemented Rockfill process delivery to the mine's underground workings whereby a presentation with recommendations was provided to SilverCrest Metals, Inc.

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

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

Dated: September 5, 2023

"Signed and Sealed"

Christopher Lee, P. Eng.

CERTIFICATE OF QUALIFIED PERSON
Humberto F. Preciado, P.E.

I, Humberto F. Preciado, P.E., state that:

(a) I am a Principal Geotechnical Engineer at:
WSP USA Inc.
2000 South Colorado Blvd., Suite 2-1000
Denver, CO 80222

(b) This certificate applies to the technical report titled "Las Chispas Operation Technical Report" dated September 5, 2023 with an effective date of: July 19, 2023 (the "Technical Report").

(c) I am a "qualified person" for the purposes of National Instrument 43-101 ("NI 43-101"). My qualifications as a qualified person are as follows. I am a graduate of Universidad Autonoma de Guadalajara in 1992 with a Bachelor of Science in Civil Engineering and from The University of British Columbia in 2005 with a PhD in Civil Engineering. I am a Registered Professional Engineer in AZ (46625), CO (0052648) and NV (019528). My relevant experience after graduation and over 31 years for the purpose of the Technical Report includes design of Tailings Storage Facilities, Heap Leach Pads, Mine Waste Dumps, Mining Closure, and Geo-environmental Site Investigations. I have coordinated and conducted geotechnical studies for mine waste facilities at the scoping, pre-feasibility, feasibility, and detailed engineering level, and have performed reviews for internal and external audits for existing operations in North and South America.

(d) My most recent personal inspection of each property described in the Technical Report occurred on December 7, 2021, and was for a duration of three days.

(e) I am responsible for Item(s) Sections 1.14.2, 1.14.4, 1.14.7, 18.13.1, 18.18, 18.18.1, 18.18.2, 18.19, 18.19.1, 18.19.2, 18.19.3, 18.19.4, 18.19.5, 18.19.6, 18.19.7, 18.19.8, 18.19.9, 18.19.10, 18.19.11, 18.19.12, 18.19.13, 18.19.14, 18.19.15, 18.19.16, 18.19.17, 20.3, 20.5, 21.2, 25.11.3, 25.12.2, 25.14.4 and 27 of the Technical Report.

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

(g) My prior involvement with the property that is the subject of the Technical Report is as follows. I have been involved with the Las Chispas property since 2019 in a consulting capacity, participating in the geotechnical investigation, surface water management, the Feasibility Design and the Detailed Design of the tailings storage facilities.

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

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

Dated: September 5, 2023

"Signed and Sealed"

Humberto F. Preciado, P.E.

Important Notice

This report was prepared as National Instrument 43-101 Technical Report for SilverCrest Metals Inc. (SilverCrest) by Ausenco Engineering Canada Inc. and Ausenco Sustainability Inc. (Ausenco), BBE Group Canada (BBE), Entech Mining Ltd. (Entech), Hydro-Ressources Inc. (HRI), Knight Piésold Ltd. (KP), P&E Mining Consultants Inc. (P&E), WSP Canada Inc. and WSP USA Inc. collectively the Report Authors. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in the Report Authors' services, based on i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by SilverCrest subject to terms and conditions of its contract with each of the Report Authors. Except for the purposes legislated under Canadian provincial and territorial securities law, any other uses of this report by any third party are at that party's sole risk.

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1 SUMMARY

1.1 Introduction

SilverCrest Metals Inc. (SilverCrest or the Company) commissioned Ausenco Engineering Canada Inc. (Ausenco) to compile an Operating Technical Report (the Report) on the Las Chispas Operation (the Las Chispas Operation), located in Sonora, Mexico. The effective date (the Effective Date) of the Report is July 19, 2023.

This Report has been prepared for SilverCrest to conform to the regulatory requirements of Canadian National Instrument (NI) 43-101 using the form 43-101 F1 Standards of Disclosure for Mineral Projects.

The responsibilities of the engineering companies contracted by SilverCrest to prepare this Report are as follows:

- Ausenco managed and coordinated the work related to the Report, reviewed the metallurgical test results, Process Plant operating performance and cost estimates for the Process Plant infrastructure, general site infrastructure, and economic analysis.
- Ausenco Sustainability Inc. conducted a review of the environmental studies and permitting information for the Las Chispas Operations.
- BBE Group Canada (BBE) completed the underground mine ventilation design, including capital cost inputs for fixed installation fans, auxiliary fans for ramp development, mobile refuge bay installations and bulkheads for emergency escapes.
- Entech Mining Ltd. (Entech) developed the Mineral Reserve Estimate, the mine design, mine production schedule, and mining costs including capital development and mine operating costs.
- Hydro-Ressources Inc (HRI) completed a review of the site hydrological data.
- Knight Piésold Ltd. (KP) completed geotechnical studies.
- P&E Mining Consultants Inc. (P&E) completed the work related to property description, accessibility, local resources, geological setting, deposit type, exploration work, drilling, exploration works, sample preparation and analysis, data verification and the Mineral Resource Estimate.
- WSP Canada Inc. completed the design for process water, electrical systems, mine dewatering, underground fuel distribution and other underground services, and provided capital cost inputs for process water, mine dewatering, compressed air, electrical systems and communications.
- WSP USA Inc. completed the site wide water balance and developed the design and cost estimate for the tailings storage facility.

1.2 Terms of Reference

The Report supports disclosures by SilverCrest in the news release dated July 31, 2023, entitled “SilverCrest Announces Results of Updated Independent Technical Report”.

The firms and consultants who are providing Qualified Persons (QPs) responsible for the content of the Report are, in alphabetical order, Ausenco Engineering Canada Inc. and Ausenco Sustainability Inc. (Ausenco), BBE Group Canada (BBE), Entech Mining Ltd. (Entech), Hydro-Ressources Inc. (HRI), Knight Piésold Ltd. (KP), P&E Mining Consultants Inc. (P&E), WSP Canada Inc. and WSP USA Inc.

All units of measurement in the Report are metric, unless otherwise stated. The monetary units are in US dollars, unless otherwise stated.

Mineral Resources and Mineral Reserves are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (the 2014 CIM Definition Standards).

1.3 Project Setting

The City of Hermosillo is approximately 220 km southwest of the Las Chispas Operation, or a three-hour drive; Tucson, Arizona is approximately 350 km northwest of the Las Chispas Operation, or a five-hour drive; and the community and large copper mine in Cananea is located approximately 150 km to the north along Highway 89, or a two-and-a-half-hour drive. The closest villages are Banamichi, 25 km to the southwest, and Arizpe, located approximately 12 km to the northeast. The closest resident to the Las Chispas Operation, a single ranch house, is 10 km to the west.

Mining supplies and services are readily available from the towns of Cananea, Hermosillo, and Tucson. Labour and skilled workforces exist in the nearby communities, including Banamichi and Arizpe, for which transportation routes have been established to support the mining operation. A 500-bed accommodation camp is available at the Las Chispas Operation and housing is also available in the nearby communities.

The Las Chispas Operation is connected to the national electricity grid vias a 33 KV power line with an overall capacity of 7.6 MW. This capacity is sufficient for the LOM.

The Las Chispas Operation is accessed from the community of Arizpe via secondary gravel roads, approximately 10 km off the paved highway. The Sonora River crossing is possible via the recently built 171 m Tetuachi Bridge. The remainder of the road has been upgraded to support both construction and operation-related traffic.

The climate is typical for the Sonoran Desert, with a dry season from October to May. Seasonal temperatures vary from approximately 0°C to 40°C. Average rainfall is estimated at 300 mm/year but can vary substantially. Operations are being conducted year-round.

The Las Chispas Operation is located on the western edge of the north-trending Sierra Madre Occidental Mountain range geographically adjacent to the Sonora Valley. Surface elevations range from 950 metres above sea level (masl) to approximately 1,375 masl.

Drainage valleys generally flow north to south, and east to west towards the Sonora River. During the rainy season, flash flooding can occur in the area.

Vegetation is scarce during the dry season and limited primarily to juvenile and mature mesquite trees and cactus plants. During the wet season, various blooming cactus, trees, and grasses are abundant in drainage areas and on hillsides.

1.4 Property Description and Location

The Las Chispas Property consists of 28 mineral concessions, totalling 1,400.96 ha, which are held by SilverCrest's Mexico subsidiary Compañía Minera La Llamarada S.A. de C.V. (LLA). Concessions have expiry dates that run from 2039-2073. One concession is in the grant process, and one concession is the subject of legal proceedings following cancellation. The mineral concessions that host the Mineral Resources and Mineral Reserves are in good standing. At the Report Effective Date, all required mining duties were paid.

The surface rights overlying the Las Chispas Property mineral concessions and road access from local highway are either owned by LLA or held by LLA under a negotiated 20-year lease agreement with the Ejido Bamori. LLA has purchased the Cuesta Blanca and Babicanora ranches and signed a 20-year lease agreement for a portion of the Tetuachi Ranch. Surface rights are sufficient for the proposed life of mine (LOM) plan and include the locations of necessary infrastructure as presented in the Report. On February 2, 2023, LLA purchased the La Higuerita Ranch situation in the municipality of Arizpe, Sonora.

A 2% royalty is payable on the Nuevo Lupena and Panuco II concessions for material that has processed grades of ≥0.5 oz/tonnes gold and ≥ 40 oz/tonnes silver, combined. These concessions do not include Mineral Reserves.

This Report assumes that production water will be from the 900 level (900 m from surface or 850 masl) of the historical Las Chispas Mine and from the Sonora Valley within the Las Chispas Property limit and near the main access road to the site. This combined source of water is considered representative of the regional water table, has been tested, and is adequate in quantity and quality for exploration and production purposes. LLA has sufficient water rights for operations.

1.5 History

Historic records indicated mining around the Las Chispas Operation area started as early as the 1640s. There are incomplete historic records available on mining activities in the 1800s and 1900s. Numerous small mines were operated during the period 1900–1930. There is a gap in mining activity records for Las Chispas between the mid-1930s through to 1974. A small mill operated offsite from 1974 to 1984, treating material from historic mine dumps.

Minefinders Corporation Ltd. (Minefinders) conducted geological mapping and a geochemical sampling program comprising stream sediment and bulk-leach extractable gold (BLEG) samples, underground and surface rock chip sampling, and drilling of seven (7) reverse circulation (RC) drill holes (1,842.5 m) to test potential mineralization adjacent to the Las Chispas mineralized northwest-southeast trend. Drill results were not encouraging.

SilverCrest's subsidiary obtained the rights to the Las Chispas Operation area in 2015. Exploration work completed to the Effective Date includes 2,840 (690,124 m) core drill holes, surface and underground mapping and sampling, rehabilitation of underground workings, auger and trench sampling of historic mine dumps, Mineral Resource estimations, environmental baseline and supporting studies, initiation of permitting activities, metallurgical testwork approximately 9 km of underground development and completion of a Preliminary Economic Assessment (the PEA) (Tetra Tech, 2019) and completion of a "NI 43-101 Technical Report & Feasibility Study on the Las Chispas Project" (2021 FS Report) (Ausenco, 2021).

1.6 Geological Setting and Mineralization

Mineral deposits in the Las Chispas district are classified as gold and silver, low to intermediate sulphidation epithermal systems, typical of many deposits in Sonora, Mexico.

In northwestern Mexico, much of the exposed geology can be attributed to the subduction of the Farallon Plate beneath the North American Plate and related magmatic arc volcanism. The host rocks to mineralization in the Las Chispas district are generally pyroclastic, tuffs, and rhyolitic flows interpreted to be members of the Lower Volcanic Complex. Locally, volcanic pyroclastic units mapped within the underground workings include rhyolite, welded rhyodacite tuff, lapilli (lithic) tuff, and volcanic agglomerate.

All rock types in the Las Chispas Operation area show signs of extensive hydrothermal alteration. Thin section and TerraSpec™ hyperspectral studies identified alteration consistent with argillic and advanced argillic alteration. Alteration minerals identified include smectite, illite, kaolinite, chlorite, carbonate, iron oxy/hydroxides, probable ammonium, gypsum/anhydrite, silica, and patch trace alunite.

Generally, the host rocks are above the existing water table. Oxidation of sulphides is observed from near-surface to depths greater than 300 m and the presence of secondary minerals is recorded from the Las Chispas historic underground workings approximately 60 m to 275 m in depth from the surface. Strong and pervasive near-surface oxidation is noted to occur in the Babicanora Area, where host rocks experienced faulting and advanced weathering to limonite, hematite, and clays.

Regionally, the Las Chispas Operation is situated in an extension basin related to a Late Oligocene half-graben of the Sonora River Basin. Multiple stages of normal faulting affect the basin. The main structures are steep, west-dipping (80°) and sub-parallel to the Santa Elena-Las Chispas normal fault, which is located along the western margin of the Las Chispas Operation, striking approximately 210°. The basin is further cross-cut by younger northwest–southeast trending normal faults that dip to the southwest, creating both regional and local graben structures. Locally, the graben structures are complicated by the effects of probable caldera collapse. Three structural controls, excluding bedding contacts, are considered to influence alteration and mineralization:

- 150–170° striking and are inclined at approximately 65–75° to the southwest
- 340–360° striking and are inclined 75° west to 75° east; and
- 210–230° striking and are inclined 70–85° to the northwest.

Mineralization is hosted in hydrothermal veins, stockwork, and breccia. Emplacement of the mineralization is influenced by fractures and low-pressure conduits formed within the rocks during tectonic movements. Mineralization can be controlled lithologically along regional structures, local tension cracks, and faulted bedding planes. Brecciated mineralization formed in two ways: 1) in zones of low pressure as hydrothermal breccia; and 2) as mechanical breccias. These breccia types are interpreted to occur at the intersection of two or more regional structural trends. The mineralization is 0.10–10 m in true width, and typically encompasses a central quartz ± calcite mineralization corridor with narrow veinlets within the adjacent fault damage zone. Stockwork and breccia zones are centred on structurally controlled hydrothermal conduits.

Generally, it appears that epithermal mineralization is higher in the system (closer to the paleo-surface) on the west side (e.g., La Victoria Vein and historic mine) of the Las Chispas district compared to the east side (e.g., Granaditas Vein and historic mine), where there is an observed increase in base metal content.

Silver mineralization visually dominates over gold throughout the Las Chispas Operation. Acanthite is the principal silver mineral. Electrum and native silver can be present. Silver is associated with galena, pyrite ± marcasite and chalcopyrite. Gold occurs as electrum, native flakes and in association with pyrite and chalcopyrite. Locally, gold and silver values have a strong correlation with each other. Base metal contents are low in veins.

The Las Chispas Operation is divided into the Las Chispas Area and the Babicanora Area, and currently has 62 epithermal veins, not including seven bifurcations. Mineral Resources were estimated for 38 veins, including bifurcations and Mineral Resources were estimated for 38 veins, including bifurcations, and Mineral Reserves were estimated for 19 veins, including HW, FW and splays, of which six veins (Babicanora Main, Babicanora FW, Babicanora Norte, Babicanora Sur, Babi Vista and Las Chispas) contain the majority of the Mineral Reserves.

1.7 Drilling and Sampling

SilverCrest completed several drilling program phases from 2016-2023.

SilverCrest completed their Phase I and Phase II drilling programs between March 2016 and February 2018. The Phase III drilling program included drilling up to February 2019. The Phase III Extended drilling program, starting in February 2019, focused on in-fill and expansion drilling and was completed on October 16, 2020, with a total of 309,383 m of drilling in 1,137 drill holes. Phase IV included drilling from October 2020 to June 2022, and focused mainly on infill and expansion of known veins with a total of 198,926 m of drilling in 1,041 drill holes, this Phase is known as the "Resource and Reserve" or "R&R Drill Program". Phase V includes drilling from June 2022 to March 2023, which focused on expansion drilling for Inferred Mineral Resources with a total of 64,755 m of drilling in 223 drill holes. From the start of drilling in March 2016 to March 2023, a total of 2,840 drill holes were completed for 690,124 m drilled with 247,033 samples collected for geochemical analysis. Drilling data to March 21, 2023 was used in the Mineral Resource Estimate and to June 30, 2022, in the Mineral Reserve Estimate.

The Phase I drilling program targeted near-surface mineralization, lateral extensions of previously mined areas, and potential deep extensional mineralization proximal to the historic workings. The Phase II drilling program focused on surface drilling at the Las Chispas, Babicanora, William Tell, and Giovanni veins and on underground drilling at the Las Chispas and Babicanora veins. The Phase III drilling program focused on surface drilling at the Babicanora, Babicanora FW, Babicanora HW, Babicanora Norte, Babicanora Sur, Granaditas, Luigi, and Giovanni veins and underground drilling at the Las Chispas veins. The Phase III Extended drilling program was an infill program to support potential confidence category upgrades, and test for expansion of multiple veins.

Phase IV drilling targeted the Babicanora Main, Babicanora Norte, Babicanora Sur, Babi Vista, Encinitas, Amethyst and Las Chispas vein systems. Phase V focused on expansion drilling along the Babicanora Norte, Babicanora Sur, Ranch, La Victoria, Espíritu Santo, and Babi Vista vein systems.

Surface collar locations were initially surveyed using a handheld global positioning system (GPS) unit and then professionally surveyed by a local contractor. A survey was completed by external consultant David Chavez Valenzuela in October 2018. This survey was performed using a GNSS Acnovo GX9 UHF instrument. The remainder of the drill hole collar surveys done until December 2019 were completed by Precision GPS S.A. de C.V. (Precision GPS) from Hermosillo, Sonora, Mexico, using a Trimble VX10 Total Station and a Trimble R8 GNSS GPS RTK system. Starting on January 2020, surveys have been conducted by Llamarada personnel using a Trimble R8 GNSS GPS RTK system. The survey provided drill collar locations, information on roads, and additional detail on property boundaries.

Until December 2019, underground exploration drill hole collars were surveyed by Precision GPS using the underground control points established for each of the workings. Starting in January 2020 all collars were surveyed by Llamarada personnel. All holes were downhole surveyed as single-shot measurements with a Flex-it tool starting at 15 m with measurements at every 50 m to determine deviation. The survey measurements were monitoring downhole deviations and significant magnetic interference from the drill rods that would prevent accurate readings.

For any newly discovered veins, the first 10 drill holes are completely sampled. Additional drill holes could be entirely sampled, if such sampling were needed to establish a greater understanding of geology and mineralization. Sample intervals were laid out for mineralization, veining, and structure. Approximately 10 m before and after each mineralization zone was included in the sampling intervals. A minimum of 0.5 m sample lengths of mineralization material was taken up to a maximum of 3 m in non-mineralization rock. Each sample interval was either split using a hand splitter or cut using a wet core saw, perpendicular to veining, where possible, to leave representative core in the box and to reduce any potential bias in the sampled mineralization submitted with the sample.

Chip samples and/or channel samples were collected from historic underground workings and newly developed in-vein drifting. A total of 8,178 underground channel sample results were collected as of the data cut-off date. In Babicanora Main vein system, approximately 4 km of strike length were developed and sampled, with most of it in the Babicanora Main vein. In the Babicanora Norte vein system, approximately 850 m of strike length were developed and sampled. In Babi Vista vein system, approximately 500 m were developed and sampled.

SilverCrest's approach to grade control sample collection on the face of in-vein drifting consists of the following steps. Underground continuous channel samples were marked horizontally across the face by a geologist, based on mapping, per lithology or mineralization contacts, using spray paint prior to sample collection. Sample lengths varied by width of the geological contact and were set to a minimum of 0.30 m in mineralization to a maximum of 1.5 m in waste. Two long cuts 5 cm deep and separated by 10 cm were made parallel to the sample line using a pneumatic rock saw. Then, several short cuts perpendicular to the sample line were made at the contacts and between contacts. The rock is removed from the channel using a small sledge hammer and hand maul, or pneumatic chipper, and placed on a small tarp on the floor. The channel is inspected by the geologist for uniform width and depth across the sample, and to verify that the minimum sample mass is 1 kg. Samples are collected and placed into clear plastic sample bags with a sample tag, secured with a zip tie, labeled, and stored in a fenced and locked facility at the Mine, prior to being transported by SilverCrest to SGS Arizpe for analysis.

A total of 641 bulk density measurements were collected on site by SilverCrest using the water immersion method. Seventy-two (72) samples were tested by ALS Chemex (ALS) based in Hermosillo, Mexico for wax-coated bulk density to validate the on-site measurements.

In November 2018, two samples were collected and sent by SilverCrest to Geotecnia del Noroeste S.A. de C.V. based in Hermosillo, for wax coated dry bulk density testing. The bulk density ranged from 1.53 to 4.02 t/m^3 with a mean value of 2.52 t/m^3. A uniform mean bulk density of 2.55 t/m^3 was applied to all rock types in the Mineral Resource Estimate, based on the results of the bulk density test work completed by SilverCrest and the two laboratories.

All samples collected from drilling were assayed by ALS in Hermosillo, ALS in Vancouver, BC, Canada, and Bureau Veritas Minerals Laboratories (Bureau Veritas, formally Inspectorate Labs) in Hermosillo. Check assays were performed by SGS de Mexico S.A. de C.V in Durango, Mexico (SGS Durango). These drill core samples were crushed to 75% (ALS) or 70% (Bureau Veritas) minus 2 mm, then mixed and split with a riffle splitter. A split from all samples was then pulverized to 80% (ALS) or 85% (Bureau Veritas) -75 µm. All pulverized splits were submitted for multi-element aqua regia digestion with inductively coupled plasma (ICP)-mass spectrometry (MS) detection, and for gold fire assay (FA) fusion with atomic absorption spectroscopy (AAS) detection. Samples returning assay grades >100 gpt Ag from ICP analysis were re-run using aqua regia digestion and ICP-atomic emission spectroscopy (AES) detection and diluted to account for grade detection limits (<1,500 gpt). Where Ag grades were ≥1,500 gpt, the sample was re-run using FA with gravimetric detection. During the Phase II drilling program, where gold values >1 gpt, the samples were re-run using FA with gravimetric detection, and where gold values were >10 gpt, the samples were re-run using 30 g FA with AAS detection. Samples returning grades >10,000 ppm Zn, Pb, or Cu from ICP-MS analysis were re-run using aqua regia digestion with ICP-AES finish.

SGS entered into Agreement with SGS de Mexico S.A. de C.V, a subsidiary of the global SGS SA, to design and operate a sample preparation and analytical laboratory in the nearby community of Arzipe, Mexico. The facility commenced operations and receiving grade control samples from Las Chispas in April, 2022. When fully certified, the laboratory will also serve as the primary analytical facility to support exploration activities.

SilverCrest delivered all samples collected from underground mine as channels, chips or mucks to the SGS Arizpe facility for preparation as follows: These samples were received, registered, dried at 105°C, and weighed. All samples were then crushed to 75% <2 mm, homogenized and a 500 g split generated with a riffle splitter. The 500 g split was pulverized to ≥85% <75µm (the "primary pulp"). Only channel samples collected from underground ore development headings were submitted for 34 element trace analysis, using the following procedures. A 1 g split was collected from the primary pulp and dissolved with Aqua Regia at a 3:1 ratio. The solution was analyzed using ICP-OES. Overlimits analysis using ICP-OES was conducted on samples containing >10,000 ppm Cu, Pb, and Zn.

All samples collected from the underground were submitted for gold and silver analysis by Fire Assay and Atomic Absorption Spectrometry (AAS), using method (GO_FAG37V). A 30 g split was collected from the primary pulp and fused with lead oxide flux at 1,100°C and any gold or silver in the sample was extracted into a lead button. The lead was removed by cupellation, resulting in a gold and silver bead. The dore bead was then dissolved with HCl and HNO3.

The solution was analyzed using AAS for Au with a lower detection limit of 0.01 gpt, and upper limit of 100 gpt, and Ag with a lower detection limit of 10 gpt. Samples exceeding 100 gpt Au were then tested using by Fire Assay and Gravimetric measurement, using method (GO_FAG33V). A 30 g split was collected from the primary pulp and fused with lead oxide flux at 1,100°C any gold or silver in the sample was extracted into a lead button. The lead was removed by cupellation, resulting in a gold and silver bead. The doré bead was dried and then weighed with a micro-balance. The doré bead was dissolved with HCl and HNO3. The residual solid gold was dried and measured by micro-balance using the gravimetric method with a lower detection limit of 0.5 gpt. Silver determined by difference in mass, with a lower detection limit of 10 gpt.

The quality assurance/quality control (QA/QC) program consisted of certified reference material (CRM), and blank sample insertions at a rate of 1:50 for all sample types being collected, and insertion of duplicate samples for some underground chip samples, core pulps and coarse rejects. CDN Resource Laboratories Ltd. was the source of the CRMs. The blank samples were collected from a local silica cap.

The sample preparation, analysis, and security program implemented by SilverCrest was designed with the intent to support collection of a large volume of data. Sample collection and handling routines were well-documented. The laboratory analytical methods, detection limits, and grade assay limits are suited to the style and grade of mineralization. The QA/QC methods implemented by SilverCrest enabled assessment of sample security, assay accuracy, and potential for contamination. The QP reviewed sample collection and handling procedures, laboratory analytical methods, QA/QC methods, and QA/QC program results and considers these methods are adequate to support the current Mineral Resource Estimate.

1.8 Data Verification

SilverCrest developed an extensive dataset that is saved and managed using Geospark™ management software. The QP reviewed the data compilation and audited the Geospark™ database. The QP conducted verification of the Las Chispas Operation databases for gold and silver by comparison of the database entries with assay certificates in comma-separated values (CSV) file format, obtained directly from ALS Webtrieve™. Assay data were verified for five separate datasets: Las Chispas, Las Chispas Underground, Babicanora Underground, William Tell Underground and Babi Vista.

The QP also validated the drill hole database by checking for inconsistencies in 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, survey, and missing interval and coordinate fields. A few errors were identified and corrected in the database.

The QP considers the database provided by SilverCrest to be reliable and does not consider the few minor discrepancies encountered during the verification process to be of material impact to the data supporting the Mineral Resource Estimate.

Site visits and independent sampling programs for assay data verification were completed in November 2020 and March 2022. The assay results for the independent site visit samples match closely to the SilverCrest data for both gold and silver and the QP considers the due diligence results to be acceptable.

Based upon the evaluation of the QA/QC program undertaken by SilverCrest, and the QPs due diligence sampling and database verification, it is the QP’s opinion that the data are robust and suitable for use in the current Mineral Resource Estimate.

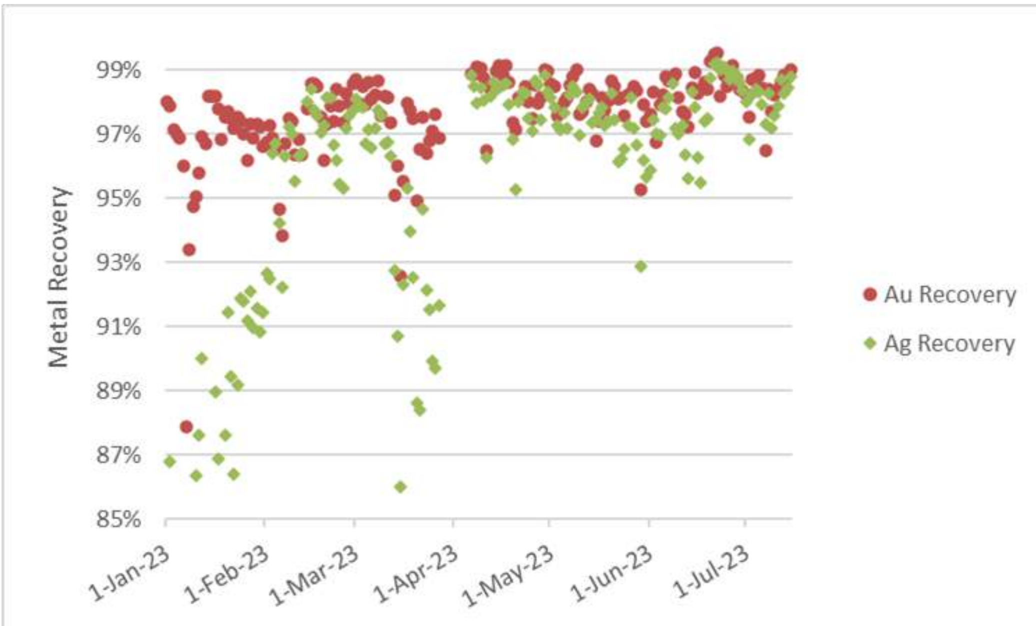
1.9 Mineral Processing and Metallurgical Testing

Mineral deposits in the Las Chispas district are classified as gold and silver, low-to intermediate sulphidation epithermal systems, typical of many deposits in northeastern Sonora and is mined using variations of longhole stoping and cut and fill mining methods via several access drifts and ramps. Ore is processed through a primary jaw crusher, SAG mill in closed circuit with hydrocyclones, cyanide leaching, Merrill-Crowe metal recovery, and tailings filtration. Following startup, the Las Chispas Operation adopted a strategy that involves a whole leach at ~1,500 mg/L CN with the flotation and concentrate leach circuits bypassed. Operating data from the whole ore leach is achieving throughput and recoveries at or above flotation & concentrate leach testwork values on similar material presented in the 2021 FS Report and demonstrated in Figure 1-1 and Figure 1-2.

The current operating strategy is providing the best economic value with gold and silver recoveries ranging from 93% to 99% and 86% to 99% with weighted averages of 98% and 97%, respectively.

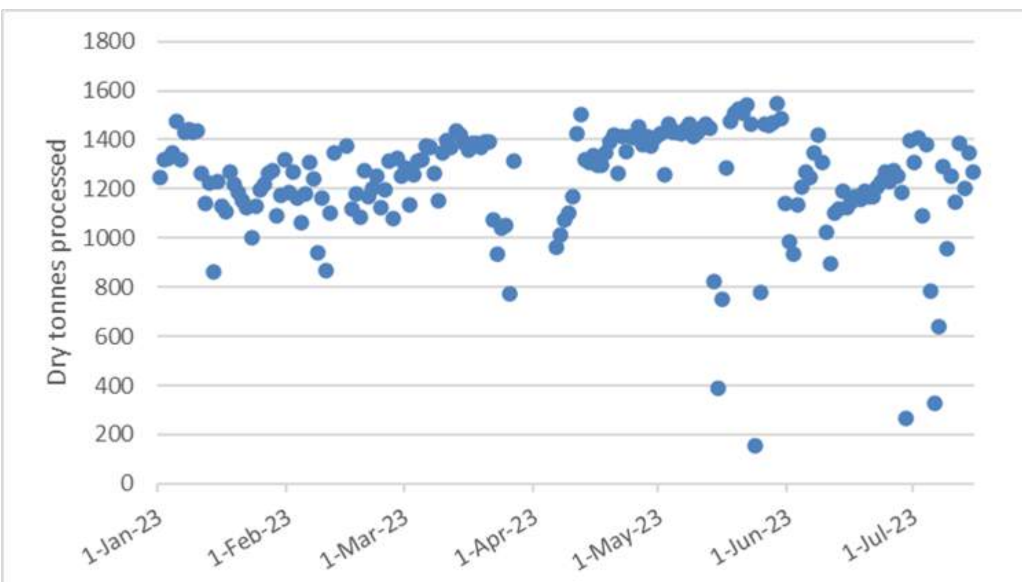
Figure 1-1 resents the daily gold and silver recoveries and Figure 1-2 presents the daily tonnes processed since January 1, 2023.

Figure 1-1: Daily Operating Gold and Silver Recoveries at Las Chispas



Source: Ausenco, 2023.

Figure 1-2: Daily Dry Tonnes Processed since January 1, 2023, Excluding Scheduled Down Days



Source: Ausenco, 2023.

1.10 Mineral Resource Estimate Summary

The Mineral Resource Estimate presented in the Report includes in-situ narrow vein gold and silver mineralization at the Babicanora and Las Chispas Areas, and gold and silver mineralization contained within run-of-mine (ROM) stockpiles and historic operations surface stockpiles.

The data cut-off dates supporting this Mineral Resource Estimate in the Babicanora Area are June 30, 2022 for the definition drilling and underground channel sample databases, July 31, 2022 for the exploration drilling database, which were used for the Indicated Mineral Resource Estimate, and March 21, 2023 for the exploration drilling database used for the Inferred Mineral Resource Estimate; whereas the cut-off date in the Las Chispas Area is October 16, 2020, due to no additional work being completed in this area since October 16, 2020. The surface stockpile estimate have a cut-off date of June 30, 2022.

The effective date of this Mineral Resource Estimate is June 30, 2022, for Measured and Indicated Mineral Resources of the vein mineralization and surface stockpiles, and March 21, 2023, for Inferred Mineral Resources.

This Mineral Resource Estimate of the Babicanora Area was undertaken with Leapfrog™ software by SilverCrest, and was independently reviewed, verified and accepted using GEOVIA GEMS™ v.6.8.2 software by P&E Mining Consultants Inc. (P&E), Brampton, Ontario. The Mineral Resource Estimate of the Las Chispas Area was performed in 2020 by Messrs. Wu and Puritch, who are independent of SilverCrest as defined in NI 43-101. The QPs are of the opinion that the supplied database is suitable for Mineral Resource estimation.

The database supporting this Mineral Resource Estimate consisted of surface drill holes, underground drill holes and underground channel and chip samples for the in-situ narrow veins in both the Babicanora and Las Chispas Areas, and surface channel and RC samples for the historic surface stockpiles. All drill hole survey and assay values are expressed in metric units, with grid coordinates reported using the WGS84, zone 12N UTM system.

The mineralized vein wireframes were interpreted and constructed by SilverCrest using Seequent Limited Leapfrog® and the QPs reviewed the vein models. Some adjustments to the wireframes were made as a result of the reviews, and the QPs consider the wireframes to reasonably represent the assay data and are suitable for Mineral Resource estimation.

In the Babicanora Area, a total of 43 unclipped wireframes were developed to represent the mineralized veins, bifurcations and splays. The Babicanora veins were modelled as true width and were not subjected to a minimum mining width. The “unclipped” solids were clipped to include mineralization areas with ≥150 gpt AgEq (where AgEq = Ag gpt + (Au gpt * 86.9)). In the Las Chispas Area, a total of eight mineralized vein wireframes were created that were constrained to a minimum thickness of 0.5 m true width. The “unclip” solids were manually clipped to include mineralized areas with ≥150 gpt AgEq (where AgEq = Ag gpt + Au gpt * 75).

A depletion wireframe model was developed to represent areas with excavations from historic mining in the Las Chispas Area and they were excluded from the Mineral Resource Estimate. All mineralized veins were clipped and removed above a topographic surface supplied by SilverCrest. The historic mined areas and internal waste zones created by SilverCrest were clipped and removed from the related vein wireframes.

Due to the nature of the narrow veins and in order to regularize the assay sampling intervals for grade interpolation, a 0.5 m compositing length was selected for the drill hole intervals that fell within the constraints of the above-mentioned vein wireframes.

Grade capping and high-grade transition analyses were undertaken on the 0.5 m composite values in the database within the constraining wireframes to control possible bias resulting from erratic high-grade composites in the database, and to maintain the high-grade local variation. The high-grade transition consists of a restrictive search ellipse and a maximum limiting composite value.

In the Babicanora and Las Chispas Areas, drill hole and channel sample log-probability plots for gold and silver composites were generated by SilverCrest for each mineralization vein to establish capping levels. The capped composites were utilized to develop variograms and for block model grade interpolation and classification.

A variography analysis was performed by SilverCrest using the gold and silver composites within each individual vein wireframe, as a guide to determining a grade interpolation search distance and ellipse orientation strategy. Continuity ellipses based on the observed ranges were subsequently generated and utilized as the basis for grade estimation search ranges, distance weighting calculations and Mineral Resource classification criteria.

A total of 641 bulk density measurements were collected on-site from drill core by SilverCrest using the water immersion method. The bulk density ranged from 1.53 to 4.02 t/m^3 with a mean value of 2.52 t/m^3. A uniform mean bulk density of 2.55 t/m^3 was applied to all in-situ rock types in the Mineral Resource Estimate.

The block models for the Babicanora Area were constructed by SilverCrest using Leapfrog™ software. The block models for the Las Chispas Area were independently created by the QPs using GEOVIA GEMS™ V6.8.2 modelling software during the October 2020 Mineral Resource Estimate.

In the Babicanora Area, the gold and silver grade values were interpolated into the grade blocks using inverse distance weighting to the third power (ID^3). A variable orientation search was utilized for all the main veins. The high-grade transition was utilized for the grade interpolation, in order to mitigate the high-grade influence.

The QPs are of the opinion that the block models of the Babicanora Area and the Las Chispas Areas are suitable for reporting a Mineral Resource Estimate.

In the Las Chispas Area, the gold and silver grade values were interpolated into the blocks using inverse distance weighting to the third power (ID^3).

The Mineral Resource was classified as Measured, Indicated, and Inferred based on the geological interpretation, variogram performance and drill hole spacing. A Measured Mineral Resource was classified for the Babicanora underground sampled area only with a 10 m range extended up- and down-dip from areas with underground in-vein development samples and interpolated with both underground channel and chip samples and drill holes. An Indicated Mineral Resource was classified with at least two drill holes within a 50 m mean distance. An Inferred Mineral Resource was classified for all remaining grade blocks within the mineralized veins. ROM stockpiles which were derived from the underground vein mining were classified as Measured Mineral Resources, and the historic stockpiles were categorized as Indicated Mineral Resources. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

The following parameters were used to calculate the AgEq cut-off values that determine the underground mining potentially economic portions of the constrained mineralization:

- Ag price: $21/oz (approximate three-year trailing average as of June 30, 2022)
- Ag process recovery: 94%
- Marginal mining cost: $40/t
- Processing cost: $40/t

- G&A: $15/t.

The AgEq cut-off value of the underground Mineral Resource is calculated as follows:

- ($40+ $40+$15)/($21/31.1035 x 94%) = ~150 gpt AgEq

The AgEq cut-off value of the historic stockpiles is 110 gpt without the mining cost.

Table 1-1: Mineral Resource Estimate Statement for Depleted In-Situ Vein, ROM Stockpile and Historic Surface Stockpiles

Resource Area	Classification	Tonnes	Au	Ag	AgEq	Contained Au	Contained Ag	Contained AgEq
		(k)	(gpt)	(gpt)	(gpt)	(k oz)	(k oz)	(k oz)
Babicanora Area Veins	Measured	206.6	13.67	1,289	2,376	90.8	8,561	15,779
	Indicated	1,726.3	7.09	658	1,222	393.6	36,540	67,832
	Meas + Ind	**1,932.9**	**7.79**	**726**	**1,345**	**484.3**	**45,101**	**83,611**
Las Chispas Area Veins	Indicated	441.6	4.22	552	888	60.0	7,835	12,605
Total Undiluted Veins	**Meas + Ind**	**2,374.5**	**7.13**	**693**	**1,260**	**544.3**	**52,936**	**96,216**
Historic Stockpiles	Indicated	151.8	1.14	112	203	5.6	546	990
ROM Stockpiles	Measured	168.1	5.56	428	869	30.0	2,311	4,699
Total (Veins + Stockpiles)	**Meas + Ind**	**2,694.4**	**6.69**	**644**	**1,176**	**579.9**	**55,794**	**101,905**
Babicanora Area Veins	Inferred	953.5	4.49	267	624	137.5	8,188	19,123
Las Chispas Area Veins	Inferred	373.6	1.81	274	418	21.7	3,296	5,024
Total Undiluted Veins	**Inferred**	**1,327.1**	**3.73**	**269**	**566**	**159.2**	**11,484**	**24,147**

Notes:
1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
2. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
3. 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 can be reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
4. The Mineral Resource is estimated using the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standards for Mineral Resources & Mineral Reserves.
5. The effective date for Measured + Indicated estimate of the veins and stockpiles was June 30, 2022, while Inferred estimate for the veins was effective March 21, 2023.
6. Mined areas as of June 30, 2022, were removed from the wireframes and block models.
7. AgEq is based on Ag:Au ratio of 79.51:1 calculated using $1,650/oz Au and $21/oz Ag, with average metallurgical recoveries of 97.9% Au and 96.7% Ag, and 99.9% payable for both Au and Ag.
8. Mineral Resources are inclusive of the Mineral Reserves.
9. All numbers are rounded.
10. Cut-off grade (COG) used for In-situ material is 150 gpt AgEq and, for Historic stockpiles is 110 gpt AgEq. No cut-off grade was applied to ROM stockpile as it is based on material mined.

1.11 Mineral Reserve Estimate

The Mineral Reserve estimate was completed for underground mining of in-situ vein deposits at the Babicanora and Las Chispas Areas and for surface extraction of stockpiles from historical and current operations. All drilling, surveying and assay databases were provided by SilverCrest, including data up to the cut-off date of June 30, 2022 for Measured and Indicated Mineral Resources. The Mineral Reserve Estimate is provided in Table 1-2.

Table 1-2: Mineral Reserve Estimate

Area	Classification	Tonnes (k)	Au (gpt)	Ag (gpt)	AgEq (gpt)	Contained Au (koz)	Contained Ag (koz)	Contained AgEq (koz)
Babicanora	Proven	345	7.03	665	1,224	78	7,382	13,589
	Probable	2,334	3.90	370	679	292	27,734	50,987
Las Chispas	Proven	-	-	-	-	-	-	-
	Probable	401	3.09	399	645	40	5,152	8,323
Babicanora + Las Chispas	**Proven + Probable**	**3,081**	**4.14**	**407**	**736**	**410**	**40,269**	**72,899**
ROM Stockpile	Proven	168	5.56	428	869	30	2,311	4,699
Historic Stockpile	Proven	150	1.14	112	203	6	541	980
Total Stockpile	**Proven**	**318**	**3.47**	**279**	**555**	**36**	**2,852**	**5,679**
Total Mineral Reserve Estimate	**Proven + Probable**	**3,399**	**4.08**	**395**	**719**	**446**	**43,121**	**78,579**

Notes:
1. The Mineral Reserve is estimated using the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standards for Mineral Resources & Mineral Reserves.
2. The Mineral Reserve is estimated with a 372 gpt AgEq fully-costed COG for the deposit and an 85 gpt AgEq Marginal COG for development.
3. The Mineral Reserve is estimated using long-term prices of $1,650/oz for gold and $21.00/oz for silver.
4. A government gold royalty of 0.5% is included in the Mineral Reserve estimate.
5. Stockpile values were provided by SilverCrest and account for approximately 7% of Mineral Reserve ounces.
6. The Mineral Reserve is estimated with a maximum mining recovery of 95%, with reductions in select areas based on geotechnical guidelines.
7. The Mineral Reserve presented includes both planned and unplanned dilution.
8. A minimum mining width exclusive of dilution of 1.5 m, 3.3 m and 0.5 m was used for the longhole, cut and fill and resue mining methods, respectively.
9. Average metallurgical recoveries applied are 96.7% Ag and 97.9% Au.
10. AgEq(gpt) = (Au(gpt) * 79.51 + Ag(gpt)). AgEq calculations consider metal prices, metallurgical recoveries, and Mexican Government gold royalty.
11. Estimates use metric units (metres (m), tonnes (t), and gpt). Metal contents are presented in troy ounces (metric tonne x grade / 31.103475).
12. The independent Qualified Person is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues, or any other relevant issue that could materially affect the Mineral Reserve Estimate.
13. Totals may not add due to rounding.

1.12 Mining Methods

1.12.1 Geotechnical Considerations

Extensive geomechanical core logging and underground mapping has been completed by SIL at the Babicanora and Las Chispas Areas using the RMR76 and Q' rock mass classification systems. Rock mass structure data has been collected through mapping in the sill drives at the BAN, BAV, and BAM veins. The rock mass quality and structural data were reviewed by KP through site visits, core photos, and complementary underground mapping.

The available data have been used to define rock mass quality domains based on spatial variability, proximity to the mineralized zone, and lithology. The typical rock mass quality is summarized in Table 1-3.

Table 1-3: Typical Rock Quality Ranges based on the RMR_{76} Rock Mass Classification

Vein	Domain	Vein	Immediate HW-FW	Distal HW-FW
Babicanora Norte Babicanora Vista	All	60 Good	60 to 65 Good	70 Good
Babicanora Main Babicanora Sur	Low Quality Zones	20 to 40 Poor	20 to 50 Poor to Fair	-
	Outside Low Quality Zones	60 Good	55 to 60 Fair	45 to 75 Good
Babicanora Central	Low Quality Zones	20 Poor	35 Poor	-
Babicanora Main (lower part)	Outside Low Quality Zones	35 Poor	50 Fair	80 Good
William Tell Giovanni Las Chispas Main Luigi	All	60 to 65 Good	65 Good	60 to 65 Good

The available discontinuity orientation data have been used to define structural domains. The following domains reflect differences between the veins as well as several key lithologies:

- Las Chispas Area - All Veins
- Babicanora Area - LAT1 (BAC, BAM & BAS)
- Babicanora Area - LAT1 (BAN & BAV)
- Babicanora Area - SACTS (All Veins)

The defined joint sets are parallel to sub-parallel to the mineralization, cross-cut the mineralization, and are sub-horizontal. Not all of the discontinuity orientations are observed at each vein, but the general trends are similar.

The following geotechnical design input was provided to the mine plan. The design input was based on the rock mass quality and structural domains, empirical stability analyses, 2D numerical modelling, existing experience at the mine, and experience from other similar projects and mines.

- Stope dimensions and overbreak
- Dimensions for crown, sill, rib and inter-lode pillars
- Offsets and strategies for mining around voids and historic workings
- Offsets between stopes and development
- Extraction sequencing
- Strategies for temporary sill pillar recovery under sill mats
- Ground support

1.12.2 Hydrological Considerations

A hydrological and hydrogeological study was completed by HRI in 2019. Work completed included: installation of six pressure probes to measure flow elevations; water elevation measurements taken for quality control purposes in three piezometers to verify measurements taken by SilverCrest; slug testing in three piezometers; and pump tests in a stope at the base of the historic workings at Las Chispas that is filled with groundwater, and which is the only known location in the historic operations that has groundwater. Two boreholes were drilled and tested in 2021 to supply water to the operation.

There was insufficient rainfall during the monitoring period to generate any pressure variation between the six pressure probes.

Water elevation measurements indicated the presence of a perched phreatic surface considerably above the natural water table. The water table is at approximately 900 m elevation and the perched phreatic surface is at 1,032 m elevation. The perched phreatic surface does not impact the historic workings, and for the purposes of the mine plan, will not require dewatering. Pump tests indicated that the host rocks had low permeability. Based on the pump test results, a maximum flow of 9.4 L/s has been estimated at the end of operation of Las Chispas Area. There is insufficient data to determine if this flow rate will be sustained in the long-term. As a result, the mine plan in this area was designed with a dewatering system in the lower levels with a pumping capacity of 9.4 L/s; however, this pumping system will not be required until late in the mine life.

Diamond Hole database was reviewed in 2023, so is the mine plan related to groundwater elevation. Multiple faults are present in the area, but mostly above the water table elevation.

As the majority of the workings will be above the water table elevation of 900 masl, groundwater inflows are not expected to be a concern to mining operations. No impacts to surrounding perennial streams or valley bottoms are expected from mine dewatering activities, since these are typically dry other than during short-term, low precipitation rainfall events. The Rio Sonora, located 7 km west of the Las Chispas Operation, is considered too distant to be affected by any future mine-related pumping.

1.12.3 Mining Design and Schedule

The Las Chispas Operation contains mineralized zones varying in dip and thickness both along strike and at depth. While all geometries are suitably extracted using the longitudinal longhole stoping method, particular areas have been selected for cut and fill mining due to geotechnical considerations. Additionally, resue mining sees limited use to minimize dilution in high-grade narrow veins. Current site practice prioritizes longhole stoping and studies are ongoing to maximize this mining method throughout the deposit where geotechnical conditions allow it. Mining areas are accessed via three portals: the Santa Rosa, Babicanora Central, and Las Chispas Portals.

The longhole longitudinal retreat mining method is used in mining areas where areas where ground conditions are fair to good. longhole stope heights of 15 m to 18 m, as well as a maximum strike length of 25 m, were selected based on geotechnical considerations.

Variations of cut and fill mining methods include cut and fill with breasting and resuing. Cut and fill with breasting will be used in mining areas with adverse ground conditions. Resuing is used in mining areas where the vein thickness is very narrow and the additional dilution through stoping by longhole or cut and fill would bring the grade below cut-off. The level distance for cut and fill and resuing was set at 18 m to reduce the total development required.

The mine plan targets a production rate of 1,200 tpd, achieved through a ramp up in production between 2023 and 2027. Total development advance in the already established Babicanora area is limited to 30 m/d in 2023, increasing to 35 m/d in Q1 2024. Total development advance in the Las Chispas area is limited to 5 m/d for single heading advance, increasing to a total limit of 14 m/d with multiple headings.

The mine operates two 12-hour shifts per day, 365 days per year. There are three Contract development, production and maintenance crews on a schedule of 30 days working/15 days off. Contract mine staff and management are on a 20 and 10 schedule providing 7 day per week coverage while SIL mine management and the technical department mostly work 5 day per week schedules with coverage provided on weekends.

Mine services include ventilation, mine dewatering, mine water supply, power, provision of cemented rock fill, compressed air, fuel, surface and underground communications networks, explosives storage and handling, and transport for personnel and materials. All major mechanical maintenance is performed on surface at the existing workshop. Jumbos, production drills and bolters will be serviced at 3 future underground maintenance service bays. Minor maintenance and emergency work is being performed in the underground workplaces by mobile maintenance crews.

1.13 Recovery Methods

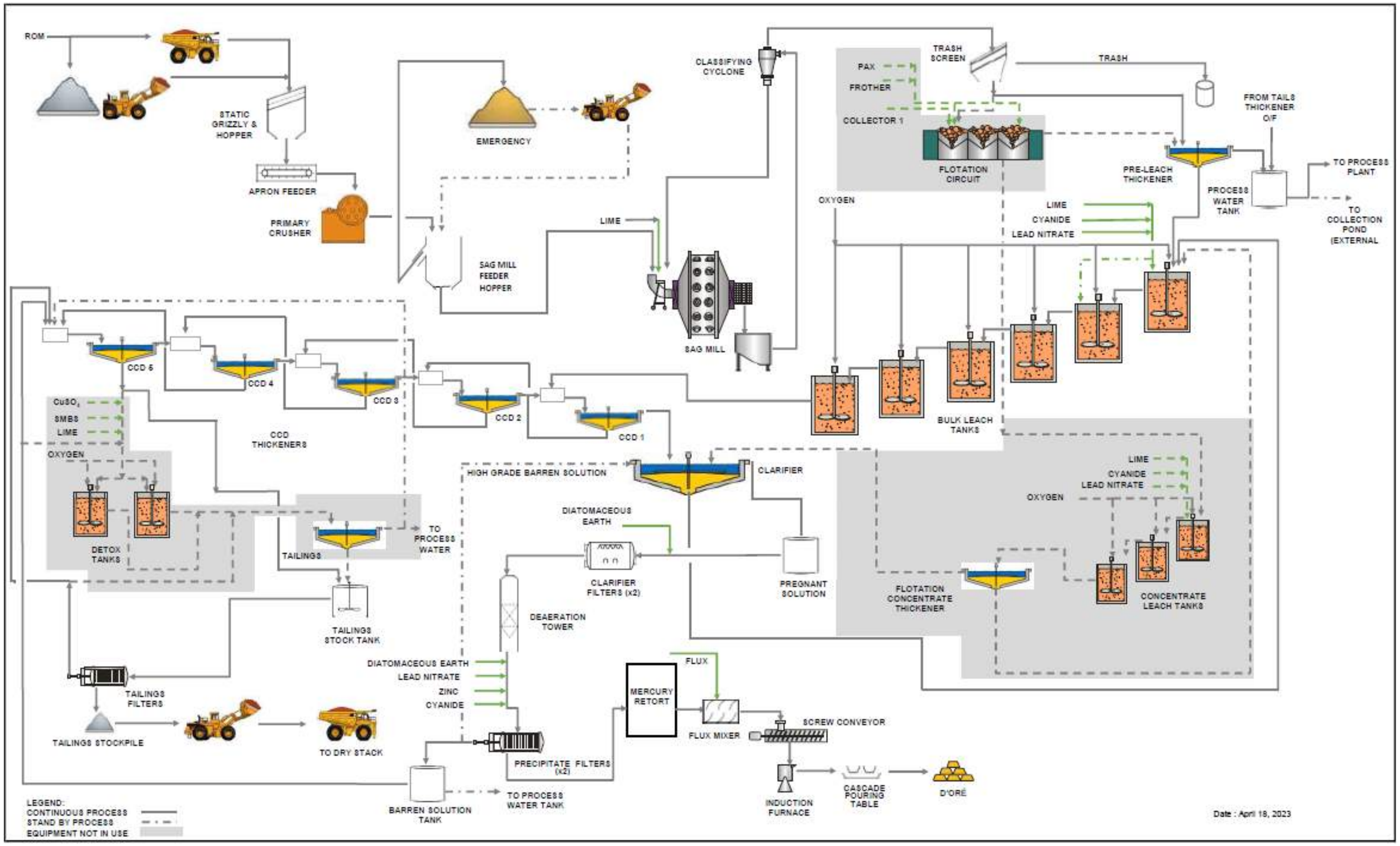
Based on the operating results, Ausenco's design for treatment of a variety of feed grades is meeting or exceeding design expectations. The Process Plant is located at the mine site and receives blended feed material from several different mineralized veins. The key process design criteria for the plant are:

- Major equipment is designed for nominal throughput of 1,250 tpd with the ability to accommodate increased throughput up to 1,750 tpd via an expansion to the comminution circuit.
- Crushing circuit availability of 70% is being achieved or exceeded at the Process Plant.
- The Process Plant includes semi-autogenous grinding (SAG), flotation, independent cyanide leaching circuits for flotation concentrate and tailings streams, Merrill Crowe circuit, Cyanide destruction and tailings handling facilities, and is achieving an overall availability of greater than the design value of 91.3%:
    - SAG design values (Axb) of 41 and BWI of 19.4 kWh/t are sufficient to process future material successfully.
    - Design head grades of 8 gpt Au and 800 gpt Ag with the ability to handle peak head grades of as much as 13 gpt Au and 1,300 gpt Ag are higher than required to process future material successfully.

The current operating strategy has the flotation, concentrate leach and cyanide detoxification circuit typically by-passed. The Process Plant is using the bulk leach circuit to perform a whole ore leach at ~1,500 ppm CN. Overall recoveries remain high, and weakly acid dissociable cyanide (CNwad) levels in filtered tailings seepage ponds are well below International Management Cyanide Code (ICMC) limits. The cyanide detoxification circuit has been modified to process solution to process solution or slurry and is operated as required to maintain seepage pond concentrations below the ICMC limit. Figure 1-3 presents an overall process flow diagram of the Process Plant as currently operated.

The total operating power for the Process Plant is between 3.8 and 4.6 MW depending on which circuits are being operated. Provisions were made for raw water to be supplied from the underground mine, the fresh water (storm) pond, the Sonora Valley, or any combination thereof pending availability and requirements. Wherever possible in the Process Plant, process water or barren solution is used to minimize freshwater consumption. Potable water is sourced from the sediment-free water in the raw water tanks and treated prior to distribution or shipped to site. Process Plant consumables for current operations include quick lime, sodium cyanide, lead nitrate, oxygen, flocculants, coagulant, diatomaceous earth, zinc powder, copper sulphate, anti-scalant, and flux.

Figure 1-3: Overall Process Diagram



Flowsheet designed by Ausenco

Source: Ausenco, 2023.

1.14 Project Infrastructure

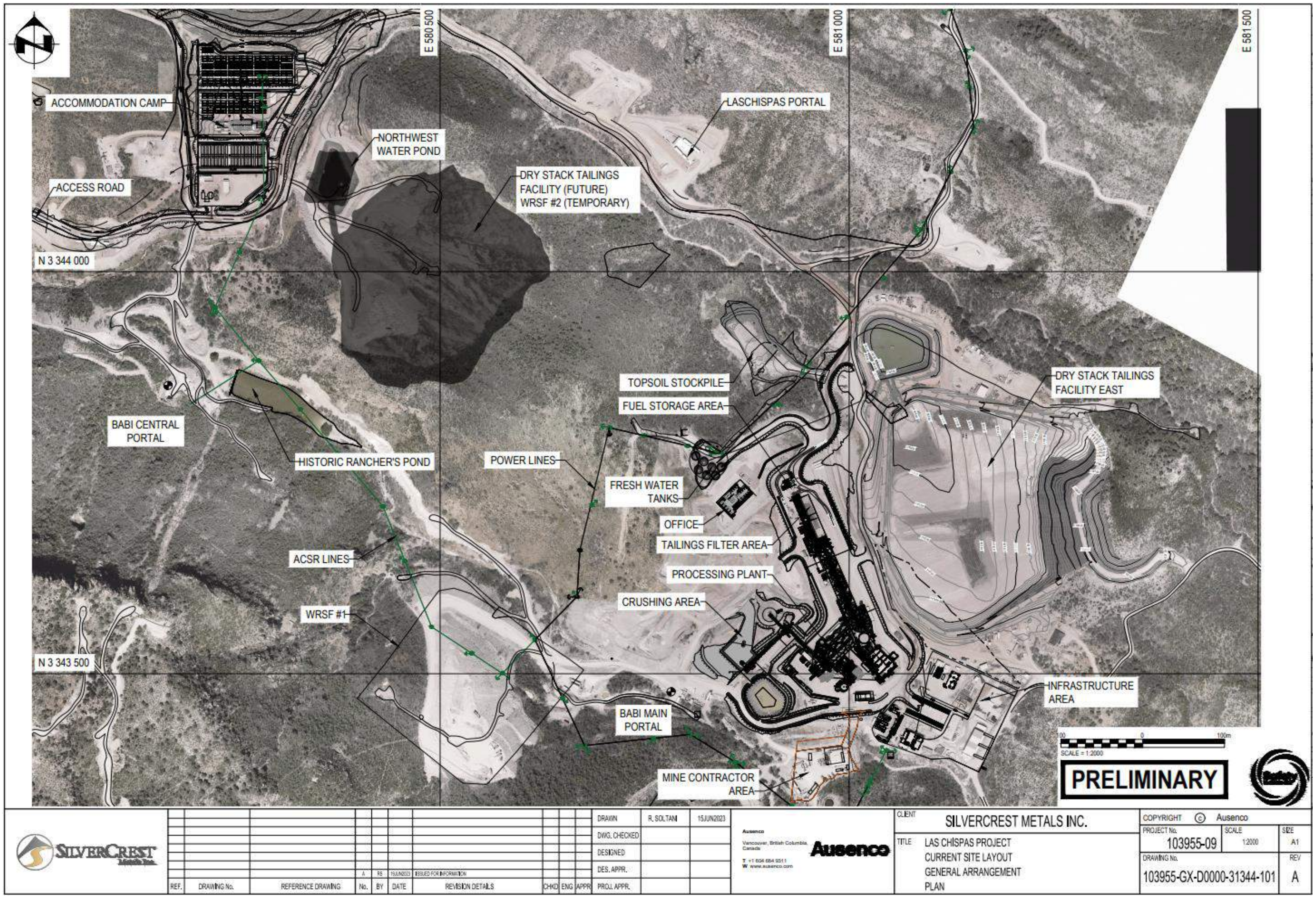
1.14.1 Introduction

Infrastructure existing for the mining and processing operations include:

- Underground mine, including portals (3), ramps and vents
- Roads: main access road, site access road, bridge crossing, borrow pit haul road, filtered tailings storage facility (FTSF) haul road, waster rock storage facility (WRSF) haul road, and explosives access road
- Diversion and collection channels, culverts, and containment structures
- Site main gate and guard house (2)
- Accommodation camp
- Power and water distribution
- Warehouse and truck shop, offices, medical clinic, and nursery
- Explosives magazines
- Process Plant
- Control room
- Doré room
- Assay laboratory (off-site facility)
- Reagent storage facilities
- Water treatment plant
- Mineralized stockpiles and WRSFs
- Filtered tailings storage facility (FTSF)
- Nuclear devices storage facility
- Hazardous waste interim storage facility
- Exploration core shacks.

Figure 1-4 shows the site layout.

Figure 1-4: Site Layout



Source: Ausenco, 2023.

1.14.2 Waste Rock Storage Facility

The two waste rock storage facilities (WRSF#1 and #2) have a combined capacity of approximately 1.0 Mt and are expected to be sufficient as temporary facilities to store development waste before returning it to be used as rock fill in mined-out stopes.

1.14.3 Ore Stockpiles

The mineralized material stockpiles have a capacity of approximately 0.35 Mt with segregated piles by grade (or clay content). These ore stockpiles are located west of the crusher.

1.14.4 Filtered Tailings Storage Facility

A filtered tailings storage facility (FTSF) was adopted based on the mine plan, limited available construction materials, and to avoid risks associated with storage of conventional slurried tailings behind a dam. Tailings are thickened, filtered, and delivered by trucks to the FTSF. Two facilities were designed to store approximately 4.5 Mt of tailings. The East FTSF has been designed with a capacity to store up to 3.1 Mt of filtered tailings. Given the current estimated production for the LOM, approximately 150 to 200 kt of filtered tailings are projected be stored in the West FTSF, which will be constructed towards the end of the LOM.

The facilities were designed with an overall slope of 2.8:1 (H:V), slope between benches of 2.2:1 (H:V), and maximum approximate height of 56 m (measured from the lowest portion of the starting buttress to the maximum elevation of the dry stack). The existing East FTSF is located 530 m northeast of the Process Plant and covers an area of approximately 101,932 m^2.

The FTSF designs include contact water collection channels, contact water collection/storage ponds, sub-drain collection systems, and access roads. Non-contact water diversion channels have been constructed to reduce the amount of surface contact water generated from the FTSF area.

1.14.5 Power and Fuel

Electrical power is supplied to site from the national grid, by way of an overhead power line, rated to carry 8.5 MVA at 33 kV. Connection to the grid is via the Nacozari de Garcia substation, which is 83 km from the operation.

Diesel fuel requirements for the mining equipment, process and ancillary facilities is temporarily supplied by a contractor. The permanent distribution systems located near the Process Plant are constructed and will be used when the necessary permits have been received.

1.14.6 Camp

The Las Chispas Operation is equipped with an accommodation camp with a capacity of 500 beds. The camp is connected to the national electricity grid and equipped with an emergency genset capable of handling the entire electrical load. The camp is serviced by the potable water treatment plant and sewage treatment plant. Garbage is collected on site and disposed at the Arizpe municipality waste disposal facility.

All rooms are single occupancy and include a bed, toilet, air heating/conditioning and shower. The camp is equipped with kitchen and dining facilities to support the 24-hour operation, laundry, maintenance camp shop, and snack area. The camp also includes a gym, a multifunction sport field, a recreation facility, barbecue area, and a chapel.

1.14.7 Water Management

Water required for the Las Chispas Operation is supplied as groundwater from dewatering of the underground mine and or from the Sonora Valley groundwater, as required. The Las Chispas Operation design includes water diversion features to divert precipitation and groundwater away from operation infrastructure and direct it to natural receiving streams to minimize the generation of contact water. The layout also includes water collection ponds to collect any contact water that is produced, and to store any excess water from the underground workings such that it can be recycled for use in the Process Plant. There is not expected to be any water discharged from the Las Chispas Operation.

1.15 Market Studies and Contracts

The doré bars produced at the Las Chispas Operation have variable gold and silver contents and a variable gold to silver ratio, depending mainly on the corresponding gold and silver grades of the feed material being processed at any given time. Over the projected LOM, the metal content is expected to be 0.5%-1.5% gold and 85%-95% silver with the balance impurities. During 2022, SilverCrest has engaged with gold and silver buyers and refiners, and made the necessary arrangements to safely transport, refine, and sell the doré.

Gold and silver doré can be readily sold on many markets throughout the world and the market price ascertained on demand.

Metal pricing for financial analysis was agreed upon based on consideration of various metal price sources. This included review of consensus price forecasts from banks and financial institutions, three-year trailing average of spot prices, and current spot prices. The metal pricing for the base case economic model was:

- Gold price of $1,800/troy oz payable
- Silver price of $23.00/troy oz payable.

At the Report Effective Date, the Company has entered into contracts necessary for operating Las Chispas. These contracts and agreement include, but are not limited to, contracts for drilling, underground mining, explosives, power, supply of consumables, catering and camp management, security, personnel transportation, and refining. These contracts are reviewed and negotiated periodically to ensure they remain competitive and aligned within industry norms for projects in similar settings in Mexico.

1.16 Environmental Studies, Permitting and Social or Community Impact

1.16.1 Environmental Considerations

Environmental studies pertaining to the Las Chispas Operation have been submitted to the Ministry of Environmental and Natural Resources of Mexico (SEMARNAT), including physical and biological evaluations of the surrounding climate, flora, fauna, air quality, noise, and surface and groundwater quality. This information is updated and reported annually. In addition, a physical climate risk assessment aligned with the Task Force on Climate-Related Financial Disclosures (TCFD) was conducted in 2021 in order to assess and understand key risks.

LLA is conducting a comprehensive rock quality characterization study with the intent to assess the potential for acid rock drainage and metal leaching in the waste rock. Samples chosen based on the deposit's lithological characteristics are being processed by SGS Lakefield Canada, and the analysis will be performed by a specialized consultant, with preliminary results due in 2023. This work will complement studies already completed which concluded on low concentration of potentially leachable metals and no acid rock drainage (ARD).

There are no known environmental liabilities at the Las Chispas Operation arising from historic mining and processing operations. Since 2019 LLA has been conducting environmental characterization studies on soil and water, initially in the baseline study reported to SEMARNAT and subsequently periodically as part of the monitoring program. No environmental liabilities have been identified.

1.16.2 Permitting Considerations

LLA has successfully fulfilled the SEMARNAT's requirement for a suite of studies to support the award of environmental permits for the exploration, construction, and operation of the Las Chispas Operation. LLA secured all key permits, ensuring legal and environmental compliance for the Las Chispas Operation, including exploration, construction, exploitation stages, water use, change of land use, waste generation, emissions, and Process Plant.

A medium voltage power transmission line, authorized by SEMARNAT for positive environmental impact, was developed and went operational in April 2022. The "Tetuachi" bridge was designed and constructed in 2021 to ensure safe crossing over the Sonora River during the rainy season, with CONAGUA's approval.

LLA has a concession to exploit and use national groundwater for industrial mining use, granted by CONAGUA in October 2020, and valid for 10 years (renewable). LLA also operates under a closed-circuit design for the Process Plant that eliminates the need for a wastewater discharge permit. LLA has a hazardous waste management plan registered with SEMARNAT.

LLA also maintains a general permit granted by SEDENA for the purchase, use, and storage of explosives., with plans for an increase in purchasing and storage capacity. Finally, the environmental operating license, secured from SEMARNAT in September 2022, permits operations at the Las Chispas Operation, integrating all previously obtained permits. Granted permits have varying terms, ranging from one year to unlimited terms. All permits will be renewed as required.

1.16.3 Environmental Management Plans

LLA conducts a comprehensive Environmental Monitoring Program at the Las Chispas Operation, which includes routine studies on environmental noise, air quality, ground and surface water quality, drinking water analysis, and heavy metals in sediments, with annual reports presented to SEMARNAT. The Water Management Plan ensures efficient use of water resources by monitoring extraction and consumption and avoids wasteful discharge practices. A third-party specialist is working on updating the water balance to improve resource optimization. The Air Quality Management Plan includes a mitigation program for suspended dust caused by traffic, with measures like quarterly dust sampling, road irrigation, speed control, and preventive maintenance for mobile equipment, all being reported to SEMARNAT.

1.16.4 Waste Considerations

The Las Chispas Operation has been registered with SEMARNAT as a hazardous waste generator since 2019. A warehouse on site is maintained for the management and disposal of waste, including that produced by contractors, with waste disposal handled by SEMARNAT-authorized suppliers. LLA is also registered with the Commission of Ecology and

Sustainable Development of the State of Sonora (CEDES) as a generator of special handling waste (non-hazardous), which is subject to recovery or recycling and is removed by state-authorized companies. LLA submits biannual reports to CEDES on the generation and disposal of this waste. All greywater from Las Chispas Operation's camp and office facilities is channelled to a wastewater treatment plant, with up to 90 m^3 treated per day; this treated water is used for road irrigation to suppress dust and greening reforested areas.

1.16.5 Social and Community Considerations

The Sonora Valley is an isolated community set in a region of rugged topography. As of March 2023, the Las Chispas Operation personnel consisted of 908 personnel (327 employees of Llamarada and 581 contractors). 15% of the personnel were local to the Sonora Valley and 99% of the total number were from various parts of Mexico. There are four main ejido groups that SilverCrest have been actively engaging with, three of which will be impacted by mining operations (Ejido Bamori, Ejido Arizpe, and Ejido Sinoquipe) and the fourth (Ejido Los Hoyos) is impacted by the Los Hoyos Powerline. Community engagement and relationship management play a crucial role in SilverCrest's operations. As such, constant dialogue is maintained, and regular meetings held with the communities within the areas of influence including the four main ejido groups. Impacts to Indigenous populations were examined. There are no indigenous populations located within 10 km of the Las Chispas Operation.

A Social Baseline Study and a Materiality Assessment highlighted key concerns within the community including water scarcity, environmental safety, local infrastructure, and job opportunities. SilverCrest has established a community communication strategy and grievance mechanism in response to these concerns and has committed $1.5 million to improving local water infrastructure over five years (2022 - 2026). Furthermore, the Company is part of the Sonoran Mining Cluster, sharing best practices on community relations and responsible mining.

The Company is one of the main sponsors of Impulso Koria, a non-profit organization focusing on local infrastructure, education, and healthcare. In addition, SilverCrest has incorporated a ranching business, Babicanora Agrícola del Noroeste S.A de C.V (BAN), underlining their participation in the local economy and commitment to the local communities.

1.16.6 Closure Considerations

A Conceptual Closure Plan was prepared in general accordance with applicable Mexican standards and WSP's experience with similar projects. Under Mexican law, mining may be initiated under a Conceptual Closure Plan with a Detailed Closure Plan being developed later in the operation's life.

WSP prepared a conceptual closure cost estimate for the Las Chispas Operation, using a combination of information derived from the 2021 FS Report, drone imagery of existing facilities and landforms, information from the Detailed Engineering Phase 1 FTSF Design, a database of itemized costs from local contractors working on similar projects in the area, and assumptions derived from WSP's experience in mine closure. The estimated cost is approximately $6.8 million. Closure costs are assumed to be incurred over a period of approximately three years, following the cessation of production and a subsequent period of seven years of monitoring.

1.17 Sustaining Capital and Operating Costs

1.17.1 Sustaining Capital Cost Estimates

LOM sustaining capital costs total $219.9 M, which are detailed as per Table 1-4.

Table 1-4: LOM Sustaining Capital Cost Summary ($M)

Calendar Year	LOM	2023	2024	2025	2026	2027	2028	2029	2030
Production Year		1	2	3	4	5	6	7	8
U/G Mine Development	176.0	24.3	33.2	31.8	32.8	28.6	21.4	1.8	1.7
U/G Mine Infrastructure	28.3	8.9	5.6	2.6	6.1	1.7	2.1	1.2	0.03
Process Plant	6.2	1.8	1.3	1.6	0.5	0.5	0.5	-	-
Dry Stack Tailings	3.2	-	2.9	-	-	-	0.3	-	-
G&A (including mobile)	6.7	4.1	1.0	0.3	0.3	0.3	0.3	0.3	-
Total	**219.9**	**39.2**	**44.1**	**36.2**	**39.7**	**31.1**	**24.7**	**3.3**	**1.7**

1.17.2 Reclamation and Closure Cost Estimates

An allowance of $6.8 M was made for closure costs with spending scheduled to occur across the three years following the cessation of production. Any change in regulations that would require SilverCrest to undertake progressive closure, or to post a cash bond, would affect the timing of these cash flows.

No salvage value was assumed for the Process Plant and surface infrastructure. It has also been assumed that CFE would accept ownership of the power line which is common in Mexico.

1.17.3 Operating Cost Estimate

The average LOM operating cost is estimated at 168.18 $/t processed. The operating cost is defined as the total direct operating costs including mining, processing, and G&A costs. Mining costs are estimated to be 99.59 $/t processed (108.04 $/t mined). Tonnes of material to be processed includes mined ore that is already in stockpiles. Table 1-5 shows a summary breakdown of the operating costs.

Table 1-5: Operating Cost Summary

Area	LOM Average Operating Cost
Mining* ($/t processed)	99.59
Process ($/t processed)	47.21
G&A ($/t processed)	21.39
Total LOM Operating Cost ($/t processed)	**168.18**

Notes: *Includes stope development but excludes capitalized underground development. Total may not add due to rounding.

1.18 Economic Analysis

A pre- and post-tax economic analysis was completed on the basis of a discounted cash flow model featuring a 5% discount rate. The analysis used constant (real) Q1 2023 US$ and the Las Chispas Operation cash flows were modelled in annual periods.

The model assumed a production period of eight years, including 2023-2030. It should be noted that the average Process Plant throughput of 1,200 tpd is limited by the mining rate not the Process Plant design which is 1,250 tpd.

The economic model was based on a gold price of $1,800/oz and a silver price of $23.00/oz. The refining terms used as the basis of the economic analysis are based on actual average cost paid by SilverCrest with its third-party refiner. The freight terms are also based on actual rates.

The taxable income was estimated using a tax rate of 30% over the LOM.

The economic analysis demonstrates that the mine plan has positive economics under the assumptions used. The Las Chispas Operation post-tax (NPV) at a 5% discount rate is estimated to be $549.9 M. A summary of the economic analysis of the Las Chispas Operation is shown in Table 1-6.

Table 1-6: Economic Analysis Summary

Description	Unit	LOM Total/Avg.
Average Mill Throughput	tpd	1,200
Mine Life years	years	8
Average Gold Mill Head Grade	gpt Au	4.02
Average Silver Mill Head Grade	gpt Ag	396
Average Silver Equivalent Mill Head Grade	gpt AgEq	716
Contained Gold in Mine Plan	koz Au	422.7
Contained Silver in Mine Plan	koz Ag	41,615.6
Contained Silver Equivalent in Mine Plan	(koz AgEq)	75,227.6
Average Gold Metallurgical Recovery	% Au	98.0
Average Silver Metallurgical Recovery	% Ag	97.0
Payable Gold	koz Au	421.6
Payable Silver	koz Ag	41,005.5
Payable Silver Equivalent	koz AgEq	74,525.4
Average Full Year Annual Production		
Gold	Au koz/yr	57.0
Silver	Ag koz/yr	5,503.5
Silver Equivalent	AgEq koz/yr	10,036.0

Description	Unit	LOM Total/Avg.
Mining Cost	$/t mined	108.00
Mining Cost	$/t processed	99.59
Process Cost	$/t processed	47.21
G&A Cost	$/t processed	21.39
Total Operating Cost	$/t processed	168.18
LOM Sustaining Capital Cost	$M	219.9
Closure Costs	$M	6.8
Cash Costs LOM – Mine Level	$/oz AgEq	7.84
AISC LOM – Mine Level	$/oz AgEq	11.98
Au Price	$/oz	1,800
Ag Price	$/oz	23
Pre-Tax NPV 5%, $M	5%, $M	706.5
Post-Tax NPV (5%, $M)	5%, $M	549.9
Undiscounted LOM net free cash flow	$M	654.1
LOM AISC Margin	%	48%

The Las Chispas Operation is most sensitive to metal pricing and recovery/grade. Grade sensitivity mirrors the sensitivity to metal prices.

1.19 Interpretation and Conclusions

Under the assumptions and parameters discussed in the Report, the Las Chispas Operation shows positive economics.

1.19.1 Risks

1.19.1.1 Mineral Resource Estimate

The drill sample spacing varies by vein and the classification of Mineral Resource Estimate was assigned based on the level of confidence based on drill core sample spacing and grade variability. Risk is associated with all classifications of Mineral Resource Estimate, most particularly with the Inferred Mineral Resource Estimate.

There is a risk that the Mineral Resource Estimate wireframes (>150 gpt AgEq) may be moderately high biased with respect to the representative volume, and subsequent estimated tonnage and metal content. This potential bias could be where the wireframes extend somewhat too far into lower-grade (<150 gpt AgEq) assay areas of influence. A follow-up rolling reconciliation is recommended to allow for any mine call factor adjustments to be made in these lower-grade areas.

Localized extremely high-grade samples were encountered in drill core sampling as part of the mineralization system. Locally, this represents a risk in the accuracy of grade estimation for Mineral Resource and subsequent Mineral Reserve estimation, and to operational grade control.

Where only widely spaced sampling is available, the spatial extent of the high-grade mineralization may be uncertain. This risk can be reduced through future close-range sampling to delineate high-grade shoots within the vein systems, thereby allowing the highest-grade material to be sub-domain to constrain spatial influence of these samples within delineated shoots. Closely spaced pre-production definition drilling in combination with duplicate sampling protocols for high-grade samples should be implemented to mitigate excessive extrapolation of high-grade values and to inform the local, short-range, grade variability.

1.19.1.2 Mineral Reserve Estimate and Mine Plan

General factors that may affect the Mineral Reserve Estimate include adjustments to gold price and exchange rate assumptions; changes in operating and capital cost estimates; dilution adjustments; changes to geotechnical assumptions, changes to hydrogeological and underground dewatering assumptions; and changes to modifying factor assumptions, including mining recovery and dilution.

There is a known open stope area in the Babicanora Central Zone. This area could cause recovery problems because although the general area is known, the exact size and geometry of the open stope is not appropriately defined. To mitigate the possible impact of this risk, all mining within 10 m of the known void have been removed from the plan, and test hole drilling cost estimates were included in the costing of this area.

SIL has established access to the historic workings in the Las Chispas area and has created a 3D model of the extensive workings using digitized historic long sections. However, there remains considerable uncertainty in the position of some of the voids. It is recommended that surveys be completed to confirm the void position and geometry prior to further mining. Probe drilling will also be required on advance during development near potential voids.

1.19.2 Opportunities

1.19.2.1 Exploration and Mineral Resources

Several potential opportunities have been identified for expansion and increasing confidence of existing Mineral Resources, in addition to brownfields exploration to test mapped targets along vein strike and to depth.

The most significant upside is the potential for conversion of existing Inferred Mineral Resources to Indicated Mineral Resources with additional drilling, and the exploration potential to identify and support new Inferred Mineral Resources.

Inferred Mineral Resources are estimated at 1.3 Mt grading 3.73 gpt Au, and 269 gpt Ag, or 566 gpt AgEq, for 24.1 Moz AgEq. There are approximately 15 Moz over 500 gpt AgEq with sufficient mining width, close to surface, and in proximity to current or planned underground workings, of which 10 Moz AgEq will be targeted immediately for drilling to assess conversion into Indicated Resources. The majority of these Mineral Resources are located in the Babi Sur Main and FW, El Muerto Splay and the Babicanora Norte Vein NW Extension. Significantly, Inferred Resources targeted within the Babi Sur Zone include 144 kt containing 4.86 Moz AqEq with a grade of 1,050 gpt AgEq (8.46 gpt Au and 378 gpt Ag) using a cut-off of 500 gpt AgEq.

The Las Chispas Operation has significant brownfields exploration potential. There are over 23 km in strike of underexplored veins throughout the property that have been identified on surface through mapping and sampling programs. These areas include the Chiltepin Area, La Martina, Las Chispas Southeast, Ranch Vein, and La Victoria Vein. There are also several blind veins and structures that have been tagged through various drill programs including potential vein expansion to depth along several of the currently known zones. Future drilling should focus on step-out drilling within the known mineralization zones and testing deeper host lithologies, parallel veins and newly identified areas that had limited historical workings.

1.19.2.2 Process Plant Capacity and Plant Expandability

The Process Plant design was for 1,250 tpd and the LOM has now been set to 1,200 tpd.

If the mine capacity or ramp-up progress is better or faster than what has been planned in the Report, there is capacity in the Process Plant to go beyond the design of 1,250 tpd as the Process Plant has been tested at milling rate of 62 tph and availability above 94%.

There is also the possibility to expand the Process Plant up to 1,750 tpd with the completion of studies and engineering to review the crushing, grinding, flotation, leaching and dewatering circuits.

1.19.2.3 Mineral Reserve Estimate and Mine Plan

The design of the LOM was completed at a level of detail sufficient for inclusion in this Report. The LOM plan will be used to form the basis of future detailed design and schedule. As with any LOM, there exists an opportunity to further improve the mine design and schedule in terms of detailed design, especially with due regard to integration of services, layout of development, design of stopes and geomechanics.

1.20 Recommendations

A sequential phase approach is presented for recommended future work. The following is the budget for the recommended Phase 1 (Year 1) and Phase 2 (Years 2 and 3) work.

Phase 1 recommendations account for $15 M. Of this amount, a budget of $10 M has already been approved starting in July 2023 for a period of 9 months. The balance is expected to be reviewed with the 2024 budget cycle. The targets for this program are highlighted in Table 1-7.

Table 1-7: Summary of Budget for Recommended Phase 1 and Phase 2

	Phase 1 ($M) Year 1	Phase 2 ($M) Years 2 and 3
Exploration and Mineral Resource Conversion Drilling	13.1	18.3
QA/QC	0.1	0.2
Bulk Density Investigation	0.03	nil
Resource Estimation	0.05	0.1
Mine Design	0.1	0.2
Sub-Total	**13.4**	**18.8**
Contingency (10%)	**1.3**	**1.9**
Total	**14.7**	**20.7**

Note: Numbers may not add due to rounding.

2 INTRODUCTION

2.1 Introduction

SilverCrest Metals Inc. (SilverCrest or the Company) commissioned Ausenco Engineering Canada Inc. (Ausenco) to compile an Operating Technical Report (the Report) on the Las Chispas Operation (the Las Chispas Operation), located in Sonora, Mexico. The effective date (the Effective Date) of the Report is July 19, 2023.

This Report has been prepared for SilverCrest to conform to the regulatory requirements of Canadian National Instrument (NI) 43-101 using the form 43-101 F1 Standards of Disclosure for Mineral Projects.

The responsibilities of the engineering companies contracted by SilverCrest to prepare this Report are as follows:

- Ausenco managed and coordinated the work related to the Report, reviewed the metallurgical test results, Process Plant operating performance and cost estimates for the Process Plant infrastructure, general site infrastructure, and economic analysis.
- Ausenco Sustainability Inc. conducted a review of the environmental studies and permitting information for the Las Chispas Operations.
- BBE Group Canada (BBE) completed the underground mine ventilation design, including capital cost inputs for fixed installation fans, auxiliary fans for ramp development, mobile refuge bay installations and bulkheads for emergency escapes.
- Entech Mining Ltd. (Entech) developed the Mineral Reserve Estimate, the mine design, mine production schedule, and mining costs including capital development and mine operating costs.
- Hydro-Ressources Inc (HRI) completed a review of the site hydrological data.
- Knight Piésold Ltd. (KP) completed geotechnical studies.
- P&E Mining Consultants Inc. (P&E) completed the work related to property description, accessibility, local resources, geological setting, deposit type, exploration work, drilling, exploration works, sample preparation and analysis, data verification and the Mineral Resource Estimate
- WSP Canada Inc. completed the design for process water, electrical systems, mine dewatering, underground fuel distribution and other underground services, and provided capital cost inputs for process water, mine dewatering, compressed air, electrical systems and communications.
- WSP USA Inc. completed the site wide water balance and developed the design and cost estimate for the tailings storage facility.

2.2 Terms of Reference

The Report supports disclosures by SilverCrest in the news release dated July 21, 2023, titled, “SilverCrest Announces Results of Updated Independent Technical Report”.

The firms and consultants who are providing Qualified Persons (QPs) responsible for the content of the Report are, in alphabetical order, Ausenco Engineering Canada Inc. and Ausenco Sustainability Inc. (Ausenco), BBE Group Canada

(BBE), Entech Mining Ltd. (Entech), Hydro-Ressources Inc. (HRI), Knight Piésold Ltd. (KP), P&E Mining Consultants Inc. (P&E), WSP Canada Inc. and WSP USA Inc.

The Report presents Mineral Resource and Mineral Reserve Estimate for the Las Chispas Operation, and an economic assessment based on ongoing underground mining operations and a conventional processing circuit that is producing gold-silver doré bars.

All units of measurement in the Report are metric, unless otherwise stated.

The monetary units are in US dollars, unless otherwise stated.

Mineral Resources and Mineral Reserves are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014; the 2014 CIM Definition Standards) and Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (November 2019).

2.3 Qualified Persons

The following serve as the qualified persons for this Technical Report as defined in National Instrument 43-101, Standards of Disclosure for Mineral Projects, and in accordance with Form 43-101F1:

Table 2-1: Report Contributors

Qualified Person	Professional Designation	Position	Employer	Report Section
Mr. Kevin Murray	P.Eng.	Manager, Process Engineering	Ausenco Engineering Canada Inc.	1.1, 1.2, 1.9, 1.13, 1.14.1, 1.14.3, 1.14.5, 1.14.6, 1.15, 1.17, 1.18, 1.19, 1.19.2.2, 1.20, 2, 3.1, 3.4, 3.5, 13, 17, 18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7, 18.8, 18.9, 18.10, 18.11, 18.12, 18.13.2, 18.13.3, 18.14, 18.15, 18.16, 18.17, 18.20, 19, 21.1.3, 21.3.1, 21.3.3, 21.3.4, 22, 24, 25.1, 25.8, 25.9, 25.10, 25.12.1, 25.12.3, 25.13, 25.14, 25.14.3, 25.15, 25.15.3, 25.15.4, 25.15.5, 25.15.6, 25.16, 25.17, 26.1, 26.7 and 27
Mr. Scott Weston	P. Geo.	Vice President, Business Development	Ausenco Sustainability Inc.	1.16, 3.3, 20.1, 20.2, 20.4, 25.11.1, 25.11.2, 25.11.4 and 27
Mr. Wynand Marx	Fellow SAIMM	Chief Executive Officer	BBE Group Canada	16.8.12, 16.8.13.2, 21.1.2 and 27

Qualified Person	Professional Designation	Position	Employer	Report Section
Mr. Patrick Langlais	P. Eng.	Sr. Mine Engineer	Entech Mining Ltd.	1.11, 1.12.3, 1.19.1.2, 1.19.2.3, 15, 16.1, 16.4, 16.5, 16.6, 16.7, 16.8.13, 16.8.13.1, 16.8.13.3, 16.8.13.4, 16.9, 16.10, 21.1.1, 21.3.2, 25.6, 25.7.3, 25.14.2, 25.15.2, and 26.6
Mr. Michael Verreault	P. Eng.	Hydrogeologist	Hydro-Ressources Inc.	1.12.2, 16.3, 25.7.2 and 27
Mr. Ben Peacock	P. Eng.	Specialist Engineer	Knight Piésold Ltd	1.12.1, 16.2, 25.7.1 and 27
Ms. Jarita Barry	P. Geo.	Associate Geologist	P&E Mining Consultants Inc.	11, 12.1, 12.3, 26.3 and 27
Mr. David Burga	P. Geo.	Associate Geologist	P&E Mining Consultants Inc.	10, 12.2 and 27
Mr. Eugene J. Puritch	P. Eng.	President	P&E Mining Consultants Inc.	1.10, 1.19.1.1, 14.1, 14.2, 14.11, 14.14, 14.19, 25.5, 25.14.1, 26.4, 26.5 and 27
Dr. William Stone	P. Geo.	Sr. Associate Geologist	P&E Mining Consultants Inc.	1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.19.2.1, 3.2, 4, 5, 6, 7, 8, 9, 23, 25.2, 25.3, 25.4, 25.15.1, 26.2 and 27
Mr. Yungang Wu	P. Geo.	Sr. Associate Geologist	P&E Mining Consultants Inc.	14.3, 14.4, 14.5, 14.6, 14.7,14.8, 14.9, 14.10, 14.12, 14.13, 14.15, 14.15.1, 14.15.2, 4.15.3, 14.16, 14.17, 14.18 and 27
Mr. Christopher Lee	P. Eng.	Mechanical Engineer	WSP Canada Inc.	16.8, 21.1.2
Dr. Humberto F. Preciado	P.E.	Principal Geotechnical Engineer	WSP USA Inc.	1.14.2, 1.14.4, 1.14.7, 18.13.1, 18.18, 18.18.1, 18.18.2, 18.19, 18.19.1, 18.19.2, 18.19.3, 18.19.4, 18.19.5, 18.19.6, 18.19.7, 18.19.8, 18.19.9, 18.19.10, 18.19.11, 18.19.12, 18.19.13, 18.19.14, 18.19.15, 18.19.16, 18.19.17, 20.3, 20.5, 21.2, 25.11.3, 25.12.2, 25.14.4 and 27

2.4 Site Visits and Scope of Personal Information

Mr. Murray, representing Ausenco, completed a site visit from March 14-16, 2023. The objectives of the site visit were to develop an understanding of the Las Chispas Operations including plant infrastructure and process facilities, and to observe actual operations and operating results.

Mr. Verreault, representing HRI, conducted a site visit from November 10-12, 2020. The objectives of the visit were to observe the following aspects: 1) general layout at site, 2) underground veins and geological structures, 3) surface hydrology, 4) current pump testing situation and 5) general geology. Meetings were held with various SilverCrest technical staff members to discuss basin tectonics, structural geology including veins and other discontinuities, overall geology and historic water records.

Dr. Preciado, representing WSP, conducted a site visit from March 7-10, 2022. The purpose of this visit was to oversee the geomembrane installation and construction of the filtered tailings storage facility (FTSF), meet with SilverCrest´s environmental and construction team, meet with WSP's construction supervisors, review construction quality assurance and as-built information available at the time of the visit.

Mr. Burga, representing P&E, conducted a site visit from March 12-14, 2022. The purpose of this visit was to complete sampling of selected drill holes for assay data verification, check the location of select surface drill collar collars, complete an underground tour, and meet with SilverCrest technical staff on-site. Thirty-two (32) samples were collected from 16 drill holes during the site visit for verification of the assay data.

Mr. Peacock, representing KP, conducted a site visit from March 29 to April 1, 2022 and again from November 29 to December 2, 2022. The objectives of the visits were to become familiar with the mine, rock mass characteristics, and operating practices, and to provide training to SilverCrest geotechnical personnel.

Mr. Langlais, representing Entech, conducted a site visit from July 10-12, 2023. The purpose of this visit was to inspect the underground mine and confirm the suitability of all assumptions used in the design and scheduling of the LOM.

2.5 Effective Dates

The Report has a number of effective dates as follows:

- Date of information on mineral tenure, surface rights and agreements: May 15, 2023
- Indicated and Measured Mineral Resource Estimate: June 30, 2022
- Inferred Mineral Resource Estimate: March 21, 2023
- Mineral Reserve Estimate: June 30, 2022
- Financial analysis: July 19, 2023

The overall Effective Date of the Report is the effective date of the financial analysis which is July 19, 2023.

2.6 Information Sources and References

Report and documents listed in Section 2.7, Section 3, and Section 27 were used to support the preparation of the Report. Additional information was sought from SilverCrest personnel where required.

2.7 Previous Technical Reports

SilverCrest has previously filed the following technical reports on the Las Chispas Operation:

- Kalanchey, R, Weston, S., Stone, W., Puritch, E., Burga, D., Barry, J., Wu, Y., Turner, A.J., Michaud, C., Verreault, M., Aref, K., and Preciado, H., 2021, NI 43-101 Technical Report & Feasibility Study on the Las Chispas Proiect, Sonora, Mexico,. for SilverCrest Metals Inc., Effective date: January 4, 2021;

- Barr, J., Ghaffari, H., and Horan, M., 2019: Technical Report and Preliminary Economic Assessment for the Las Chispas Property, Sonora, Mexico: report prepared by Tetra Tech Canada Inc. for SilverCrest Metals Inc., effective date May 15, 2019, amended July 19, 2019;
- Barr, J., and Huang, J., 2019: Technical Report and Mineral Resource Estimate for the Las Chispas Property, Sonora, Mexico: report prepared by Tetra Tech Canada Inc. for SilverCrest Metals Inc., effective date February 8, 2019.
- Fier, N.E., 2018: Technical Report and Updated Mineral Resource Estimate for the Las Chispas Property, Sonora, Mexico: report prepared for SilverCrest Metals Inc., effective date September 13, 2018;
- Barr, J., 2018: Technical Report and Mineral Resource Estimate for the Las Chispas Property, Sonora, Mexico: report prepared by Tetra Tech Canada Inc. for SilverCrest Metals Inc., effective date February 12, 2018, amended May 9, 2018; and,
- Barr, J., 2016: Technical Report on the Las Chispas Property, Sonora, Mexico: report prepared by Tetra Tech Canada Inc. for SilverCrest Metals Inc., effective date September 15, 2016.

2.8 Units and Abbreviations

Table 2-2: Unit Abbreviations

Abbreviation	Description
$	United States dollar
MXN	Mexican peso
°C	degree Celsius
°F	degree Fahrenheit
%	percent
µ	micro
µm	micrometre
C$	Canadian dollar
cm	centimetre
ft	feet
ft^2	square feet
g	gram
gpt	grams per metric tonne
ha	hectare
hr	hour
HP	horsepower
km	kilometre
koz	thousand ounces
kV	kilovolt
kgpt	kilo grams per tonne
kW	kilowatt
kWh	kilowatt-hour

Abbreviation	Description
kWh/t	kilowatt-hours per metric tonne
kN/m^3	kilonewton per cubic metre
MW	megawatt
kPa	kilopascal
kcmil	thousand circular mills
kN	kilonewton
masl	metres above sea level
mamsl	metres above mean sea level
L/s	litre per second
M	million
m	metre
m/a	metres per annum
m/d	metres per day
m^2	square metre
m^3	cubic metre
mm	millimetres
t	metric tonne
Mt	million tonnes
oz	ounce
Moz	million ounces
Mt	mega tonne
ppb	parts per billion
ppm	parts per million
ton	short ton
tph	metric tonnes per hour
tpd	metric tonnes per day
t/a	metric tonnes per annum
w/w/ w/s	gravimetric moisture content (weight of water/weight of soil)
wt	weight

Table 2-3: Name Abbreviations

Abbreviation	Description
3D	three-dimensional
AAS	atomic absorption spectroscopy
ABA	acid base accounting
AES	atomic emission spectrometry
AgEq	silver equivalent
ALS	ALS Chemex

Abbreviation	Description
ARD	acid rock drainage
BAC	Babi Central
BAM	Babi
BAN	Babicanora Agrícola Del Noroeste S.A de C.V
BAV	Babi Vista
CCD	counter-current decantation
CCTV	closed circuit television
CDN Labs	CDN Resource Laboratories Ltd.
CEDES	Comisión de Ecología y Desarrollo Sustentable del Estado de Sonora (Commission of Ecology and Sustainable Development of the State of Sonora, Mexico)
CFE	Comisión Federal de Electricidad (Federal Electricity Commission of Mexico)
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CMT	construction management team
CNCF	cumulative cash flow
COG	cut-off grade
CONAGUA	Comisión Nacional del Agua (National Water Comission of Mexico)
CPI	consumer price index
CRF	cemented rock fill
CRM	certified reference materials
CSR	corporate social responsibility
CSS	closed side setting
CSV	comma-separated value
DCS	distributed control system
DSO	Deswik Stope Optimizer software
EBITDA	earnings before interest, taxes, depreciation and amortization
ELOS	equivalent linear overbreak/slough
EPCM	Engineering, Procurement and Construction Management
ESG	Environmental, Social and Governance
ESMS	environmental and social management system
FA	fire assay
FTSF	filtered tailings storage facility
FW	footwall
G&A	General and Administration
GIS	geographic information system
GPS	global positioning system
HDPE	high density polyethylene

Abbreviation	Description
HR	hydraulic radius
HRI	Hydro-Ressources Inc.
HW	hangingwall
ICP	inductively coupled plasma
ID	inverse distance
ID^3	inverse distance weighting to the third power
IP	Preventive Report (Informe Preventivo)
IRR	internal rate of return
LAN	local area network
LiDar	light detection and ranging data
LLA	Compañía Minera La Llamarada S.A. de C.V (subsidiary of SilverCrest in Mexico)
LOM	life of mine
LRS	longhole retreat stoping
MC-HS	master composite historic stockpile
MED Comp	medium grade composite
MGM	mine general manager
MIA	Spanish acronym for Environmental Impact Assessment
ML	metals leaching
MS	mass spectrometry
MSO	Mineable Shape Optimizer software
N’	stability number
NAF	non-acid forming
NAG	net acid generation
NCF	net cash flow
NN	nearest neighbour
NPV	net present value
NW	northwest
OEM	original equipment manufacturer
OIS	operator interface station
ORP	operation readiness plan
P&E	P&E Mining Consultants Inc.
PCR	polymerase chain reaction
PEA	preliminary economic analysis
PEP	project execution plan
PLS	pregnant leach solution
PMZ	precious metal zone
Q (1, 2, 3, 4)	calendar quarter (1, 2, 3, 4)

Abbreviation	Description
Q'	mass quality
QA/QC	quality assurance/quality control
QEMSCAN	quantitative evaluation of materials by scanning electron microscopy
QP	Qualified Person
RDCLF	rhyodacitic crystal tuff
ROM	run of mine
RPD	relative percent difference
RQD	rock quality designation
SAG	semi-autonomous grinding
SD	standard deviation
SEDENA	Secretaría de la Defensa Nacional (Ministry of Defense)
SEMARNAT	Secretaría del Medio Ambiente y Recursos Naturales (Ministry of Environment and Natural Resources of Mexico)
SG	specific gravity
SGS Lakefield	SGS Lakefield Research
SilverCrest or SIL	SilverCrest Metals Inc.
SLS	solid to liquid system
SUCS	Unified Soil Classification System
SWIR	shortwave infrared
SWMS	Safe Work Method Statement
URF	Uncemented Rock Fill
USMCA	United States-Mexico-Canada Agreement
UTM	Universal Transverse Mercator
VHF	very high frequency
VOIP	voice over internet protocol
VSA	vacuum swing adsorption
WGS	World Geodetic System

Table 2-4: Definitions

Term	Definition
Las Chispas Property	this encompasses all mineral occurrences and land underlying the mineral concessions 100% owned or optioned to SilverCrest
Las Chispas District	this is a general term used in historic context for the various mines which operated in the area prior to the 1930s. The district has an approximate footprint of 4 km north to south and 3 km east to west. It consists of the Las Chispas Area and Babicanora Area, which are approximately 1.5 km apart

Term	Definition
Las Chispas Area	this consists of the Las Chispas Vein containing Area 118 Zone and Historic Mine, Giovanni Vein, Gio Mini Vein, La Blanquita Vein, William Tell Vein, Luigi Vein, Luigi FW Vein, Varela veins, Chiltepin veins, El Cumaro Vein, and various other lesser or unnamed veins
Babicanora Area	this consists of the Babicanora Main Vein containing Area 51 Zone and Babicanora Central Zone, Babicanora FW Vein, Babicanora HW Vein, Babi Vista Vein, Babi Vista FW Vein, Babi Vista Vein Splay, Babicanora Norte Vein containing Area 200 Zone, Babicanora Norte HW Vein, Babicanora Sur Vein, Babicanora Sur HW Vein, Amethyst Vein, La Victoria Vein, Granaditas Vein, Granaditas Dos Vein, Ranch Veins and various other lesser or unnamed veins
Area 118 Zone (Area 118)	the southeast extension of the Las Chispas Vein discovered in 2020 by drill hole LC20-118. The hole intersected 8.6 m (true width) grading 44.30 gpt gold and 4,551.5 gpt silver
Area 51 Zone (Area 51)	the southeast extension of the Babicanora Main Vein discovered in late 2017 by drill hole BA17-51. The hole intersected 3.1 m (true width) grading 40.45 gpt gold and 5,375.2 gpt silver
Babicanora Central Zone (Babicanora Central)	the northwest, near surface, extension of the Babicanora Main Vein
Area 200 Zone (Area 200)	the southeast extension of the Babicanora Norte Vein discovered in 2020 by drill hole BA219-200. The hole intersected 2.0 m (true width) grading 39.77 gpt gold and 3,472.5 gpt silver
The Las Chispas (Historic) Mine	this refers to a historic shaft and series of underground developments believed to be sunk under the original discovery outcrop that was located in the 1640s; and
Vein	this is a current term used by SilverCrest for geological features consisting of semi-continuous structures, quartz veins, quartz stockwork, and breccia

2.9 Reporting of Grades by Silver Equivalent

SilverCrest has reported AgEq calculated on an Ag:Au ratio of 86.9:1 in several recent news releases, based on contemporaneous understanding of metal recoveries and the prevailing long term metal price trends. Due to variations in metal prices and improved understanding of metal recoveries, the AgEq ratio has varied since the 2021 FS Report. Unless otherwise stated the AgEq presented in this Report has been determined using an Ag:Au ratio of 79.51:1, as calculated based on long-term gold and silver prices of $1,650/oz Au and $21.00/oz Ag, metallurgical recovery values of 98% Au/97% Ag, and assuming applicable smelter charge and royalty of 0.5% for both gold and silver. The Mineral Resource Estimate, Mineral Reserve Estimate and the Economic Analysis have been developed using values from Au and Ag grades; AgEq is used only for reporting purposes.

3 RELIANCE ON OTHER EXPERTS

3.1 Introduction

The QPs have relied upon the following other expert reports, which provided information regarding mineral rights, surface rights, property agreements, royalties, taxation, and marketing sections of the Report.

3.2 Mineral Tenure and Surface Rights

The QPs have not independently reviewed ownership of the Las Chispas Operation and any underlying mineral tenure, and surface rights. The QPs have fully relied upon information derived from SilverCrest and legal experts retained by SilverCrest for this information through the following document:

- Urias Romero y Asociados, S.C., 2023: Legal Opinion: May 15, 2023.

This information is used in the summary in Section 1, and in Section 4, Property Description and Location, of the Report. It is also used to support the Mineral Resource Estimate in Section 14, the Mineral Reserve Estimate in Section 15, and the economic analysis in Section 22.

3.3 Environmental

The QPs have not independently reviewed environmental baseline, permitting, and social information for the Las Chispas Operation. The QPs have fully relied upon information derived from SilverCrest and experts retained by SilverCrest for this information through the following documents:

- ALS, 2019; Waste Rock Samples Analytical Reports, prepared for Altadore Energía, S.A. de C.V., November 2019, Hermosillo, Sonora, Mexico.
- ALS, 2020; Tailings Samples Analytical Reports, prepared for Tinto Roca Exploración S.A. de C.V, March 2020, Hermosillo, Sonora, Mexico.
- Ontiveros A, 2019; Various Reports on Surface Water Quality Results from Sampling Points Located Upstream and Downstream from the Mine Project, prepared for Compañía Minera la Llamarada S.A. de C.V and Altadore Energía, S.A. de C.V., Hermosillo, Sonora, Mexico.
- SGS, 2020a; Modified Acid Base Accounting & Net Acid Generation Testing Results on Various Rock Core Samples from the Babicanora Central, Babicanora Norte, Babicanora Sur, Babi Vista, William Tell, and Las Chispas Mining Areas, Report prepared by SGS Minerals Services for SilverCrest Metals Inc., Project 17337-1, January 2020, Lakefield, Ontario, Canada.

This information is used in Section 20 of the Report. It is also used to support the Mineral Resource Estimate in Section 14, the Mineral Reserve Estimate in Section 15, and the economic analysis in Section 22.

3.4 Market Studies and Contracts

The QPs have fully relied upon information supplied by SilverCrest for information related to market assumptions as applied to the financial model. This information is used in support of the marketing assumptions presented in Section 19 and the financial analysis discussed in Section 22. To some extent, this information was also included in the estimation of the Mineral Reserve Estimate, detailed in Section 15.

The QPs consider it reasonable to rely upon the information provided by SilverCrest for gold and silver doré marketing and marketing assumptions, especially given the ongoing Las Chispas Operations and existing contracts and agreements in place.

- Lafleur, C. of SilverCrest (2023) Email titled *Economic Market Assumptions,* to T. Hassan et. al., April 26, 2023.
- Lafleur, C. of SilverCrest (2023) Email titled *Technical Report Metal Prices for Reserve and Resource Cut Off Grade,* to T. Hassan et. al., January 5, 2023.

3.5 Taxation

The QPs have fully relied upon information supplied by SilverCrest's Sarahy del Rosario Moreno Acosta, Senior Tax Manager based in Mexico for information related to taxation assumptions used in support of the economic analysis discussed in Section 22.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 Introduction

The Las Chispas Property (Figure 4-1) is located in the State of Sonora, Mexico, at approximate 30.233902°N latitude and 110.163396°W longitude (Universal Transverse Mercator [UTM] World Geodetic System [WGS]84: 580,500E, 3,344,500N), within the Arizpe Mining district. The City of Hermosillo is approximately 220 km, or a three-hour drive to the southwest; Tucson, Arizona is approximately 350 km via Cananea, or a five-hour drive, to the northwest; and the community and Cananea Mine are located approximately 150 km, or a two-and-a-half-hour drive, to the north along Highway 89. The general topography of the area surrounding Las Chispas is shown in Figure 4-1. A location map for the Property is shown in Figure 4-2. The Property area is covered by the 1:50,000 topographic map sheet "Banamichi" H12-B83.

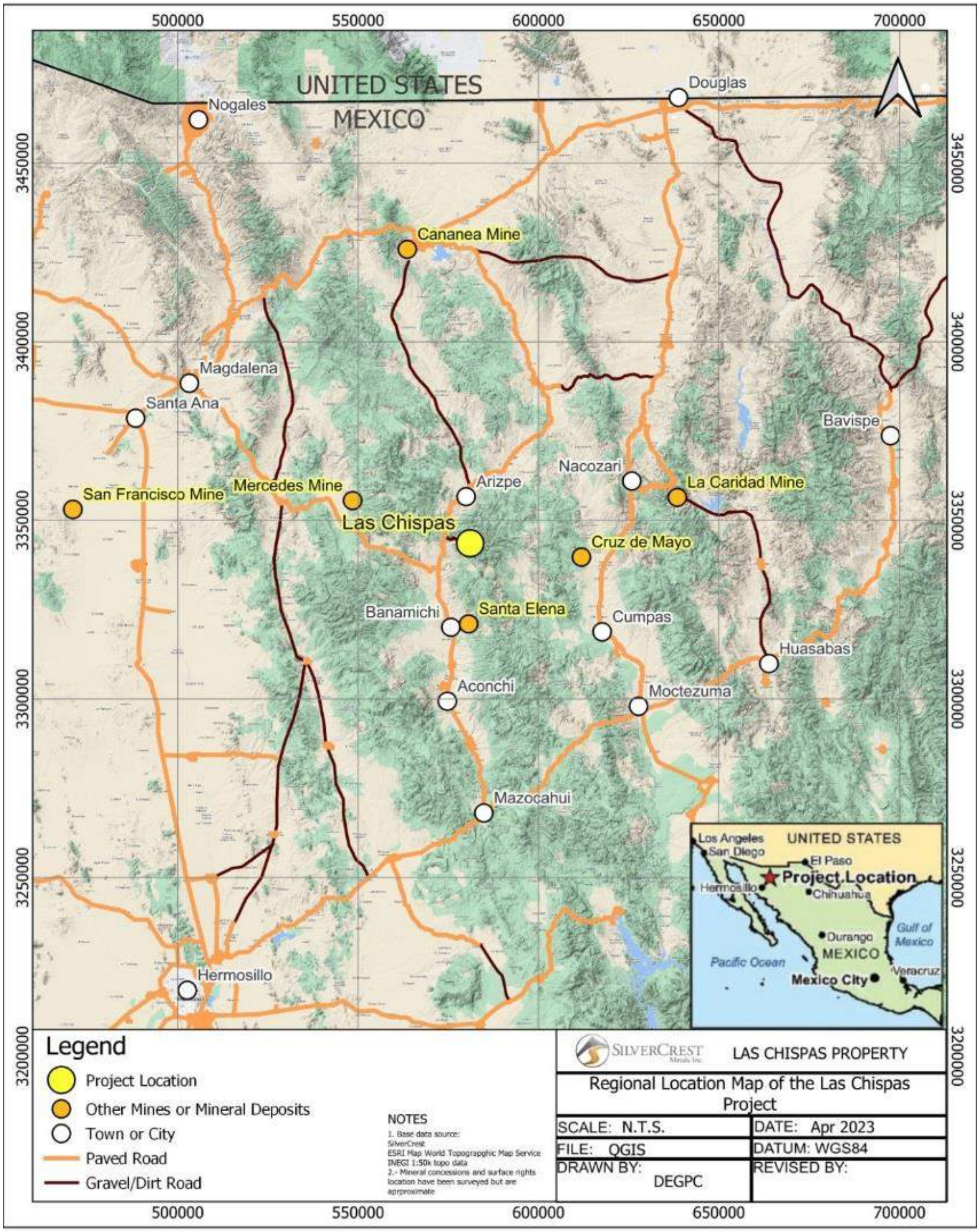
4.2 Project Ownership

Compañía Minera La Llamarada S.A. de C.V. (LLA) is a subsidiary of SilverCrest holds title to the mining concessions comprising the Las Chispas Property.

Figure 4-1: View Looking Eastwards Across the Las Chispas Property

Source: Tetra Tech Canada Inc., 2019. Note: Length of field of view in photograph is approximately 4 km.

Figure 4-2: Regional Location Map of the Las Chispas Property

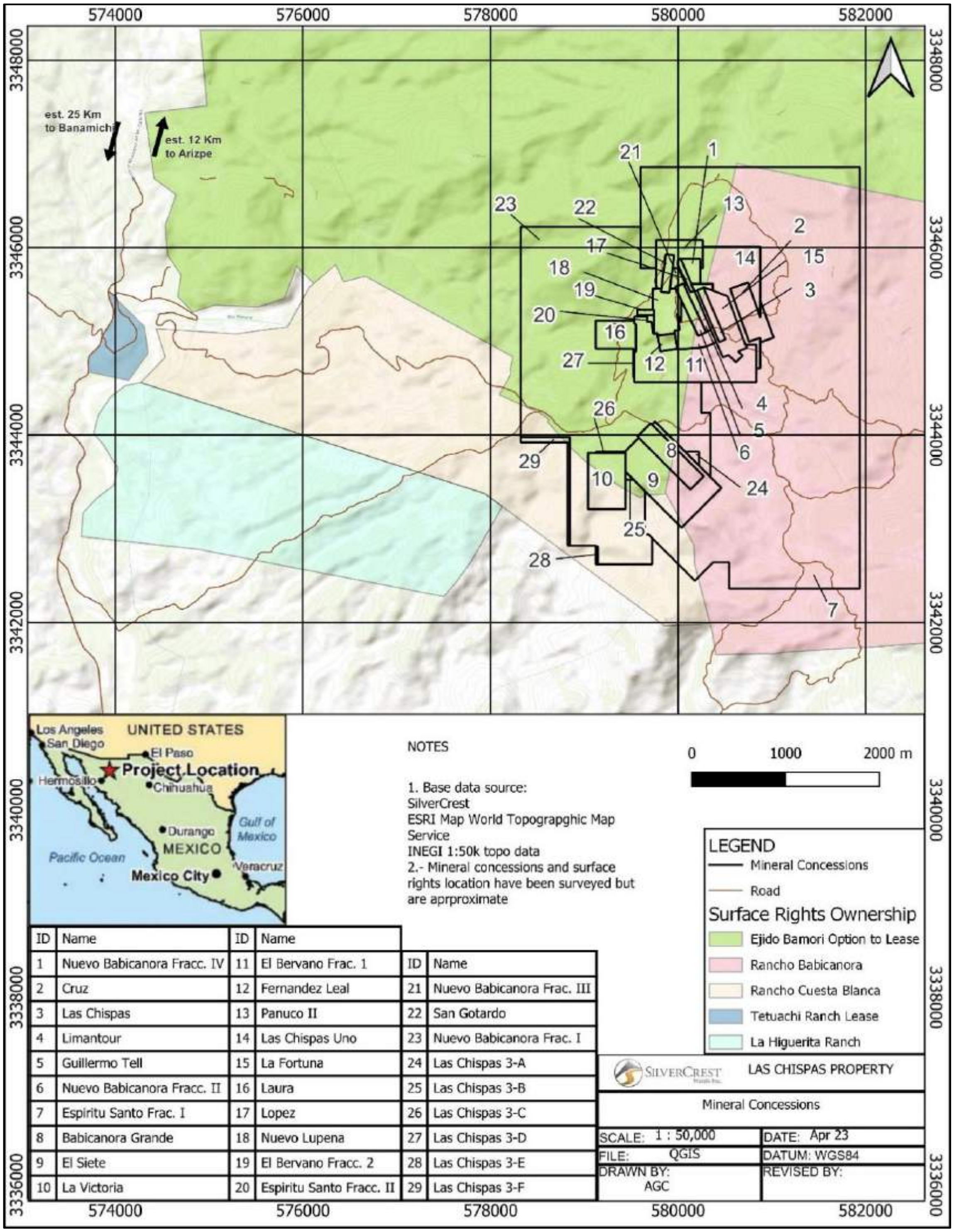


Source: Barr et al., 2019.

4.3 Mineral Tenure

The Las Chispas Property consists of 28 mineral concessions, totalling 1,400.96 ha, as shown in Figure 4-3 and listed in Table 4-1. LLA, has acquired 100% title to the mining concessions comprising the Las Chispas Property, except for the Lopez, La Fortuna (untitled claim) and Panuco II (pending final cancellation) mining concessions.

Figure 4-3: General Map Showing Mineral Concessions and Surface Rights for Las Chispas Property



Source: SilverCrest, 2023.

Table 4-1: Mineral Concessions held by SilverCrest for the Las Chispas Property[1]

Concession Name	Title Number	Registration Date	End Date	Surface Area (ha)	Concession Holder/Option Agreement Number
El Bervano Fracción 1	212027	8/25/2000	8/24/2050	53.4183	LLA
El Bervano Fracción 2	212028	8/25/2000	8/24/2050	0.9966	LLA
Las Chispas Uno	188661	11/29/1990	11/28/2040	33.7110	LLA
El Siete	184913	12/6/1989	12/5/2039	43.2390	LLA
Babicanora Grande	159377	10/29/1973	10/28/2073	16.0000	LLA
Fernandez Leal	190472	4/29/1991	4/28/2041	3.1292	LLA
Guillermo Tell	191051	4/29/1991	4/28/2041	5.6521	LLA
Limantour	191060	4/29/1991	4/28/2041	4.5537	LLA
San Gotardo	210776	11/26/1999	11/25/2049	3.6171	LLA
Las Chispas	156924	5/12/1972	5/11/2072	4.4700	LLA
La Fortuna[2]	EXP 082/39410	N/A	N/A	15.28	(1) Tarachi
Espíritu Santo Fracc. I	217589	8/6/2002	8/5/2052	733.3232	LLA
Espíritu Santo Fracc. II	217590	8/6/2002	8/5/2052	0.8770	LLA
La Cruz	223784	2/15/2005	2/14/2055	14.4360	LLA
Lopez	190855	4/29/1991	4/28/2041	1.7173	(2) LLA – Lopez
Nuevo Babicanora Fracc. I	235366	11/18/2009	11/17/2059	392.5760	LLA
Nuevo Babicanora Fracc. II	235367	11/18/2009	11/17/2059	9.8115	LLA
Nuevo Babicanora Fracc. III	235368	11/18/2009	11/17/2059	2.2777	LLA
Nuevo Babicanora Fracc. IV	235369	11/18/2009	11/17/2059	3.6764	LLA
Nuevo Lupena	212971	2/20/2001	2/19/2051	13.0830	LLA
Panuco II[3]	193297	Cancelled	Cancelled	12.9286	(3) LLA
La Victoria	216994	6/5/2002	6/4/2052	24.0000	LLA
Las Chispas 3-A	245423	01/24/2017	01/23/2067	1.0809	LLA
Las Chispas 3-B	245424	01/24/2017	01/23/2067	0.3879	LLA
Las Chispas 3-C	245425	01/24/2017	01/23/2067	0.3413	LLA
Las Chispas 3-D	245426	01/24/2017	01/23/2067	0.3359	LLA
Las Chispas 3-E	245427	01/24/2017	01/23/2067	0.4241	LLA
Las Chispas 3-F	245428	01/24/2017	01/23/2067	5.6112	LLA
Total (28)	**-**	**-**	**-**	**1,400.9600**	**-**

Notes:
1. As of May 15, 2023, Date of the Opinion for Las Chispas by Urias Romero Y Asociados, S.C., for SilverCrest.
2. The application for a mining concession is filed and currently under review by the Mining Authority.
3. Legal recourse pending (Section 4.4.3).

Mining duties are based on the surface area and date of issue of each concession and are due in January and July of each year at a total annual cost of approximately $10,000 (adjusted scale). At the Report Effective Date, all required mining duties were paid.

4.4 Mineral Reserves on Mining Concessions

All Mineral Reserves stated in the Report are on mining concessions 100% owned by LLA with no NSR applied. In Table 4-1, all mining concessions are 100% owned by LLA except for those noted and described below.

4.4.1 Option 1

On February 21, 2018, LLA acquired from Minerales Tarachi, S. de R.L. de C.V. an option to purchase the rights to the La Fortuna mining concession applications No. 082/39410 and 082/38731, which cover the Panuco II and Carmen Dos Fracción II mineral lots on payment of MXP500,000 (paid) and $150,000 payable on acquisition of title by LLA (Title Opinion dated May 15, 2023). Title transfer of concessions are pending until the applications are issued as mining concessions.

4.4.2 Option 2

On January 10, 2017, Pedro Antonio Goya Espina and Eliseo Espina Guillen, acting as Assignors, and LLA, acting as Assignee, signed certain Partial Assignment of Mining Concession Agreement for transfer to the Assignee of 67% title to the Lopez mining concession. Acquisition by LLA of 67% title to the Lopez concession is subject to a condition precedent consisting in the exercise or relinquishment of right of first refusal of owner of remaining 34% title.

4.4.3 Option 3

On December 1, 2018, LLA acquired 100% rights to Panuco II, pending title for ownership. This concession was cancelled in 1999 but, by law, a public notice of cancellation was not announced, therefore, a legal recourse for reinstatement was filed by LLA. Final cancellation of concession is pending as of Title Opinion dated May 15, 2023.

All Mineral Reserves stated in the Report are on mining concessions 100% owned by LLA with no NSR applied.

4.5 Surface Rights

The surface rights overlying the Las Chispas mineral concessions and road access from local highway are either owned by LLA or held by LLA under a negotiated 20-year lease agreement. Surface rights are sufficient for the life of mine plan and include the locations of necessary infrastructure as presented in the Report.

4.5.1 Ejido Bamori

On November 18, 2015 (as amended June 3, 2018), LLA signed a 20-year lease agreement with the Ejido Bamori for surface access and use of facilities. Compensation for exploration activities was paid at a rate of MXN700/ha, up to a total of 360.60 ha. After exploration and announcement of mine construction/production, compensation was paid on a scaled timeframe at a rate of MXN2,000/ha during construction and will continue for Years 1 to 4 of production. After the fifth production year to the end of the mine life the compensation will be MXN4,000/ha. In April 2019, LLA expanded its Ejido Bamori surface rights from 360.6 ha to 400 ha.

4.5.2 Cuesta Blanca Ranch

In February 2018, LLA purchased the Cuesta Blanca Ranch covering 671.9 ha of land situated in the municipality of Arizpe, Sonora.

4.5.3 Babicanora Ranch

In April 2017, LLA purchased from Maprejex Distributions Mexico, S.A. de C.V. the Babicanora Ranch covering 2,500 ha of land situated in the municipality of Arizpe, Sonora.

4.5.4 Tetuachi Ranch

In November 2017, LLA signed a lease agreement for a term of 20 years with Maria Dolores Pesqueira Serrano for the lease of the Tetuachi Ranch covering 32.3 ha of land situated in Arizpe, Sonora, for payment of an annual rental fee of MXN2,000/ha during the exploration phase and MXN7,000/ha during the exploitation phase.

4.5.5 La Higuerita Ranch

On February 2, 2023, LLA purchased the La Higuerita Ranch situated in the municipality of Arizpe, Sonora.

4.6 Royalties

A 2% royalty is payable to Gutierrez-Pérez-Ramirez, on the Nuevo Lupena and Panuco II concessions for material that has processed grades of ≥0.5 oz per tonne gold and ≥40 oz per tonne silver combined (Title Opinion dated May 15, 2023). Currently no Mineral Reserves are estimated within these concessions.

4.7 Permitting Considerations

Permitting considerations for operations are discussed in Section 20.

4.8 Environmental Considerations

Environmental considerations for operations are discussed in Section 20.

Remnants exist on the Las Chispas Operation that show the active mining history and community development that once existed in this district. There are numerous historic mine portals and shafts that are partially overgrown with vegetation, which have been flagged and/or fenced.

4.9 Social License Considerations

Social license considerations for operations are discussed in Section 20.

4.10 Other Properties of Interest

In August 2020, SilverCrest acquired the El Picacho Property (Picacho), which is located approximately 40 km directly north of the Company's Las Chispas Operation or 80 km by paved and upgraded gravel roads. Picacho is not contiguous with the Las Chispas Operation Property. Picacho was a historic gold and silver producer with small production recorded in the late-1800s with grades >15 gpt gold plus silver. There are three low sulfidation epithermal main veins on the Property with numerous near-parallel hanging and footwall veins. The main veins have a known cumulative strike length of >6 km with thicknesses of 0.5 to 15 m. The Picacho Vein is the most prominently explored vein on the Property and has a non-compliant NI 43-101 historic mineral resource estimate. SilverCrest completed significant drilling from 2020 through 2022 with some results reported in its publicly announced news releases.

4.11 Comment on Property Description and Location

To the extent known to the QP, there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the Las Chispas Operation that have not been discussed in this Report.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The Las Chispas Operation is accessed from the communities of Arizpe, 12 km away, and Banamichi, 25 km, away, by paved Highway 89. The Las Chispas Operation itself is accessed via secondary gravel road, approximately 10 km off the paved highway. The Rio Sonora crossing is possible via the Tetuachi Bridge, recently constructed by SIL (Figure 5-1). The bridge provides single lane access across the Sonora River and has a capacity of 72 Mt.

Figure 5-1 Tetuachi Bridge

Source: SilverCrest, 2023.

The 10 km gravel road was upgraded during construction to facilitate construction and operation activities. Net elevation gain from the highway to the Operation area is approximately 400 m.

5.2 Climate

The climate is typical for the Sonoran Desert, with a dry season from October to May. Seasonal temperatures vary from 0°C to 40°C. Average rainfall is estimated at 300 mm/year. There are two wet seasons: one in the summer (July to September) and the second in the winter (December). The summer rains are short with heavy thunderstorms, whereas the winter rains are longer and lighter. Summer afternoon thunderstorms are common and can temporarily impact the electrical services. Experience to date has shown these power interruptions are of short duration. Operations are being conducted year-round.

5.3 Local Resources and Infrastructure

5.3.1 Water Supply

Water requirements range between 8 and 12 L/s for the operation stage. The requirement varies between seasons. Core drilling for exploration purposes adds to this requirement depending on number of rigs. Some wells have been established to supply local ranches. During previous geophysical investigation, areas near the Las Chispas Operation were surveyed, but no significant surface water-bearing targets were identified.

Water for the Las Chispas Operation is pumped from two main sources. First, from the 900 level (feet from surface or 850 m above sea level (masl)) of the historic Las Chispas Mine. This water source is considered part of the regional water table, which is linked by a pumping system to seven surface water storage tanks adjacent to the Process Plant site (Figure 5-2). The second source of water is located in the Sonora Valley Basin within the Property limit and near the main access road to the site. Together, the two sources of water are adequate in quantity and quality to support production and exploration activities. The second pumping station (Figure 5-3) in the Sonora Valley Basin (10 km from site) is powered from the nearby 33 kV powerline.

Figure 5-2: Water Distribution Tank Located Near the Main Office

Source: SilverCrest, 2023.

Figure 5-3: Sonora River Pumping Station

Source: SilverCrest, 2023.

The water management plan defines the order of priority to service the operation, with a view to reduce the impact on the surrounding environment. First, water is pumped from contact water in the 3 ponds located on the surface (Figure 5-4 to Figure 5-6); second, water is pumped from underground at the historic Las Chispas Mine; and third, water is pumped from the Sonora Valley pumping station.

Figure 5-4: North Pond

Source: SilverCrest, 2023.

Figure 5-5: West Pond

Source: SilverCrest, 2023.

Figure 5-6: Emergency Pond

Source: SilverCrest, 2023.

5.3.2 Community Services

Mining supplies and services are readily available from Cananea and Hermosillo (Mexico), and Tucson (USA). Most of the operation supplies are being sourced in Mexico.

5.3.3 Infrastructure

No surface infrastructure from the historic mining industry remains in the Operation area, except for roads and a few eroding rock foundations. Several ranch buildings, corrals, and fencing were acquired from the purchase of ranches.

Information on the infrastructure is discussed in Section 18 of this Report.

Information on the availability of manpower is covered in Section 20.4.2 of this Report.

5.3.4 Power

Power to the mine site is supplied via a new 54 km 33 KV powerline with an overall capacity of 7.6 MW. The powerline is owned by SIL and connected to the national grid. Comisión Federal de Electricidad (CFE) is the responsible entity for power production and distribution in Mexico.

Emergency gensets have been installed throughout the Property to support critical needs when the electrical power grid is down. Emergency gensets cannot support the entire operations, except in the case of the camp, where an emergency genset has been designed to support continuous operation.

Site access security facility, bridge lighting and the Sonora River pumping station are being serviced by a different powerline.

Additional Information on power requirements is provided in Section 18 of this Report.

5.4 Physiography

The Operation is located on the western edge of the north-trending Sierra Madre Occidental mountain range, geographically adjacent to the Sonora Valley.

Surface elevations range from 950 masl to approximately 1,375 masl. The San Gotardo portal to the Las Chispas and William Tell veins is located at 980 masl, the Santa Rosa decline portal to the Babicanora Vein in Area 51 Zone at 1,180 masl, and the Babicanora Central adit portal to the Babicanora Central Zone at 1,170 masl. A third portal to access Las Chispas veins is under preparation and expected to be completed in Q2 2023.

Hillsides commonly have steep colluvium slopes or subvertical scarps resulting from fractures in local volcaniclastic bedrock units.

Rivers and streams generally flow north to south or east to west toward the Sonora River. Flash flooding is common in the area and the Las Chispas Operation has been designed with it in mind.

Vegetation is scarce during the dry season and limited primarily to juvenile and mature mesquite trees and cactus plants. During the wet season, various blooming cactus trees, and grasses are abundant in drainage areas and on hillsides.

There are no known indigenous communities or protected areas in the vicinity of the Operation.

5.5 Sufficiency of Surface Rights

There is sufficient surface area for all required facilities as stated in this Report, including top soil stockpiles, underground portals, mineralized stockpiles, and waste rock storage facilities (WRSFs), Process Plant, filtered tailings storage facilities (FTSFs), associated infrastructure, and other operational requirements for the planned life of mine (LOM) and mine plan discussed in this Report.

6 HISTORY

6.1 Regional History

Historic records indicated mining around the Las Chispas Operation area started as early as the 1640s. There are incomplete historic records available on mining activities in the 1800s and 1900s. There is also a gap in mining activity records for Las Chispas between the mid-1930s through to 1974. In 2008, modern exploration activities in the area commenced with Minefinders Corporation Ltd. (Minefinders). SilverCrest acquired the Property in 2015 and completed what is considered to be the first drill core hole in early 2016.

The history of Las Chispas as summarized in the following sub-sections was extracted from the limited documentation available to SilverCrest in the public domain and private libraries. Every reasonable effort has been made to include data for mineralization within the present Property boundaries. However, as the history of the Las Chispas Property area dates back to the 1600s, it was not always possible to determine the precise location of ownership and work completed.

6.2 Property Exploration and Production History

6.2.1 1800s and Early 1900s

Mining interest in the Las Chispas Operation area is considered to have begun in 1640, when outcrop of the Las Chispas Vein was discovered by Spanish General Pedro de Perra (Wallace 2008), which led to the development of the historic Las Chispas Mine. Through to 1880, small-scale mining, including the excavation of the Babicanora (Central) Adit, was intermittently conducted at this location.

A French company under the name Camou Brothers is reported to have re-developed the Babicanora Mine around 1865 (SilverCrest, 2015). The Babicanora area was mined by Chinese immigrants who originally settled in Baja, relocated to the State of Sinaloa in the late 1800s for agriculture, and were eventually pushed inland by competition from the State of Sonora.Here, they found work in the mines. The Babicanora Adit portal construction and dimensions of underground development was notably different than that of the Las Chispas and William Tell workings. The adit is a 4 m by 4 m drift and approximately 230 m in length to intersect the Babicanora Vein.

From 1870s to the 1920s, the Las Chispas Mine was initially operated by the Santa Maria Mining Company, which went bankrupt after the crash of the silver price in 1893 (Russell, 1908). John (Giovanni) Pedrazzini was given the rights to the Mine and founded the Minas Pedrazzini Gold & Silver Mining Company (Figure 6-1 and Figure 6-2). From the 1890s to the 1920s, the Pedrazzini family-maintained control of the Las Chispas Mine area together with the Las Chispas, William Tell, Luigi, Varela, and Cumaro veins.

Antonio Pedrazzini (Figure 6-3), nephew of Giovanni, maintained an active role in the operation and management of the Mine into the 1920s. In 1904, Edward Dufourcq, a well-known mining engineer, was appointed general manager of the Mine. Minas Pedrazzini was the first operator to drive an adit into the Las Chispas Vein, known as The San Gotardo Tunnel or 600 level, with an estimated length of 1,250 m that was excavated in the early 1900s. Referenced historic levels (i.e., 600 level) are named by depth in feet from the Las Chispas shaft collar (Figure 6-10).

Figure 6-1: Giovanni Pedrazzini and Family at Las Chispas, Circa Early 1880s

Source: FS Report, 2021.

Figure 6-2: Minas Pedrazzini Stock Certificate

Source: FS Report, 2021.

Figure 6-3: Antonio Pedrazzini and Family at Las Chispas, Circa Early 1900s

Source: FS Report, 2021.

At least two additional companies focused efforts on the El Carmen Mine, located approximately 5 km southeast of the Las Chispas Mine, and on the Babicanora area, approximately 1.5 km south of the Las Chispas Mine. Little is known about the historic production and operations of those companies; however, it is understood that small mills were installed at Babicanora and El Carmen to process ores of the Babicanora, El Carmen, and Granaditas veins in a similar manner to the San Gotardo (Las Chispas) Mill (Russell, 1908). The district had at least six operating flotation and cyanidation mills from the late 1880s to 1984.

The San Gotardo Mill, operated by Minas Pedrazzini, was located at the northern portal to the 600 level of the Las Chispas and William Tell veins. The mill consisted of rock breakers, five gravity stamps, two Wilfley tables, and three amalgamation pans, with reported recovery of 70% to 75% (Russell, 1908). The mill expanded with up to 20 operating stamps and four pans in 1910, when total recovery was noted to be between 71% and 84%. Approximately 26,000 t of material were treated in the mill, and over 12,000 t of tailings were estimated to have been deposited as tails into ponds below the mill. In 1910, a 24-inch gauge tramway was built from the San Gotardo portal to the new mill, anticipating daily production to increase to 60 tpd. Wallace (2008) reports that in the 1970s, the mill was salvaged and hauled away with the old mine buildings along with tailings for reprocessing.

In 1910, the decision was made to install a cyanide plant at the Las Chispas Mine to reduce overall processing costs, enable reprocessing of the earlier deposited tailings, and attempt higher metal recoveries with a throughput of 30 tpd to 40 tpd. Construction of the plant occurred during the Mexican Revolution, with delays in building (Dufourcq 1912). Mulchay (1935) indicates that this plant was used for less than six months, due to interference from sulphides in the mineralized material with cyanidation. A small flotation plant was installed prior to 1926 (Mulchay 1935).

Water for the operations was supplied via a 5 km-long pipeline from the Sonora River and power reportedly from a small powerline running from a diesel generator at Nacozari. In 1918, the pumping station along the Sonora River was destroyed by a flood and the Mine resorted to pumping from within the Mine to supply the mill with water (Wallace 2008). Dufourcq (1910) indicates that water was originally intersected below the 900 level of the Mine.

In 1917, it is reported that the mine was confiscated by the local government who operated and extracted "rich ore", before eventually returning the Mine back to Pedrazzini (Montijo, 1920).

From 1900 to 1926, production from the Las Chispas and William Tell veins is reported to have been interrupted several times due to numerous interventions, including theft of high-grade ore, the Mexican Revolution from 1910 to 1920, the Mexican National Catholic Church revolution in 1925, mill flooding/fire, and the government take-over of the mine with no economic plan (Montijo, 1920).

Two versions exist regarding how the Las Chispas Mine was taken over and eventually closed. Mulchay (1935) suggests that in 1935, Minas Pedrazzini was taken over under option by Douglas-Williams with the Phelps-Dodge Corporation. At that time, the Mine was managed by Henry Bollweg. However, Wallace (2008) reports the Mine was acquired by a French corporate subsidiary Corporación Minera de Mexico, S.A. in 1921. This company was reported to have remodelled the power plant and continued mining until closure in 1930.

The very limited information available on metal production suggests approximately 200,000 oz of gold and 100 Moz of silver and (Dahlgren 1883) were recovered from mines within the loosely-defined Las Chispas district, including approximately 20 to 40 Moz of silver estimated to have been recovered from the Las Chispas and William Tell veins. Wallace (2008) estimates that in the period between 1907 and 1911, annual production at the Las Chispas Mine achieved approximately 22,000 t producing 10,000 oz of gold and 1.5 Moz of silver per year with an estimated average grade of 1.1 oz per ton gold and 146.8 oz per ton silver (Table 6-1). Reports indicate that gold and silver were produced from both quartz/amethyst veinlets <5 cm thick and local high-grade shoots up to 4 m thick.

Table 6-1: Las Chispas Mine Production, 1908 to 1911 (Dufourcq 1910)

	1908	1909	1910	1911[1]	Total
Tonnes	3,286	3,064	3,540	12,000	21,890
Gold ounces per tonne	1.5	1.4	1.0	1.0	1.1
Silver ounces per tonne	199.9	187.2	136.9	125.0	146.8
Gold ounces	4,876	4,189	3,615	12,000	24,680
Silver ounces	656,882	573,448	484,746	1,500,000	3,215,076

Note: Estimated projected budget for 1911.

Some records suggest that small-scale mining at Espíritu Santo and operation of a small mill at Babicanora occurred in 1935 (Mulchay 1935). Espíritu Santo workings consisted of a small, inclined shaft approximately 80 cm wide, which declined below a small drainage to two short, mineralized drifts. Approximately 13.2 tons of mineralized material was reported to have been shipped from this small mine in 1934 (Table 6-2).

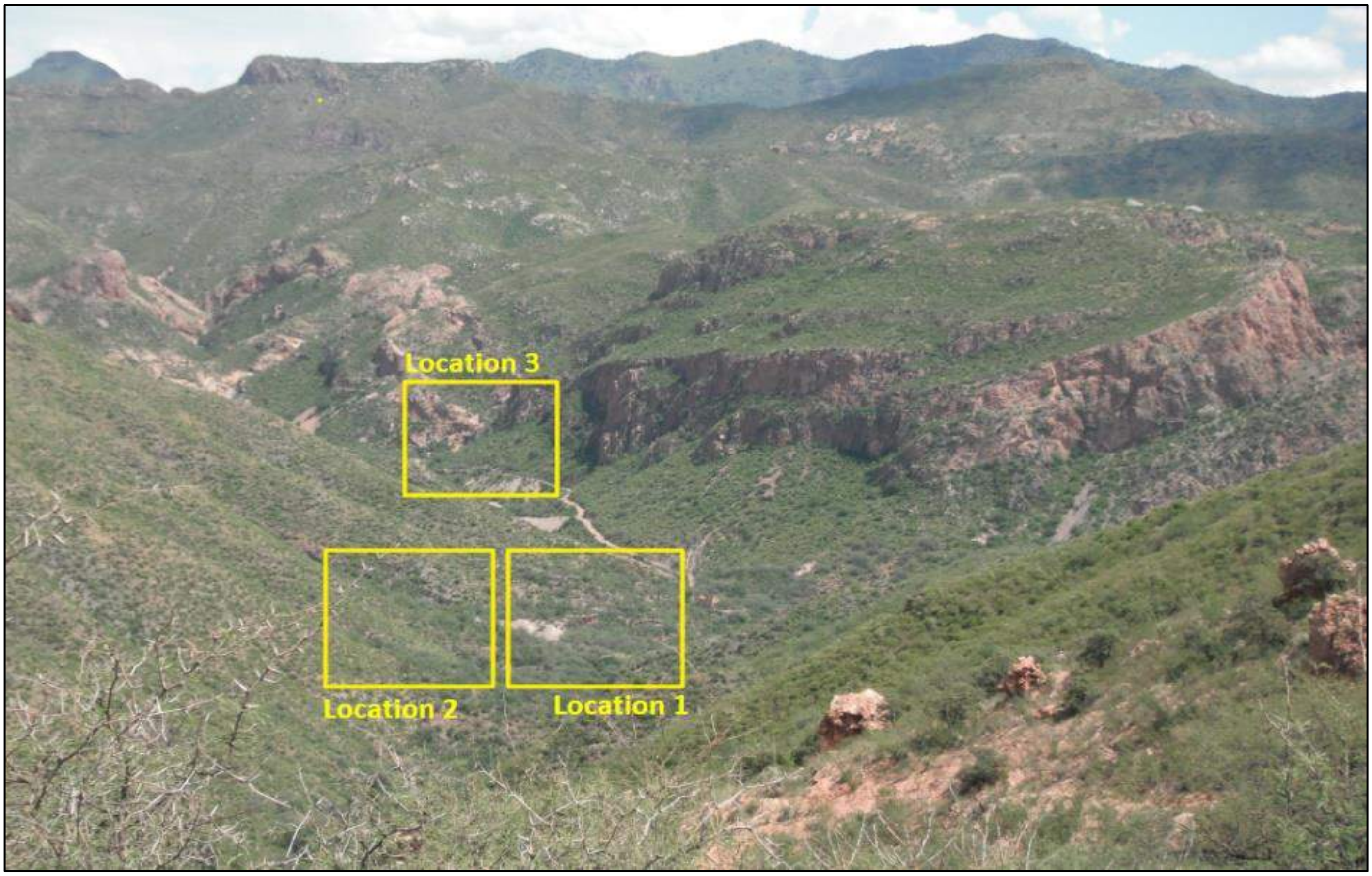
Table 6-2: Espíritu Santo Mine Production, 1934 (Mulchay 1935)

October 1934:	Tons	Ag (oz.)	Au (oz.)
Oct. 9, 1934	3.6	75.2	0.17
Nov. 21, 1934	1.2	149.7	2.63
Jan. 23, 1935	1.8	159.3	0.66
Jan. 25, 1935	2.1	490.0	1.36
Feb. 22, 1935	2.3	160.3	0.56
Apr. 3, 1935	1.2	132.3	0.44
Total	**1.0**	**131.8**	**0.82**

Another small mining operation at La Victoria was in operation around 1940. The workings consisted of three short, mineralized drives on separate levels approximately 30 m in length (Mulchay 1941).

Figure 6-4 provides an overview of the Las Chispas Valley and highlights the locations where the community of Las Chispas once stood, in addition to the original San Gotardo Mill and the subsequently developed rail-connected mill near the community. Historic Figure 6-4 through Figure 6-8 are of various locations around the historic operation. Figure 6-9 shows the 2017 view of the historic Babicanora (Central) portal and surface workings. Figure 6-10 is a longitudinal section of the historic Las Chispas underground development.

Figure 6-4: View looking North down the Main Valley where Las Chispas Community and Process Plants were located

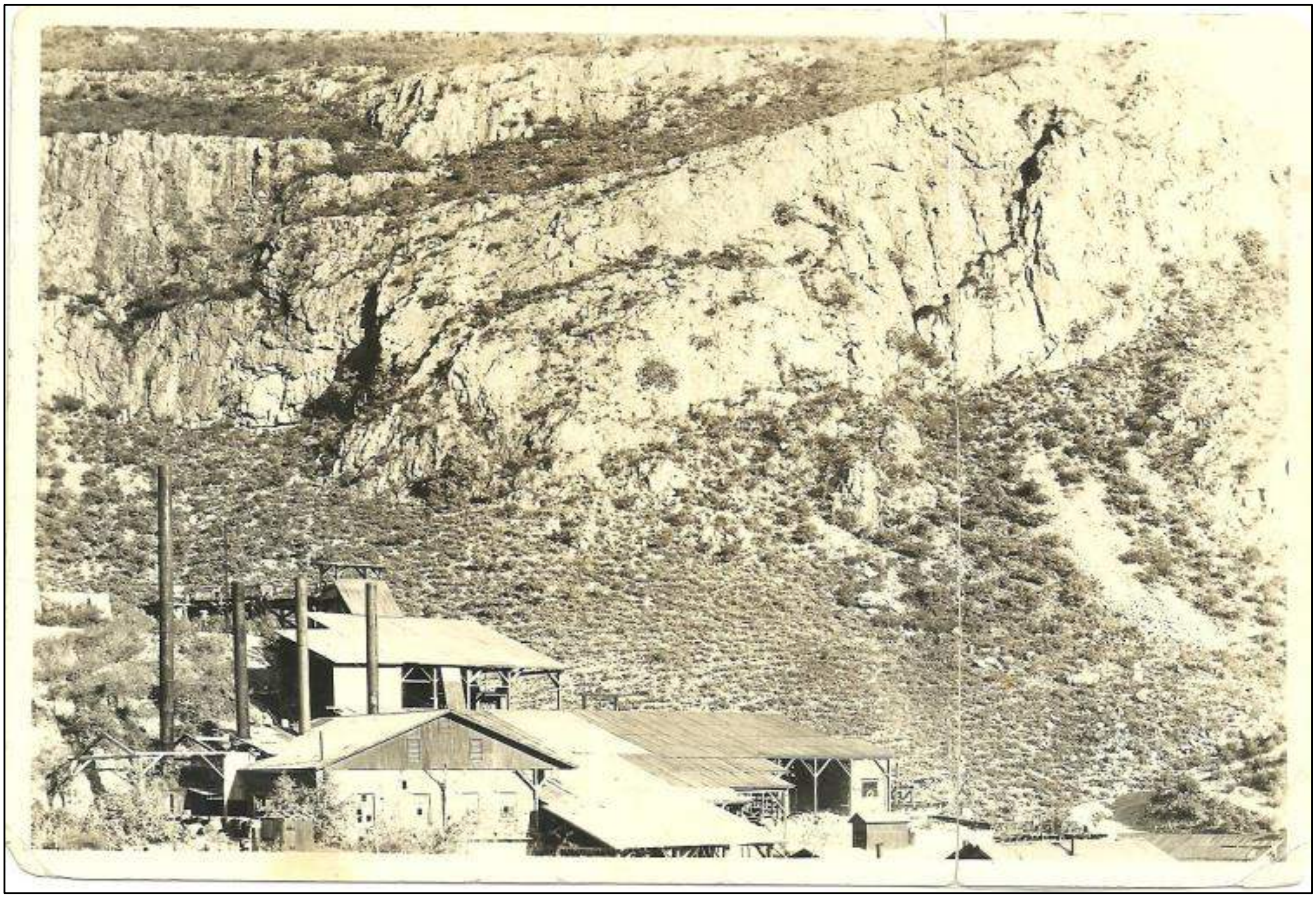


Source: PEA, 2019. Note: Photo taken September 2015.

Figure 6-5: Historic Photo of former Las Chispas Community (Location 1, circa 1920s)

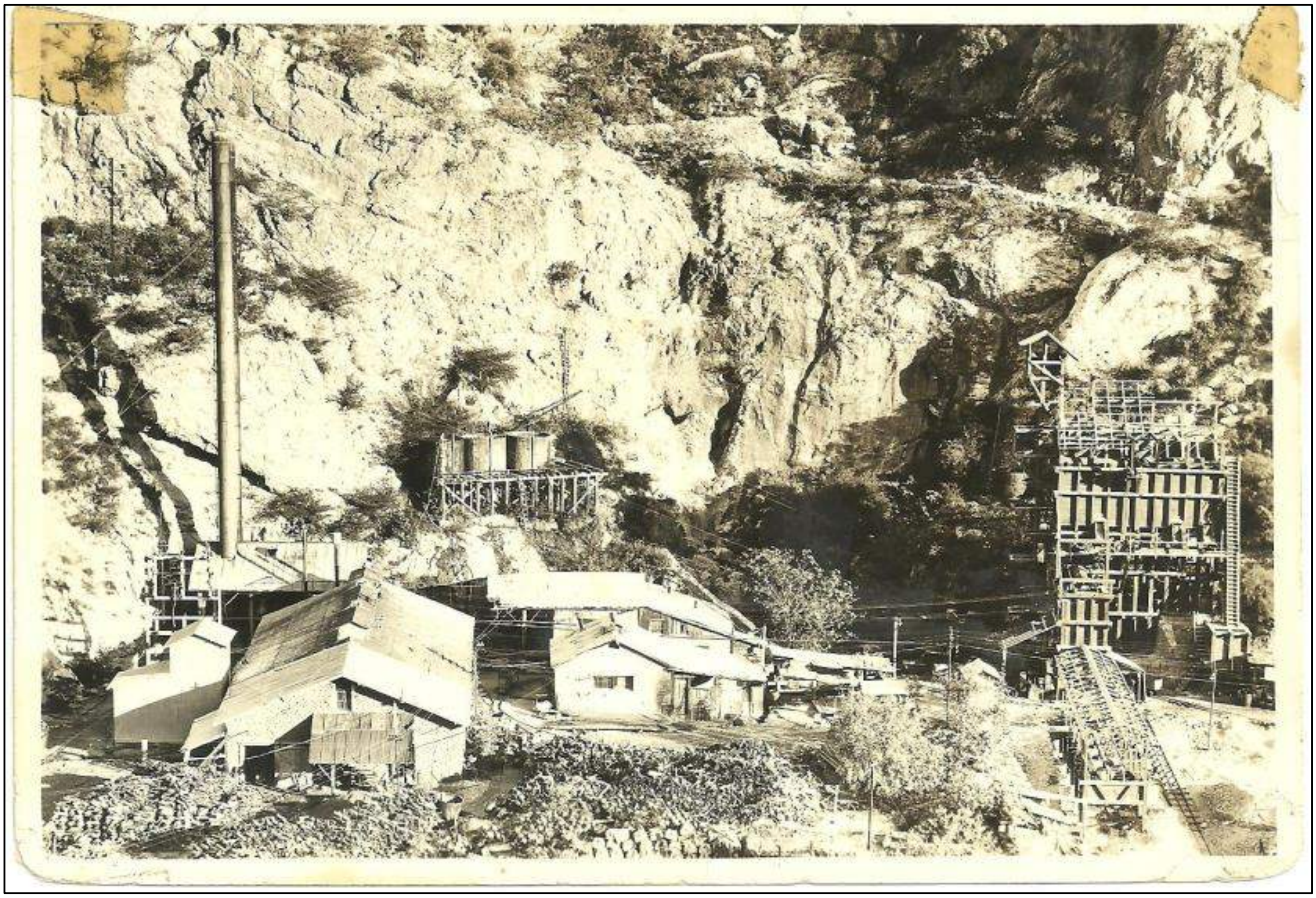
Source: FS Report, 2021.

Figure 6-6: Historic Photo of a Processing Facility to Northwest of Community (Location2, circa 1920s)



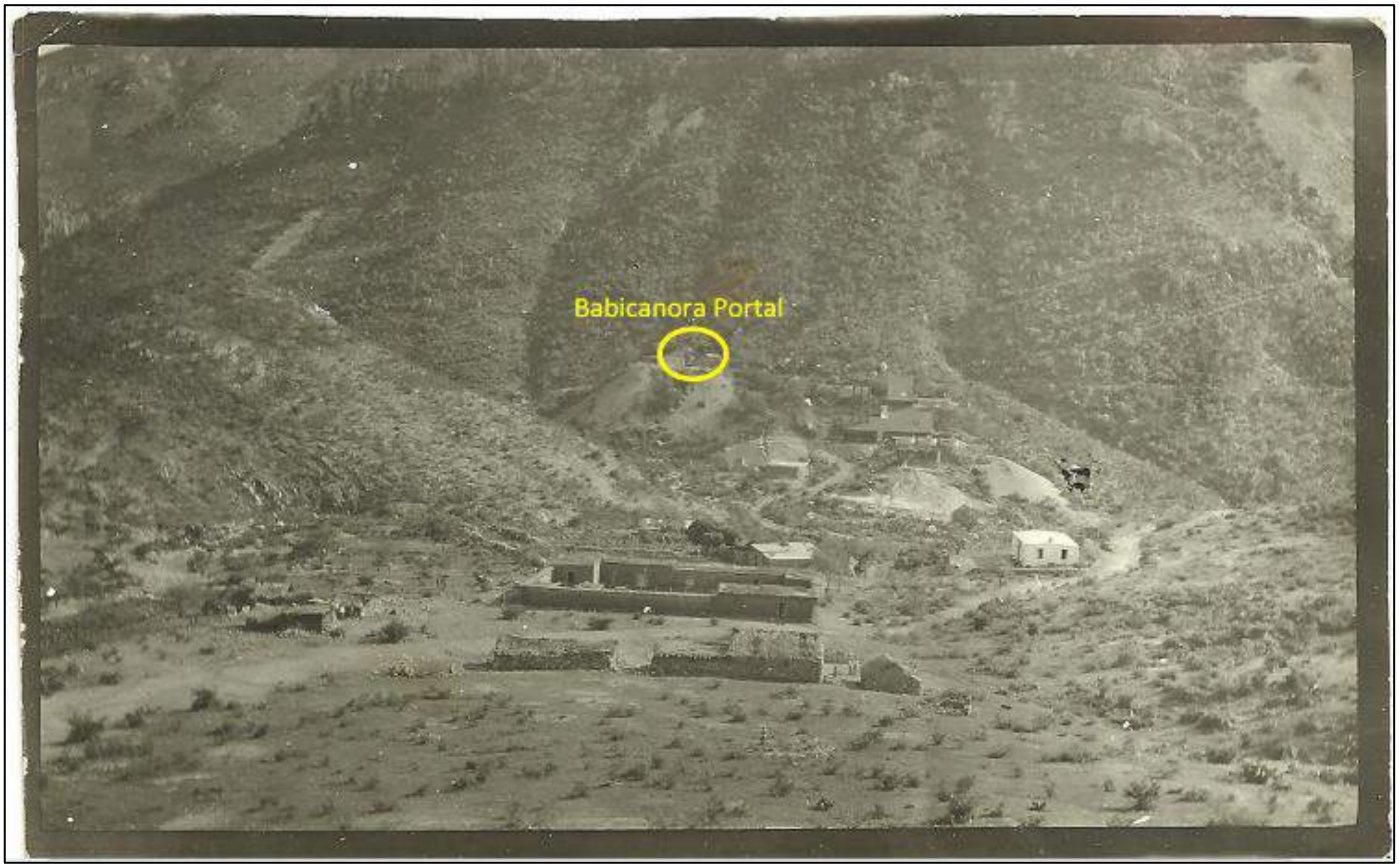
Source: FS Report, 2021.

Figure 6-7: Historic Photo of San Gotardo Mill (Location 3, circa 1910s)



Source: FS Report, 2021.

Figure 6-8: Photo of Historic Processing Facility at Babicanora, Established in 1921

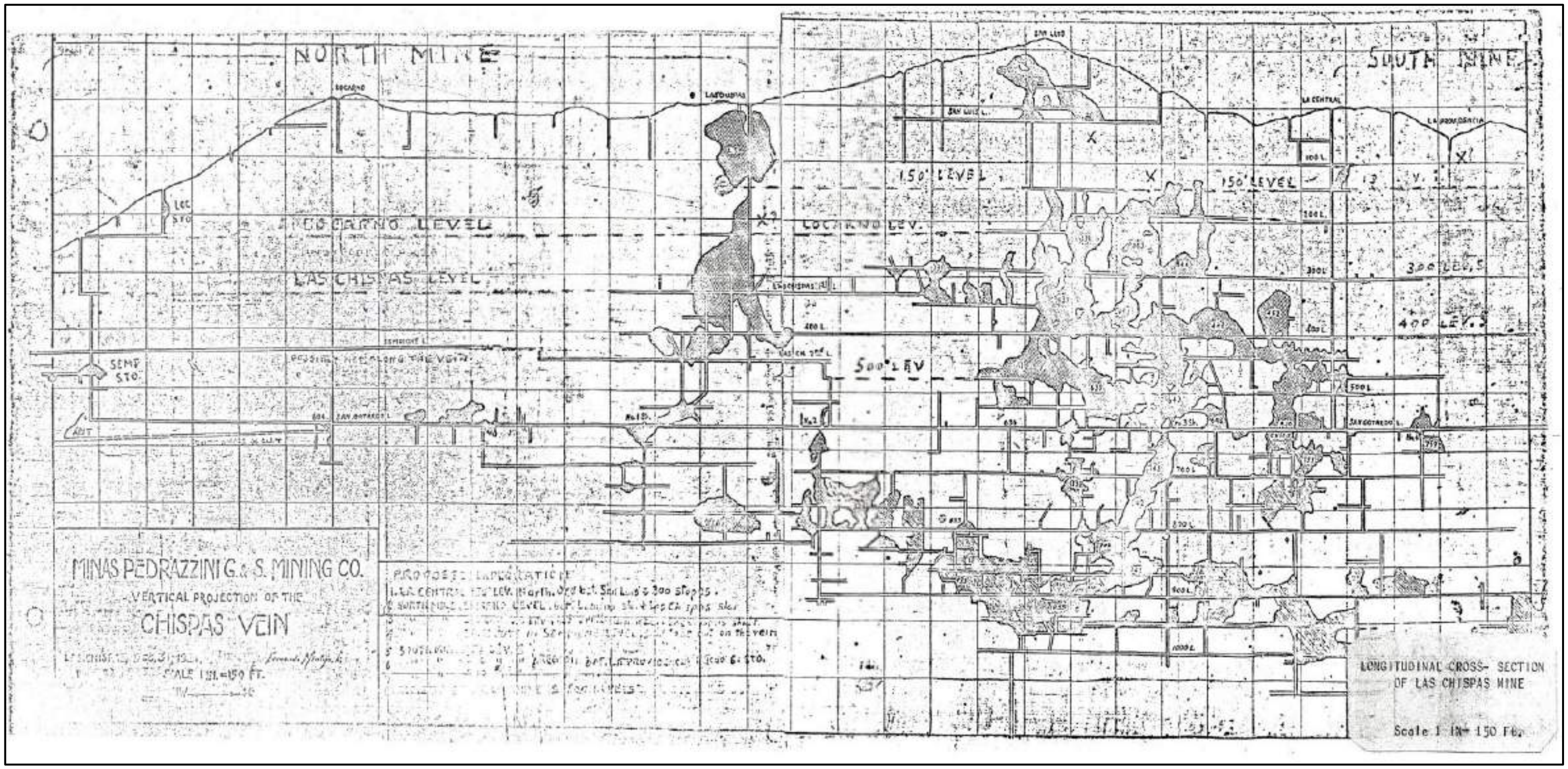


Source: FS Report, 2021.

Figure 6-9: View of Babicanora Central Portal and Site of Historic Processing Facility, November 2017

Source: SilverCrest, 2021.

Figure 6-10: Long Section of the Historic Las Chispas Underground Development (Circa, 1921, looking northeast)



Source: FS Report, 2021.

6.2.2 Mid to Late 1900s to Early 2000s

No written documented information is available for the Las Chispas Operation area during this period. Verbal discussions with Luis Pérez, a local operator, indicate that from 1974 to 1984 a small cyanide leach mill was constructed near the highway entrance to the Las Chispas Operation. During this period, approximately 75,000 t of historic waste was processed with doré poured on-site. No production estimation is available.

It is assumed that sometime between the mid-1930s and 2008, the historic and 1974 Process Plants were dismantled and transported from the area and that both concession and surface ownership likely changed hands at least once in that time.

6.2.3 Minefinders Corporation Ltd. (2008-2011)

6.2.3.1 Overview

In 2008 Minefinders Corporation Ltd (Minefinders) operating under their Mexican affiliate, Minera Minefinders, acquired concessions within the current SilverCrest ground holdings, but were unable to negotiate with the main district concession owners. Subsequently, Minefinders completed initial exploration work in the district, which they referred to as the Babicanora Project.

Minefinders conducted a systematic exploration program across these concessions between 2008 and 2011. Regional activities consisted of geological mapping and a geochemical sampling program totalling 143 stream sediment and bulk-leach extractable gold (BLEG) samples, 213 underground rock chip samples, and 1,352 surface rock chip samples. The work was successful in identifying three gold targets along a 3 km-long structural zone. The most prospective of these targets was interpreted to be an area between the Las Chispas Vein and the Babicanora Vein. Minefinders focused on the western extension of the Babicanora Vein called El Muerto, which is the only part of the trend that was acquired by concession and accessible for exploration work.

Targeted exploration conducted solely within the Babicanora Project area included the collection of 24 stream sediment and BLEG samples, 184 select surface rock chip samples, 474 grid rock chip samples, and drilling of seven reverse circulation (RC) drill holes for a total of 1,842.5 m. The drill hole locations are shown in Figure 6-11 and Figure 6-12.

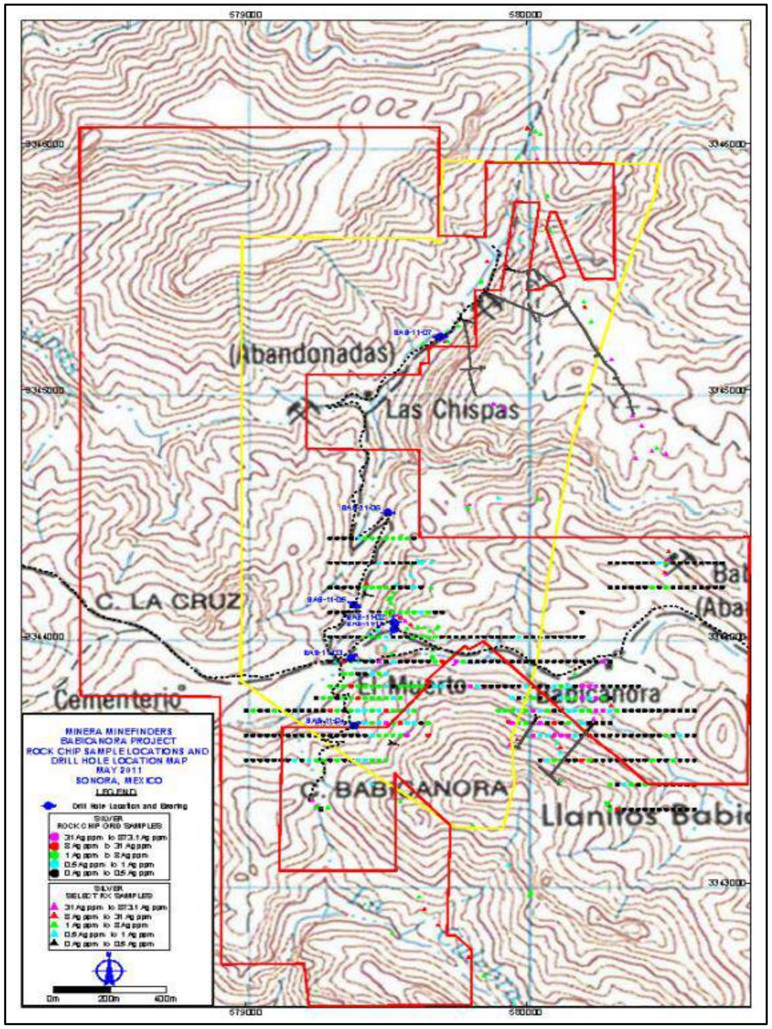
6.2.3.2 Minefinders Surface Sampling

Turner (2011) describes in detail the work by Minefinders on the Babicanora Project. Outcrop in the area is variable and the sampling was adjusted based on terrain limitations. Minefinders determined that high-grade gold and silver occurrences noted in mine workings and outcrops occurred mainly as discontinuous and narrow quartz stockwork zones. Notable exceptions were a 5 m wide zone and narrow veins in the El Muerto area, northwest of the Babicanora Mine workings.

Twenty-four (24) stream sediment samples were collected from drainages in the Las Chispas Area, as part of a regional sampling program. The large samples were analysed as both 2 kg BLEG samples and via a more conventional analysis of a -80 mesh sieved product. The material utilized for the -80 mesh analysis was obtained after splitting the initial 2 kg used for BLEG analysis. Anomalous zones defined by the regional stream sediment program were later confirmed by a follow-up rock-chip grid sampling program.

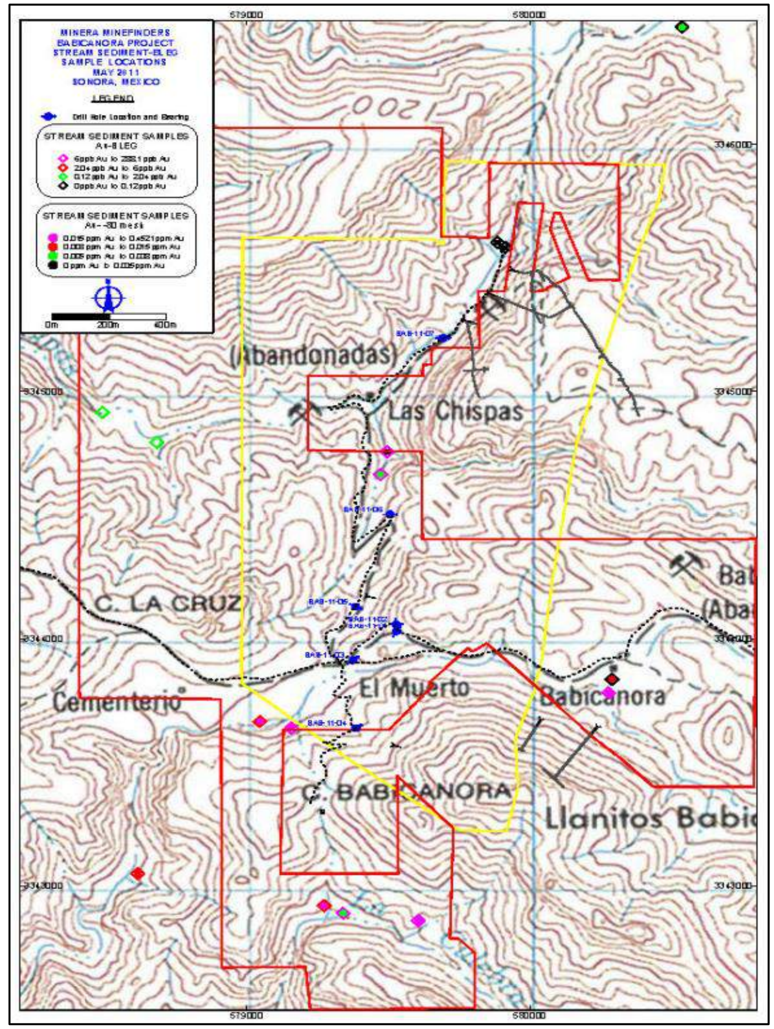
All surface rock chip and stream sediment samples were collected by the staff of Minefinders and submitted to ALS Chemex in Hermosillo. Sampling coverage and results are also illustrated in Figure 6-11 and Figure 6-12 (Turner, 2011).

Figure 6-11: Minefinders Rock Chip Sample Location and Gold Results



Source: Turner, 2011.

Figure 6-12: Minefinders Stream Sediment Sample Gold Results – BLEG an -80 Mesh



Source: Turner, 2011.

6.2.3.3 Minefinders Drilling 2011

Minefinders carried out a seven-hole RC drill program in 2011. The purpose of the program was to test a porous volcanic agglomerate (i.e., lithic tuff) unit located west of the main mineralization trend in the Babicanora and Las Chispas Areas. The area initially drilled by Minefinders is now known as the El Muerto Zone.

Minefinders contracted Drift Drilling to drill the seven (7) holes utilizing an MPD-1000 RC drill rig. The drilling was conducted from existing roads with drill pads enlarged to allow for safe and effective operations. Environmental permitting with the Ministry of Environment and Natural Resources of Mexico (SEMARNAT is the Spanish acronym) was prepared by Bufete Minera y Servicios de Ingeniería S.A. de C.V. and completed on March 23, 2011. All assay work was conducted by Bureau Veritas of Hermosillo, Mexico and Reno, Nevada.

The drill program was conducted between April 7, 2011, through May 3, 2011, with a total of 1,842.5 m drilled. The drill holes were oriented to intercept a range of host rocks in areas of anomalous precious metal contents or adjacent to mine workings. The concept was that bulk tonnage targets might exist within the more porous or chemically reactive rocks. Table 6-3 shows a summary of the drilling.

Table 6-3: Summary of Minefinders 2011 RC Drill Program

Hole ID	Easting	Northing	Elevation (m)	Dip (°)	Azimuth (°)	Depth (m)	Depth (ft)
BAB11-01	579,527	3,344,033	1,135	-60	30	304.80	1,000
BAB11-02	579,526	3,344,060	1,130	-90	0	324.60	1,065
BAB11-03	579,372	3,343,914	1,091	-60	50	242.30	795
BAB11-04	579,382	3,343,638	1,132	-55	60	350.50	1,150
BAB11-05	579,386	3,344,130	1,053	-45	115	198.12	650
BAB11-06	579,507	3,344,503	1,009	-70	90	182.90	600
BAB11-07	579,693	3,345,216	977	-70	90	239.30	785
Total						**1,842.52**	**6,045**

The drill results were disappointing in that none of the drill holes intersected the mineralized structure beneath the historic workings. Only narrow zones of gold mineralization at scattered depths were encountered and only one drill hole, BAB11-02, intercepted significant mineralization greater than 900 ppb of gold in four narrow intervals. This mineralized interval occurs within basal volcaniclastic sandstones and rhyodacite tuffs cut by propylitic altered dacite dykes.

Results of the drilling indicate that several phases of quartz veining, accompanied by broad zones of argillic and propylitic alteration, are present in the 1.5 km-long target zone. Mineralization was determined to occur as low sulphidation gold-silver epithermal quartz and calcite veins and stockwork within an Oligocene volcanic sequence. This sequence consisting of volcaniclastic sedimentary rocks interbedded with rhyolite tuff and andesite dykes/flow cut by dacite dykes.

In 2012, Minefinders dropped their interest in the Babicanora Project.

SilverCrest acquired the Las Chispas Operation in 2015. Their subsequent exploration and drilling activities in the area are summarized in Sections 9 and 10 of this Report.

6.3 SilverCrest Las Chispas Operation Production

SilverCrest's Las Chispas Process Plant started-up in late-May 2022, the first pour was completed June 30, 2022, and commercial production commenced November 1, 2022. The production figures for year 2022 through Q1 2023 are given in Table 6-4.

For year 2022 at Las Chispas Operation, 201,100 t of ore were mined and 187,600 t of ore processed.

Total silver and gold recovered in 2022 was 1.74 Moz Ag and 17,800 oz Au, or 3.29 Moz AgEq (silver equivalent based on the 2021 FS Report's Mineral Resource and Reserve gold to silver ratio of 86.9:1).

In Q1 2023 at Las Chispas, 63,600 t of ore were mined and 104,400 t of ore were processed.

Total silver and gold recovered were 1.29 Moz Ag and 13,300 oz Au, or 2.45 Moz AgEq (as defined above).

Total production since Process Plant start-up amounts to 264,700 t mined and 292,000 t processed. Total silver and gold recovered was 2.94 Moz Ag and 31,100 oz Au, or 5.74 Moz AgEq (as defined above).

Table 6-4: Las Chispas Mine Production FY 2022 Through Q1 2023

Operational Parameter	Unit	FY 2022	Q1 2023	Total
Ore Mined	t	201,100	63,600	264,700
Ore Processed	t	187,600	104,400	292,000
Ag Recovered	Moz	1.74	1.29	2.94
Ag Recovery	%	92.5	91.9	92.4
Au Recovered	oz	17,768	13,300	31,068
Au Recovery	%	96.5	96.9	96.6

Sources: SilverCrest press releases dated January 31, 2023 and May 11, 2023.
Note: AgEq (silver equivalent) based on the 2021 FS Report's Mineral Resource and Reserve gold to silver ratio of 86.9:1.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Las Chispas Operation is located in northwestern Mexico, where much of the exposed geology can be attributed to the subduction of the Farallon Plate beneath the North American Plate and related magmatic arc volcanism. The east-directed subduction of the Farallon Plate began in early Jurassic (approximately 200 Ma) with the tectonic rifting of the supercontinent Pangea (Rogers, 2004). The resulting northwest-trending Sierra Madre Occidental extends >1,200 km from the US-Mexican border to Guadalajara in the southeast.

Delgado-Granados et al. (2000) proposed that subduction of the Farallon Plate occurred at a relatively shallow angle, resulting in continental uplift across northern Mexico and docking of accretionary terranes along the western fringes of the pre-existing Jurassic continental and marine sedimentary rocks and crystalline Cambrian basement rocks.

Volcanism is related to fractional crystallization of mantle-derived basalts during subduction (Johnson, 1991; Wark et al., 1990). The widespread volcanic deposits and intrusive stock development from emplacement of the regional batholith typify the Upper Cretaceous record in the area, which was followed by voluminous accumulation of volcanic flows, pyroclastics, and volcano-sedimentary rocks during the Upper Cretaceous through to the Eocene.

Continental arc volcanism culminated with the Laramide Orogeny in the early to late Eocene (Alaniz-Alvarez and Nieto-Samaniego, A.F., 2007). The waning of compression coincided with east–west-directed extension between late Eocene to the early Oligocene (Wark et al., 1990; Aguirre-Diaz and McDowell 1991; 1993), along the eastern Sierra Madre Occidental flank and is considered the first formation stage of the Basin and Range Province.

By early to mid-Miocene, extension migrated west into Northern Sonora and along the western flank of the Sierra Madre Occidental, resulting in north–northwest to south–southeast trending, west-dipping normal faults. This extensional regime caused major deformation across the Sierra Madre Occidental, resulting in localized exhumation of Precambrian basement rocks within horst structures, especially in the Northern Sierra Madre Occidental (Ferrari et. Al., 2007). Bimodal volcanic flows capped the volcano–sedimentary deposits of the late Eocene. Migration of later hydrothermal fluids along the pre-existing structures are related to the cooling of the orogenic system.

The Pliocene–Pleistocene is characterized by a general decrease in volcanic activity, with deposition of some basalt flows, and accumulation of conglomerate, locally known as the Baucarit Formation.

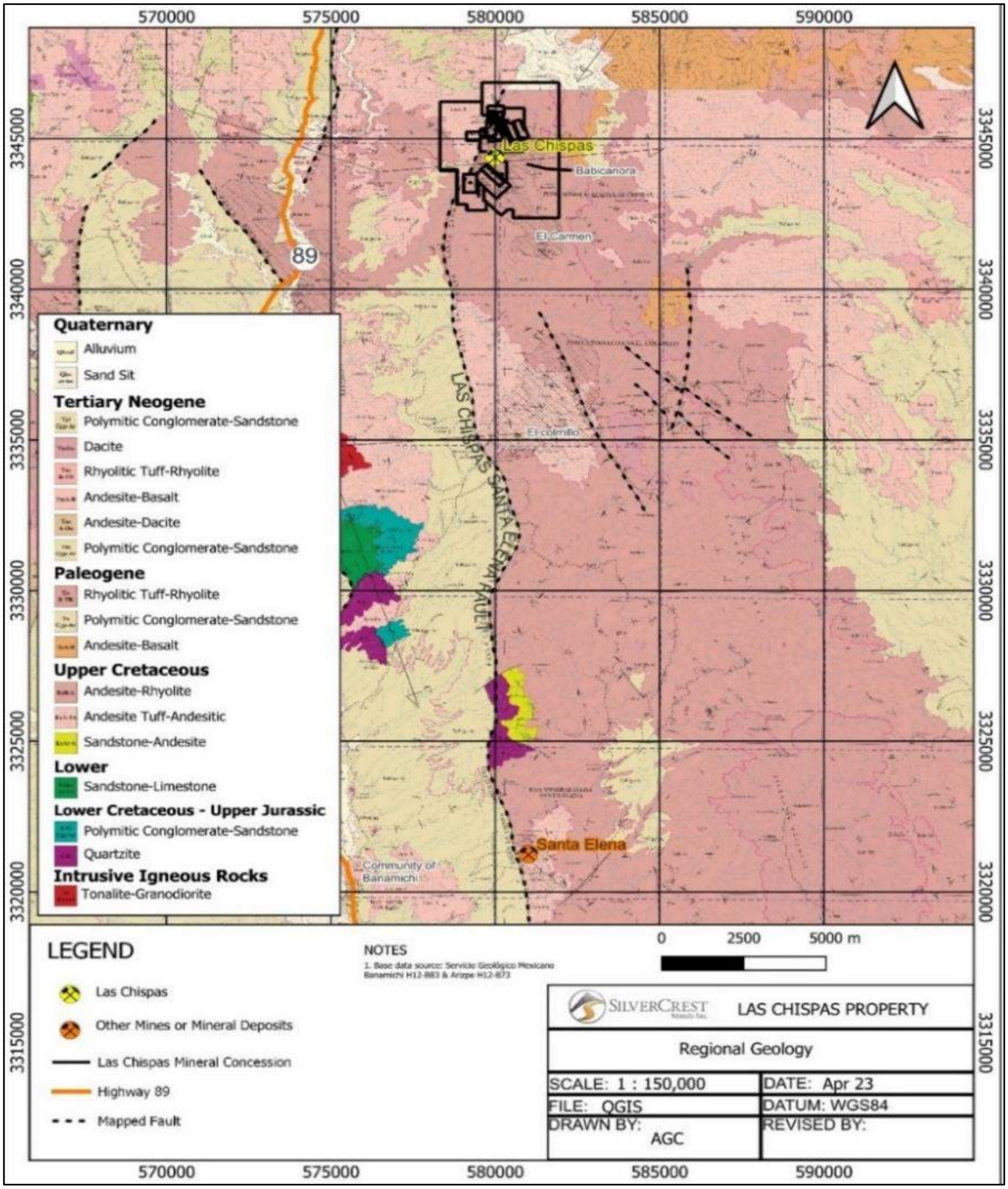
Ferrari et al. (2007) summarizes five main igneous deposits of the Sierra Madre Occidental:

1. Plutonic/volcanic rocks: Late Cretaceous–Paleocene
2. Andesite and lesser dacite–rhyolite: Eocene (Lower Volcanic Complex)
3. Felsic dominant and silicic ignimbrites: Early Oligocene and Miocene (Upper Volcanic Complex)
4. Basaltic-andesitic flows: late stage of and after ignimbrite pulses
5. Alkaline basalts and ignimbrites: Late Miocene–Pleistocene (post-subduction volcanism.

Mineralizing fluids likely originated from mid-Cenozoic intrusions. The structural dilation along the faults formed conduits for mineral-bearing solutions. The heat source for the mineralizing fluids was likely the plutonic rocks that commonly crop out in Sonora.

Porphyry deposits of the Sierra Madre Occidental occur in the Lower Volcanic and are correlated with the various Middle Jurassic through to Paleogene age intrusions. Examples of these deposits are Cananea, Nacozari and La Caridad (Ferrari et. Al., 2007). In Sonora, formation of these deposits is considered to be influenced by east–west and east–northeast- to west–southwest-directed extension. Early Eocene tectonic activity, which resulted in northwest-trending shear and fault zones, appears to be an important control on mineralization in the Sonora region (Figure 7-1).

Figure 7-1: Regional Geology Showing Major Graben of the Rio Sonora and Continuous Normal Fault between Santa Elena and Las Chispas



Source: SilverCrest, 2023.

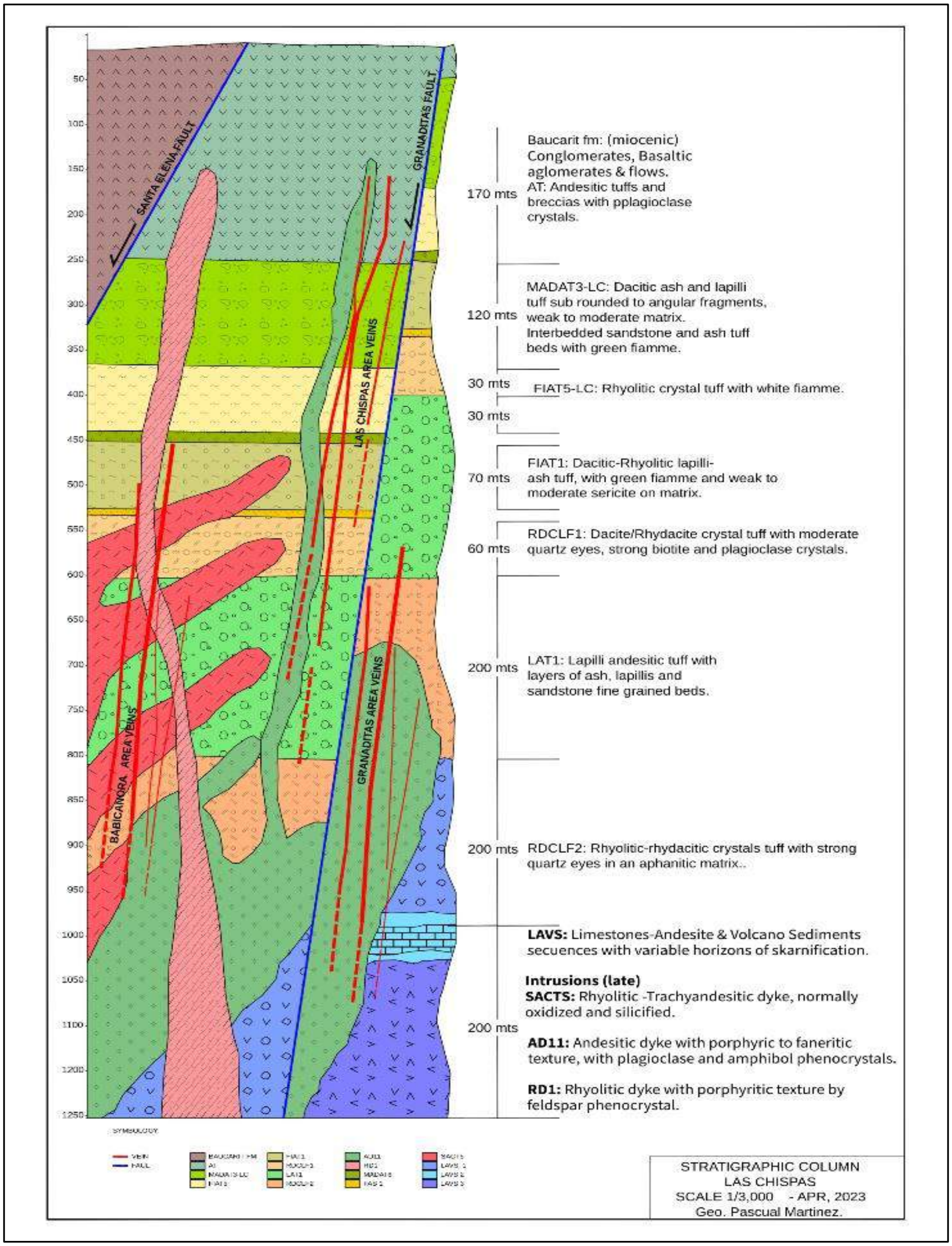
7.2 Local Geology

7.2.1 Lithologies

The host in the Las Chispas area are generally pyroclastic tuffs and rhyolite-rhyodacite-dacite flows intercalations cut by rhyolite, trachyandesite and andesite dykes, interpreted to be members of the Lower Volcanic Complex. Locally, hypabyssal and volcanic units observed within underground workings and exploratory drill holes include welded rhyolite-rhyodacite tuff, ashes to lapilli (lithic) tuff, volcano-sedimentary beds and volcanic agglomerate. A schematic summary of the regional and local stratigraphy is provided in Figure 7-2.

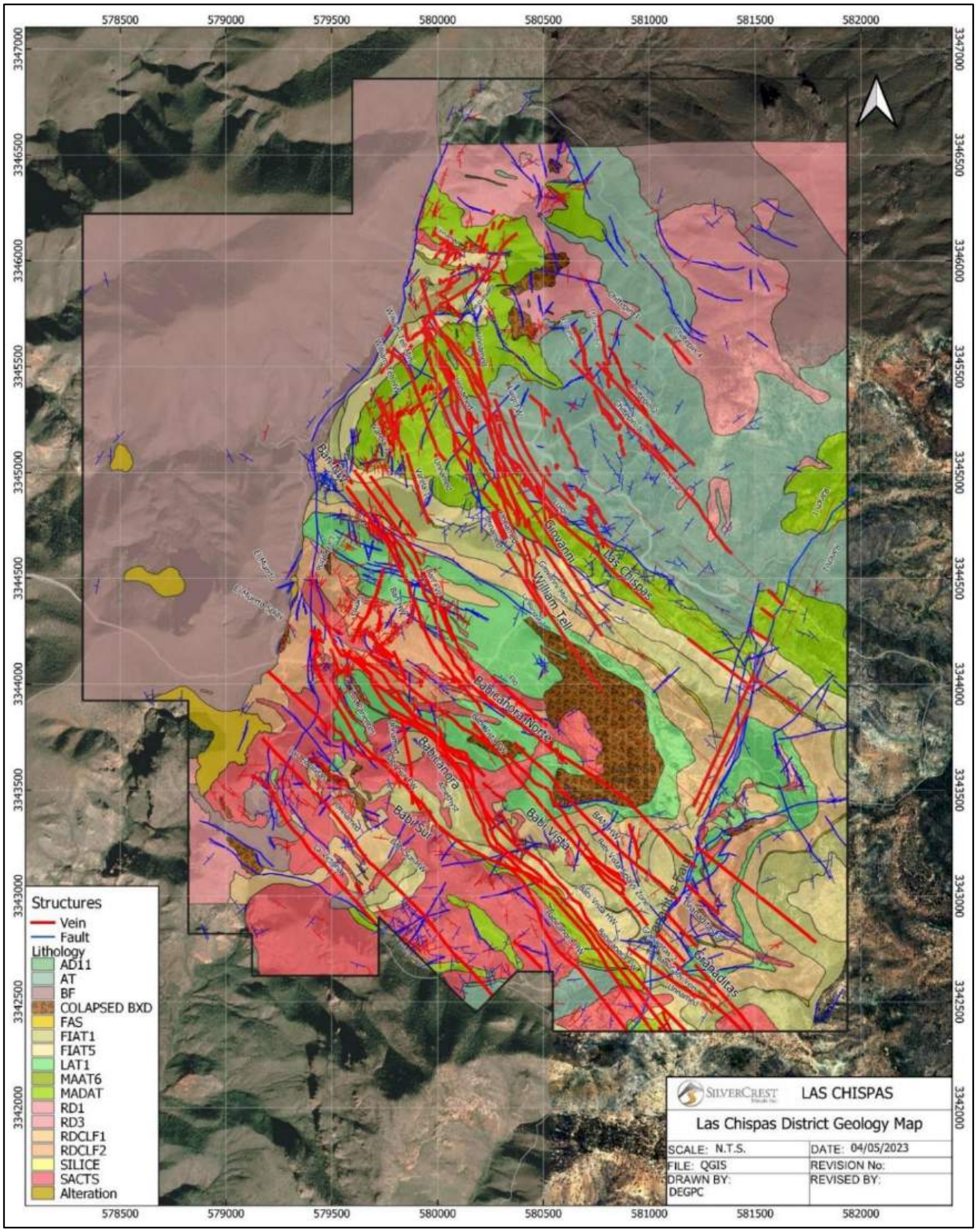
The volcanic units form a gentle syncline and anticline complex across the Las Chispas Operation, which is cross-cut nearly perpendicular to the fold axis by the dominant vein trend (Mulchay, 1935). A geological map and cross-section looking eastwards through the Las Chispas Operation are shown in Figure 7-3 and Figure 7-4.

Figure 7-2: Stratigraphic Column for Las Chispas Property



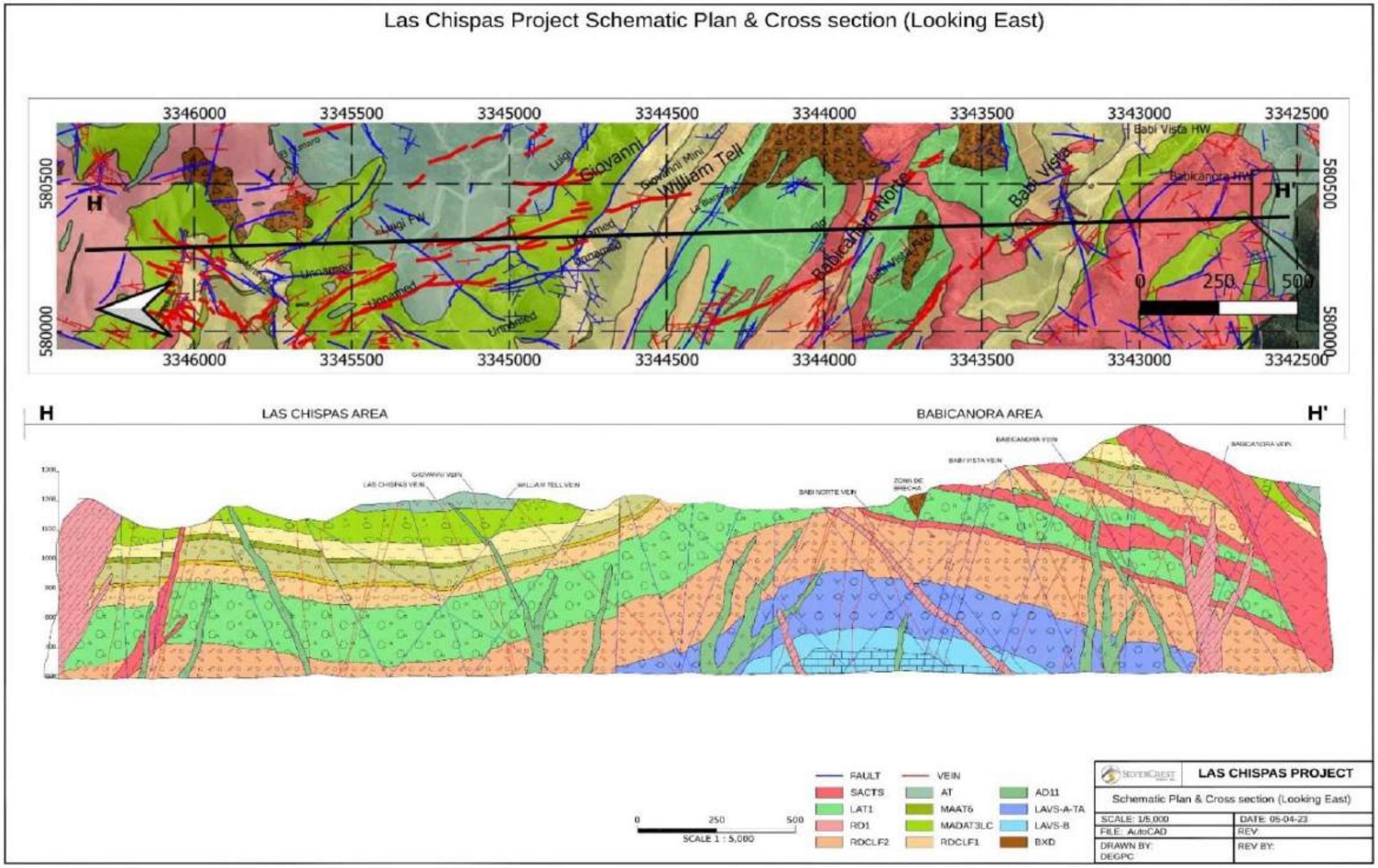
Source: SilverCrest, 2023.

Figure 7-3: Las Chispas District Geology Map



Source: SilverCrest, 2023. Refer to Figure 7-3 for legend.

Figure 7-4: Las Chispas District Cross Section



Source: SilverCrest, 2023.

Notes: Major mineralization lithologic units for this geology plan map are defined as: LAT1, Lithic andesite tuff and the most significant host for vein-related gold-silver mineralization; RDCLF 1 and 2, rhyodacite flows, which restrict mineralization, but can be mineralized; SACTS, silicic andesite to rhyolite fragments, which occur in sills and dykes, with the dykes associated with mineralization.

7.2.2 Geochemistry

Thin section and TerraSpec™ hyperspectral studies indicate that the alteration generated during the mineralization events are dominantly multi-pulse neutral and consistent with low-sulphidation mineralization. The typical alteration assemblage is montmorillonite-illite ± kaolinite ± MgFe chlorite ± pyrite. However, more acidic species of minerals and clays are also present, such as alunite, dickite and ammonium. In conjunction with the more acidic alteration, magmatically derived orthoclase occurs in thin sections as fine-grained interlobate aggregates that occupy the interstices between the coarse-grained quartz. This relationship indicates that the quartz-rich mineralizing fluids and the orthoclase are syngenetic, and therefore part of the same event (Colombo, 2017a). To produce these near neutral clays and minerals in conjunction with the more highly acidic species, two or more distinct fluid pulses are plausible.

A review of the core database was undertaken in January 2018, which included information available from the 46,925 samples from the various mineralization veins that had been sampled to date by SilverCrest within the Las Chispas Operation. The review focused on the correlation coefficient (Table 7-1) and descriptive statistics for modal abundance (Table 7-2) of the anomalous and expected elements typically associated with low to intermediate sulphidation deposits.

Gold and silver have a strong positive correlation coefficient. Emplacement of both gold and silver seems to be strongly related, although there is thin section evidence of a quartz + gold-only event at Babicanora. The principal low- to intermediate-sulphidation metals of interest (gold, silver, copper, lead, zinc, and antimony) all have a strong affinity for one another. Mercury does not have a conclusive positive or a negative correlation and has negligible values. Lead and zinc have a very high correlation coefficient 0.870. However, base metals and accessory minerals typically are in low abundance within all the mineralized zones.

There is a slight increase in base metal content in the mineralized zones located in the eastern portion of the Las Chispas Operation, such as Granaditas, which is interpreted to be a deeper section of the epithermal system. This increase may reflect evolution of the fluids during ascent or separate base metal-rich pulses, though the mode of emplacement is unclear. Sulphur has a moderate correlation with zinc and lead, likely due to sulphur in their respective sulphide minerals. The gold and silver sulphide hosted mineralization in the uppermost portion of the targets has been oxidized and mobilized as sulphate, resulting in reduced contents of total sulphur.

A fluid inclusion study determined that depths of emplacement of mineralization ranged from approximately 100 m to >2 km. The shallow depths of emplacement are outside the current main mineralization zones. Depth of emplacement in the main mineralization zone is well below 1,000 m, with a maximum depth of >2 km (Pérez, 2017). These deeper depths of emplacement are complicated by possible caldera collapse and a change in the paleo-surface.

Evidence for overprinting of low- and high-sulphidation mineralization and alteration different depths of formation are noted in the fluid inclusion, TerraSpec™ hyperspectral and thin section studies, which point towards caldera collapse as a mechanism of emplacement.

Table 7-1: Correlation Coefficient Table, Anomalous Values Highlighted, >0.25 and <0.25 (January 2018)

	Au	Ag	Cu	Pb	Zn	As	Ba	Cd	Co	Fe	Hg	Mn	Mo	S	Sb
Au	1.00	0.87	0.33	0.20	0.17	0.04	0.00	0.23	-0.01	0.00	0.11	0.00	0.01	0.01	0.52
Ag	0.87	1.00	0.31	0.18	0.16	0.03	0.00	0.20	-0.01	0.00	0.09	0.00	0.02	0.01	0.41
Cu	0.33	0.31	1.00	0.14	0.14	0.06	0.01	0.19	0.09	0.05	0.08	0.01	0.14	0.04	0.33
Pb	0.20	0.18	0.14	1.00	0.39	0.21	0.00	0.43	0.00	-0.03	0.08	0.01	0.09	0.07	0.17
Zn	0.17	0.16	0.14	0.39	1.00	0.20	0.00	0.93	0.10	0.07	0.12	0.06	0.03	0.17	0.16
As	0.04	0.03	0.06	0.21	0.20	1.00	0.00	0.20	0.07	0.07	0.11	0.08	0.06	0.18	0.12
Ba	0.00	0.00	0.01	0.00	0.00	0.00	1.00	0.00	-0.01	-0.01	0.04	0.39	0.02	-0.07	0.21
Cd(1)	0.23	0.20	0.19	0.43	0.93	0.20	0.00	1.00	0.03	-0.04	0.13	0.04	0.05	0.12	0.21
Co	-0.01	-0.01	0.09	0.00	0.10	0.07	-0.01	0.03	1.00	0.74	0.03	0.21	0.02	0.10	0.05
Fe	0.00	0.00	0.05	-0.03	0.07	0.07	-0.01	-0.04	0.74	1.00	-0.03	0.15	-0.02	-0.25	0.04
Hg(1)	0.11	0.09	0.08	0.08	0.12	0.11	0.04	0.13	0.03	-0.03	1.00	0.02	0.03	0.05	0.14
Mn	0.00	0.00	0.01	0.01	0.06	0.08	0.39	0.04	0.21	0.15	0.02	1.00	-0.02	-0.03	0.31
Mo(1)	0.01	0.02	0.14	0.09	0.03	0.06	0.02	0.05	0.02	-0.02	0.03	-0.02	1.00	0.02	0.17
S	0.01	0.01	0.04	0.07	0.17	0.18	-0.07	0.12	0.10	-0.25	0.05	-0.03	0.02	1.00	0.00
Sb(1)	0.52	0.41	0.33	0.17	0.16	0.12	0.21	0.21	0.05	0.04	0.14	0.31	0.17	0.00	1.00

Note: (1) Low statistical population.

Table 7-2: Basic Statistics for Trace Elements (January 2018)

Parameter	Count	Minimum	Maximum	Mean	Total	Variance	Standard Deviation	Coefficient of Variation	Skewness	Kurtosis
Weight (kg)	45,944	0.22	12.94	3.899	179,149	3.77	1.942	0.5	0.81	-0.23
Length (m)	46,925	0.1	7.5	1.113	52,249	0.28	0.527	0.47	0.83	0.94
Au (ppm)	45,934	0.001	305	0.122	5,611	5.7	2.387	19.54	77.06	7,654
Ag (ppm)	45,934	0.2	21,858	11.068	508,393	34,356	185.353	16.75	68.64	6,237
Cu (ppm)	29,184	1	10,250	10	290,069	5,810	76	7.67	91.07	11,398
Pb (ppm)	29,184	2	8,150	37	1,089,937	36,473	191	5.11	19.58	526.5
Zn (ppm)	29,060	2	17,700	58	1,699,437	45,639	214	3.65	38.92	2477
Ba (ppm)	29,091	1	10,000	151	4,386,336	78,966	281	1.86	9.57	207.5
Ca (pct)	28,933	0.01	25	1.086	31,420	1.87	1.366	1.26	5.69	64.74
Cd (ppm)	3,740	0.5	130	2.023	7,568	25.96	5.095	2.52	13.74	248
Co (ppm)	24,678	1	176	4	101,027	31.29	6	1.37	3.45	41.09
Hg (ppm)	4,311	0	41	1	4,692	1.03	1	0.93	22.57	705.3
Mn (ppm)	29,064	1	50,000	564	16,399,438	991,598	996	1.76	26.17	1,063
Mo (ppm)	11,304	0	1,670	4	43,432	623.7	25	6.5	44.69	2,531
S (pct)	24,815	0.01	34	0.388	9,636	0.9	0.947	2.44	16.65	381.9
b (ppm)	13,910	1	1,045	5	75,476	316.2	18	3.28	36	1,717

7.2.3 Alteration

All rock types in the Las Chispas Operation show signs of extensive hydrothermal alteration. The thin section and TerraSpec™ hyperspectral studies identified alteration consistent with argillic and advanced argillic alteration. Alteration minerals identified are smectite, illite, kaolinite, chlorite, carbonate, iron oxy/hydroxides, probable ammonium, gypsum/anhydrite, silica, and trace alunite.

Generally, most of the mineral deposits drilled to date are above the existing water table; however, paleo-water levels have fluctuated and may have previously been higher. Oxidation of sulphides is observed from near surface to depths >300 m and the presence of secondary minerals is recorded from the Las Chispas underground workings approximately 60 m to 275 m depth from surface. Hematite mineralization occurs as halos around small veins, due to percolated meteoric water along small faults and fractures of oxidized iron sulphides. Strong and pervasive near-surface oxidation is noted to occur in the Babicanora Central Area, where host rocks experienced faulting and advanced weathering to limonite, hematite, and clays.

7.2.4 Mineralization

Mineralization is interpreted to be a deeply emplaced, low to intermediate-sulphidation system, with mineralization hosted in hydrothermal veins, stockwork, and breccia. Emplacement of the mineralization is influenced by fractures and low-pressure conduits formed within the rocks during tectonic movements. Mineralization can be controlled lithologically along regional structures, local tension cracks, and faulted bedding planes.

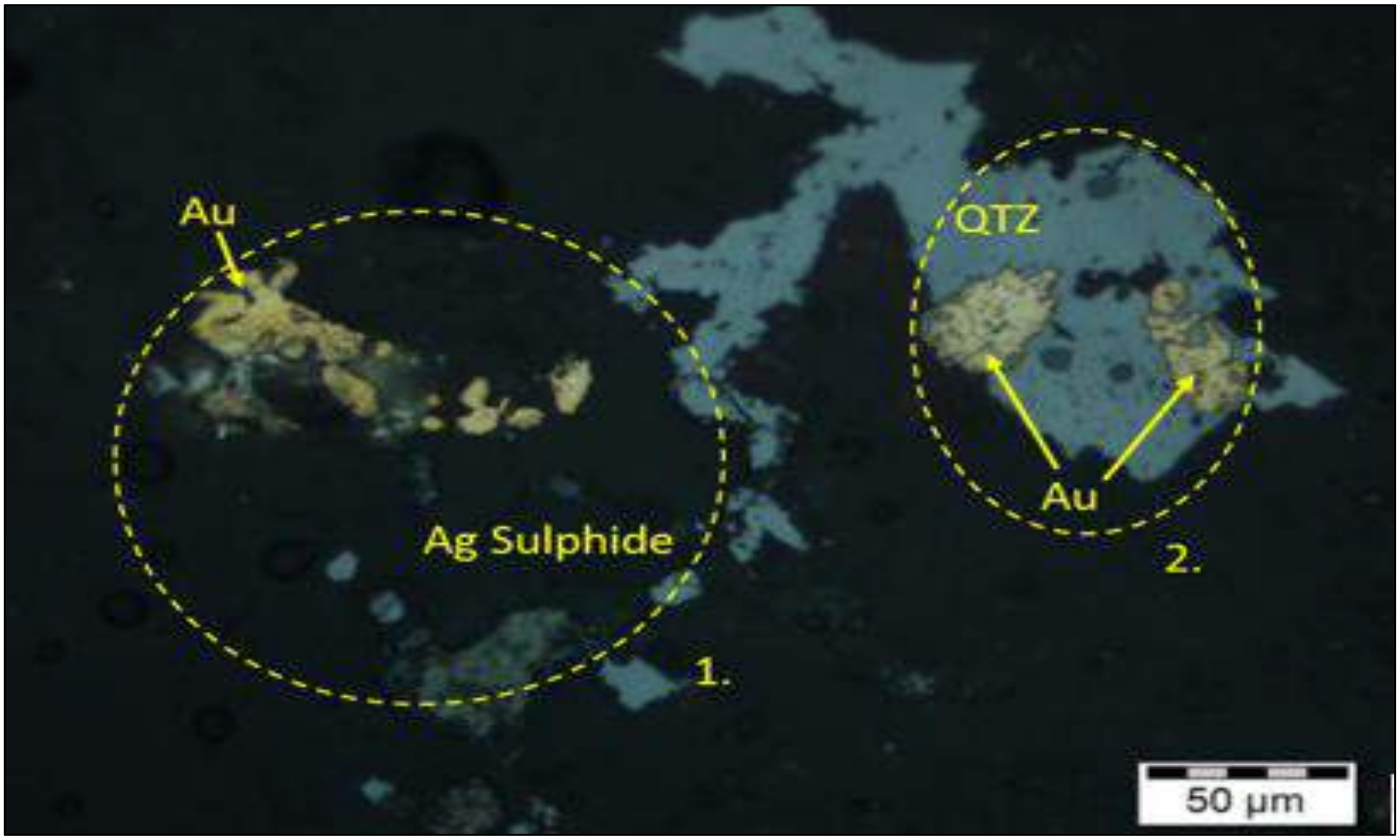
Historic reports and work conducted by SilverCrest have further investigated the gold, silver, base metals, and gangue minerals associated with the mineralization. The mineralization is 0.10 m to 9.30 m in true thickness and typically encompasses a central quartz ± calcite mineralization corridor with narrow veinlets within the adjacent fault damage zone. Stockwork and breccia zones are centred on structurally controlled hydrothermal conduits.

Historic reporting has identified economic mineralization in the form of silver sulphides and sulfosalts as the primary silver mineral species, and in association with pyrite. Secondary silver enrichment is indicated by the gradation from chlorargyrite near the surface to pyrargyrite at depth.

Silver mineralization dominates throughout the Las Chispas Operation. Typical ratios of silver to gold using a cut-off grade (COG) of 150 gpt silver equivalent (AgEq) are approximately: 90:1 at Babicanora Main Vein, 89:1 at Babi Vista Main Vein, 117:1 at Babicanora Norte Main Vein, 56:1 at Babicanora Sur Main Vein, 102:1 at Granaditas Vein, 142:1 at Las Chispas Vein, 172:1 at Giovanni Vein, and 140:1 at William Tell Vein. Overall, a 1:100 gold to silver modal ratio is considered for the Las Chispas Operation.

Stronger gold mineralization is noted within the Babicanora Area than within the Las Chispas Area. The modes of gold mineralization currently identified are threefold: 1) gold associated with pyrite and chalcopyrite; 2) gold emplacement with silver sulphides (typically argentite and electrum); and 3) native gold flakes in quartz (Figure 7-5).

Figure 7-5: Thin Section of Gold and Silver Emplacement at Las Chispas



Source: Tetra Tech Canda Inc., 2019.

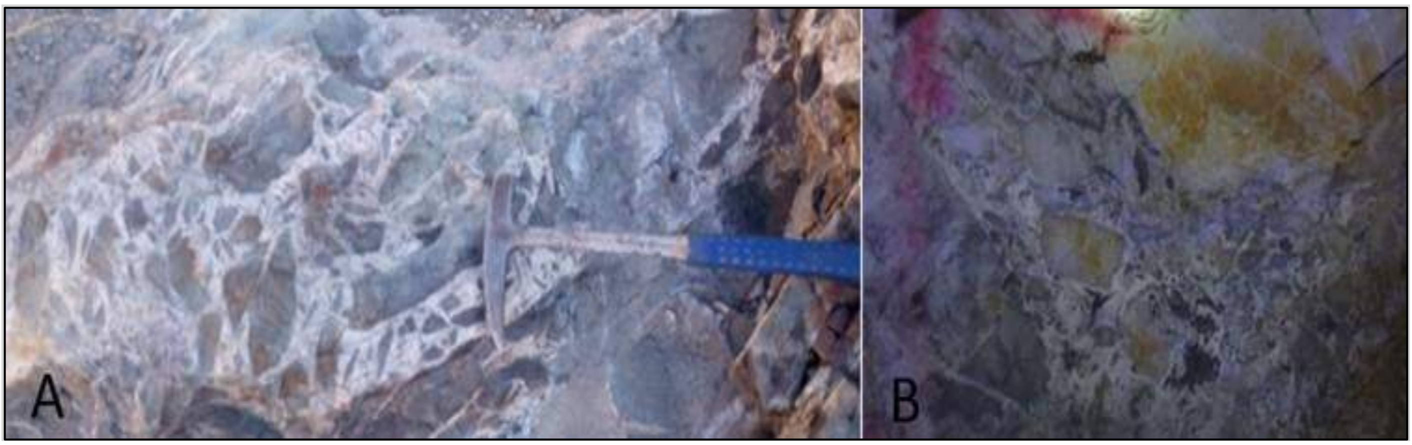
Additional sulphide species present are minor chalcopyrite, sphalerite and galena. The veins are low in base metal mineralization, except for the far south-eastern extensions of the Babicanora Norte, Babi Vista and Granaditas veins, in the south-eastern part of the district. In addition to the petrographic findings in Babicanora, samples of an early sphalerite phase were followed by a later galena phase of mineralization and visual inspection of the base metal mineralization showed galena and sphalerite emplaced at the same time within the same discrete vein. Multiple pulses of base metal-rich fluids of variable composition formed the mineralization at the Las Chispas Operation. There seems to be an increasing base metal content to the southeast and at depth. Government geophysical maps show a large magnetic anomaly to the east of the Las Chispas Operation area, which could be a buried intrusive and potentially the main source of the mineralization in the district.

The veins and stockwork within the Las Chispas Vein consist of fine- to medium-grained, subhedral to euhedral interlocking quartz with minor cavities lined by comb quartz (typically crystals are 5 to 10 mm in length). SilverCrest geologists have not observed any quartz-pseudomorphed blades after platy carbonate or other textures that indicate a shallow environment. Vein emplacement and form are structurally and lithologically controlled. The rheology of the host rock plays an important role in structural preparation and emplacement of the mineralization. Within the fine-grained welded tuff, veining is narrow, typically with sharp narrow contacts. Veins and breccia emplaced in the more competent, medium-grained lapilli tuffs are wider and commonly occur with parallel splays along the main structure and denser veining in the adjacent fault damaged rocks.

Brecciated mineralization formed in two ways: 1) in zones of low pressure as hydrothermal breccia: and 2) as mechanical breccias.

Mineralization in the hydrothermal breccia is hosted in a siliceous matrix of hydrothermal quartz ± calcite and previously formed vein clasts that have been brecciated and re-cemented (Figure 7-6). Clasts are typically monolithic, angular, and show minimal signs of milling and rounding by hydrothermal processes. Although heterolithic breccias are present, they tend to be at the intersection points of the cross-cutting faults (striking 360°) to the main trend and at depth. Where breccia clasts are mineralized, mobilization of the clasts within conduits during multi-episodic pulse events is indicated. Gold values increase with increasing amounts of pyrite and chalcopyrite within the quartz matrix.

Figure 7-6: Breccias at Las Chispas



Source: SilverCrest, 2021.
Notes: (A) Hydrothermal angular homolithic breccia, siliceous matrix with calcite and fine-grained sulphides weathering red (rock hammer for scale). (B) Heterolithic breccia with minor rounding of clasts and open space filling. Fine-grained black sulphides and manganese hosted in the crystalline quartz matrix.

Re-cemented mechanical breccia, generated by the reactivation of the fault hosting the mineralization, is also present. These breccias consist of fault gouge, have a cataclasite texture, and are re-cemented with quartz and calcite. This reactivation mechanism also produces open space filling ores, including narrow stockwork quartz ± calcite ± adularia veins. Additional textures present are banding, crustiform, comb, and chalcedonic silica-calcite veins. The matrix commonly has fine disseminated to coarse-grained banded sulphides associated with the cement.

Argentite is the principal silver mineral and occurs in association with galena, pyrite ± marcasite, and chalcopyrite. Gold and silver values have a strong correlation with each other and likely precipitated together during crystallization of the quartz. Base metals contents are low in veins. Minor zinc and lead are principally found as blebs and veinlets in black sphalerite and galena. Arsenic and mercury are conspicuously absent with minor antimony presence. Minor secondary copper minerals, such as chrysocolla and malachite, occur underground in association with oxidized chalcopyrite, but are rare.

Styles of mineralization present in the Las Chispas Operation include laminated veins (Figure 7-7), stockworks, and quartz-calcite filled hydro-brecciated structures (Figure 7-8). The presence of epithermal textures, such as bladed calcite (replaced by quartz), miarolitic cavities, and chalcedony/crustiform banding mapped underground, suggest multiple phases of fluid pulses contributed to the formation of the mineral deposits.

Generally, it appears that epithermal mineralization is higher in the system (closer to the paleo-surface) on the northwestern side of the Las Chispas district compared to the southeastern side, where there is an increase in base metal content.

Figure 7-7: Laminated (Banded) Vein Style Mineralization Along Las Chispas Vein, Tip of Rock Hammer Shown on Upper Left (Near SilverCrest Sample 2277908,1.04 gpt Au and 197 gpt Ag over 1.33 m)

Source: PEA, 2019.

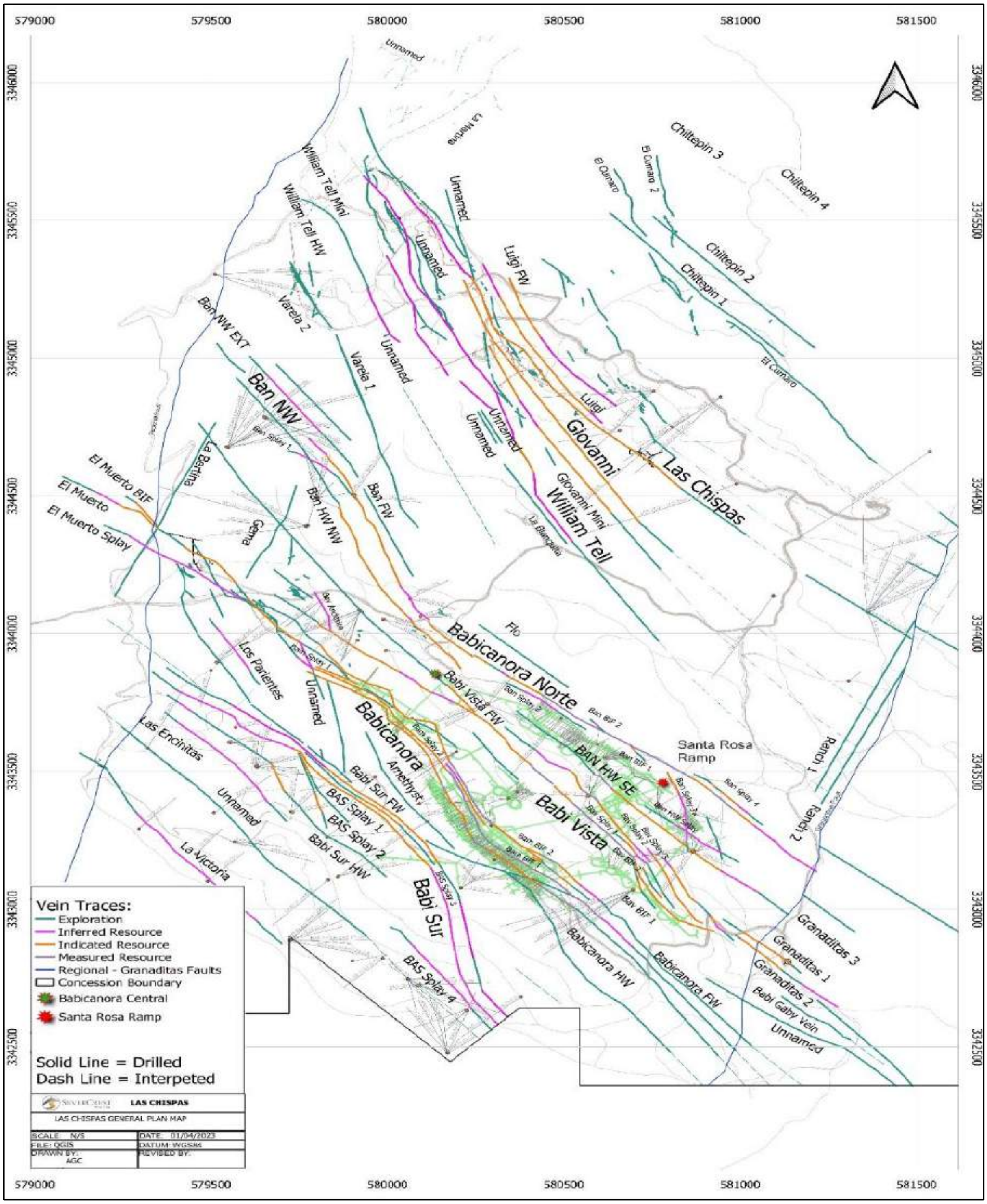
Figure 7-8: Breccia Style Mineralization Along Las Chispas Vein (Base of Las Chispas Gallery near SilverCrest Sample 617179 2.34 gpt Au and 344 gpt Ag)

Source: PEA, 2019. Hammer for scale.

7.2.5 Structural Geology

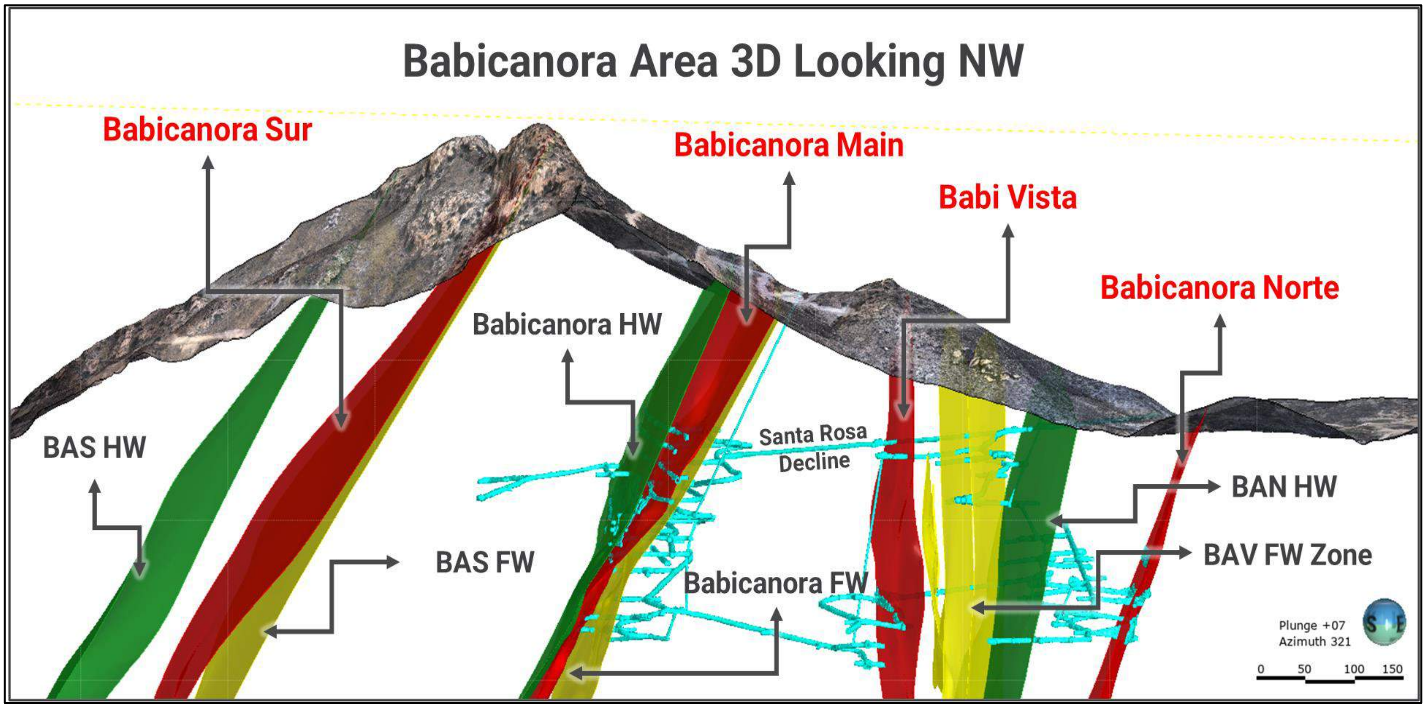
Mapping and interpretation of the structural controls on mineralization and post-mineral displacement is presented in Figure 7-9, Figure 7-10, and Figure 7-11. Multiple stages of normal faulting has affected the basin. The main structures are steep, west-dipping (80°) and sub-parallel to the Sta. Elena normal fault, which is located along the western margin of the Las Chispas Operation, striking approximately 030°. The area is further cross-cut by younger northwest-trending normal faults that dip to the southwest, creating both regional and local graben structures (Carlos et al., 2010).

Figure 7-9: Overview of the Las Chispas and Babicanora Area Veins



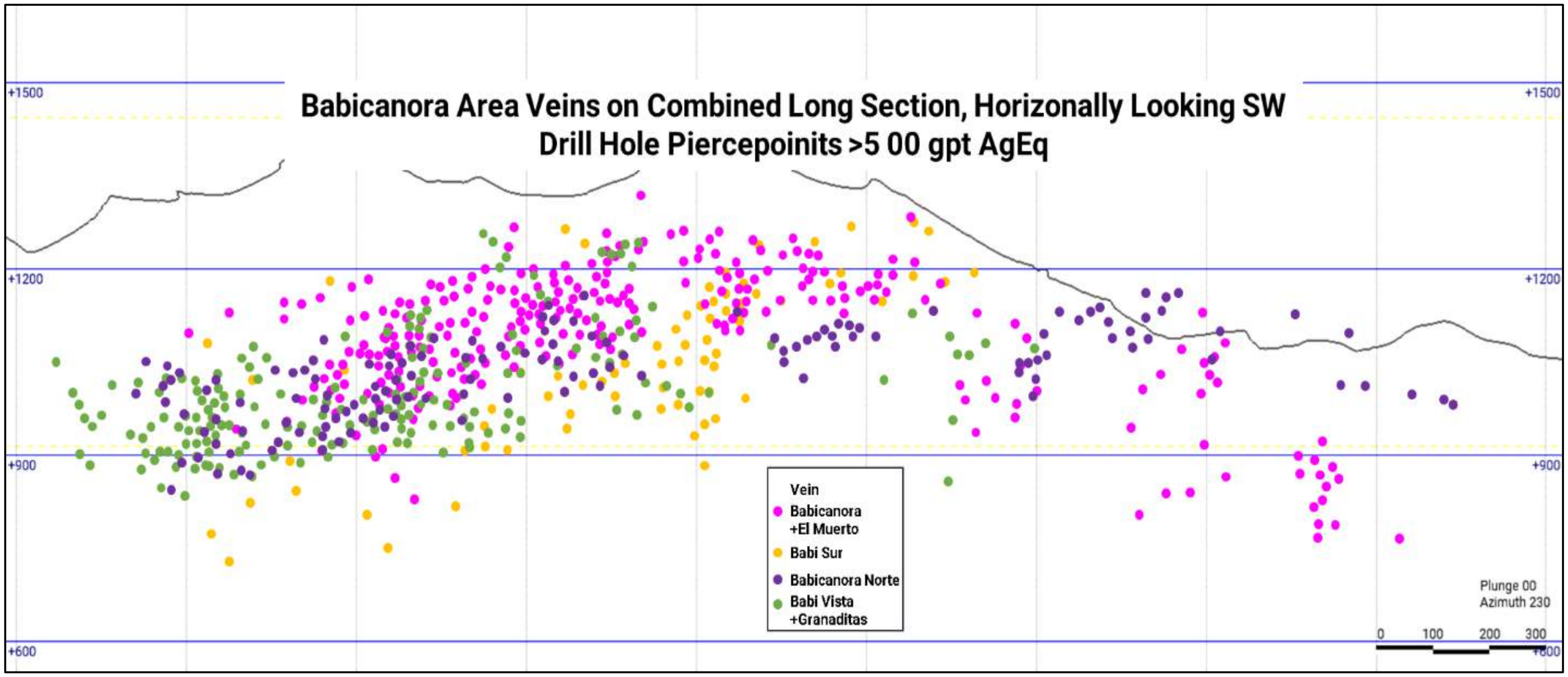
Source: SilverCrest, 2023.

Figure 7-10: 3D View of Babicanora Area with Veins



Source: SilverCrest, 2023.

Figure 7-11: High Grade (>500 got AgEq) Drill Hole Pierce Points for the Babicanora Veins



Source: SilverCrest, 2023.

Three major structural corridors have been identified to date in the Las Chispas Operation area and are referred to as the Las Chispas, Babicanora and El Carmen grabens. All three corridors may be related to horst-and-graben style displacement within broad antiformal-synformal folded stratigraphy, such that the graben structures are bounded by:

- Steeply-dipping (80° to 90°) oblique strike-slip sinistral faults trending northeast and south–southwest
- Oblique strike-slip dextral faults trending southeast and dipping (60° to 80°) to the northeast.

Locally, the graben structures are complicated by probable caldera collapse. Circular structures identified in the lineament analysis, in conjunction with locally derived, immature volcanic fill containing sharp primary quartz clasts, indicate local volcanism (Colombo, 2017b). Within a collapsed caldera, telescoping, juxtaposing or overprinting deep mineralization is common. Paleo-surfaces may be down-dropped by 1.0 km, leading to vertical compression of contained mineralized deposits (Sillitoe, 1994).

Current understanding suggests that mineralization structures are oriented along a northwest–southeast trend. Three structural controls, excluding bedding contacts, are considered to influence alteration and mineralization:

1. 150° to 170° and are inclined at approximately 65° to 75° to the southwest
2. 340° to 360° and are inclined 75° west to 75° east
3. 210° to 230° and are inclined 70° to 85° to the northwest.

High-grade vein mineralization in the district has overall plunge along strike at approximately 20° to 30° to the southeast. Figure 7-7 shows this plunge of high-grade (>500 gpt AgEq) for multiple veins and drill pierce points on a combined longitudinal section for the Babicanora Area.

Locally, the mineralization structures terminate against the northeast-trending regional Las Chispas-Santa Elena Fault, which is a normal fault on the west side of which rocks have down-dropped. Absolute direction and magnitude of movement along the fault in this area is not known. Recent drilling results indicate structural continuity and veining that cuts through this regional fault. At the nearby Santa Elena Mine, drilling indicates that movement along this normal fault postdates mineralization and is west side down by approximately 400 m. This normal fault is also considered to be a major controlling feature for important regional aquifers.

7.2.6 Deposits and Mineral Occurrences

The Las Chispas district is divided into the Las Chispas Area and the Babicanora Areas. Mineral Resources are estimated for 38 veins with their bifurcations, and Mineral Reserves for 19 veins (Table 7-3).

Table 7-3: Las Chispas Epithermal Veins in Mineral Resources and Reserves

Vein Name	Mineral Resource	Mineral Reserve
Babicanora	X	X
Babicanora FW	X	X
Babicanora HW	X	X
Babicanora Norte	X	X
Babicanora Norte HW	X	X
Babicanora Norte HW Splay	X	

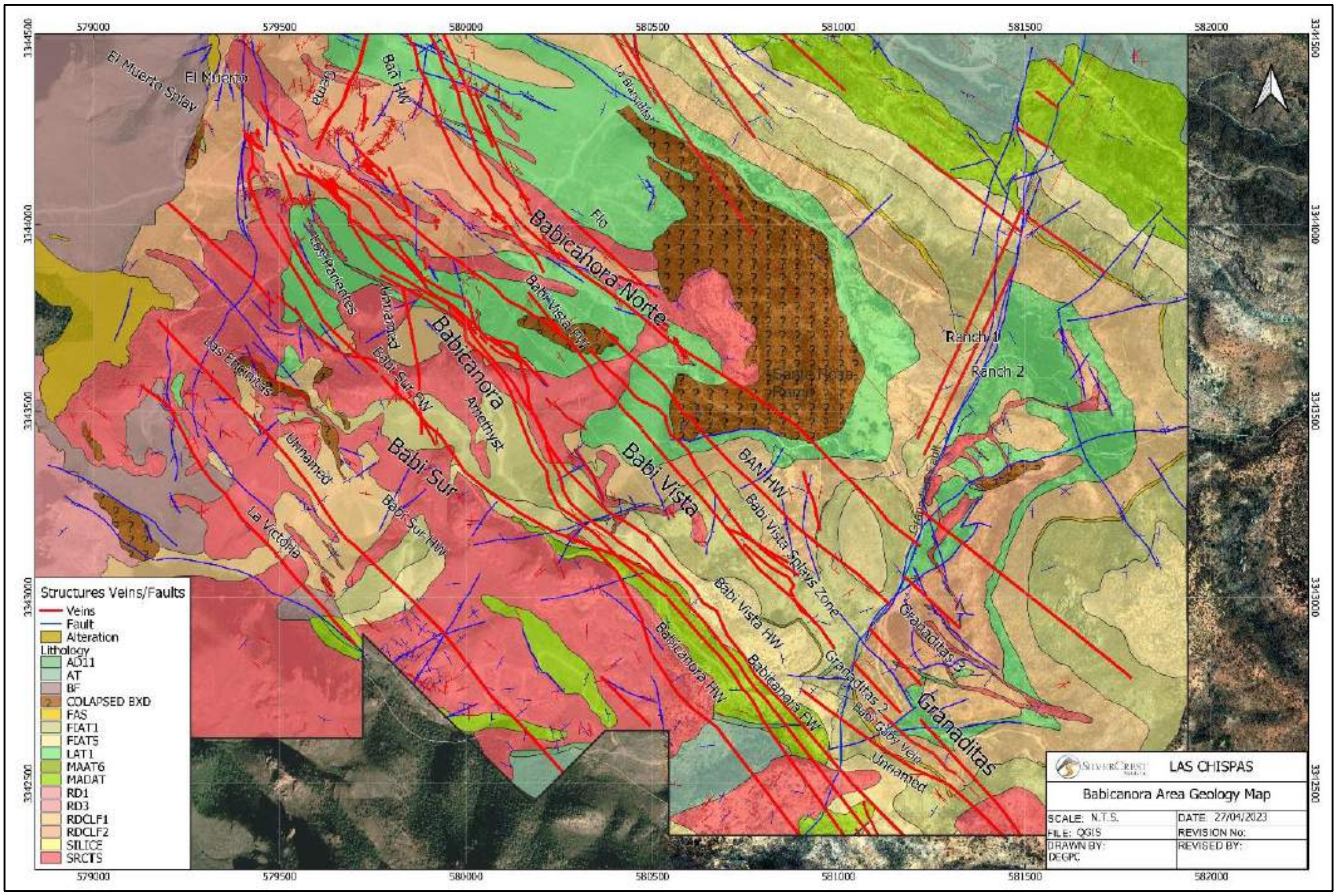
Vein Name	Mineral Resource	Mineral Reserve
Babicanora Norte Splay 1	X	
Babicanora Norte Splay 2	X	
Babicanora Norte Splay 3	X	
Babicanora Norte Splay 4	X	
Babicanora Sur	X	X
BAS HW	X	
BAS FW	X	X
BAS Splay 1	X	
BAS Splay 2	X	
BAS Splay 3	X	
BAS Splay 4	X	
Babi Vista	X	X
Babi Vista Andesite	X	
Babi Vista Splay 1	X	
Babi Vista Splay 2	X	X
Babi Vista Splay 3	X	X
Babi Vista FW	X	X
Encinitas	X	
El Muerto	X	X
El Muerto Splay	X	
Granaditas1	X	X
Granaditas2	X	
La Victoria	X	
Los Parientes	X	
Las Chispas	X	X
Giovanni	X	X
Gio Mini	X	X
William Tell	X	X
William Tell HW	X	
William Tell Mini	X	
Luigi	X	X
Luigi FW	X	X
Total Veins	**38**	**19**

7.2.6.1 Babicanora Main Vein

The Babicanora Main Vein has a continuous mineralization strike length of approximately 2.2 km with an average estimated thickness of 1.7 m and includes the Area 51 Zone, Babicanora Central Zone and the El Muerto Zone. The Precious Metal Zone (PMZ) has been drilled continuously to at least 300 m down-dip within the Babicanora Main Vein, and mineralization is exposed on surface to a depth of 500 m. Geological mapping in the Babicanora Area is shown in

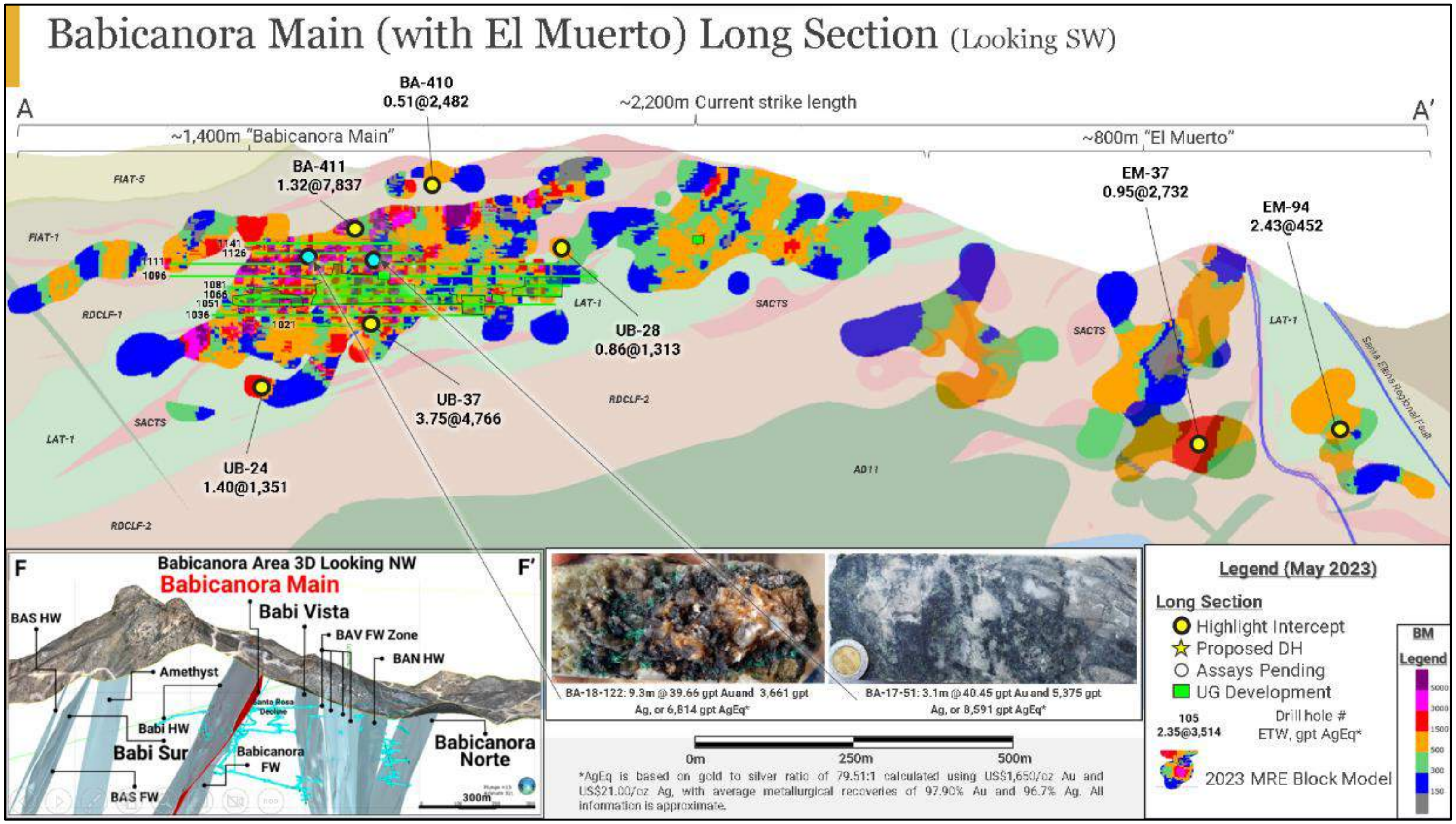
Figure 7-12. A June 2022 longitudinal section and typical cross-section of the Babicanora Area veins are shown in Figure 7-13 and Figure 7-14, respectively.

Figure 7-12: Plan View of Geographical Mapping at the Babicanora Area



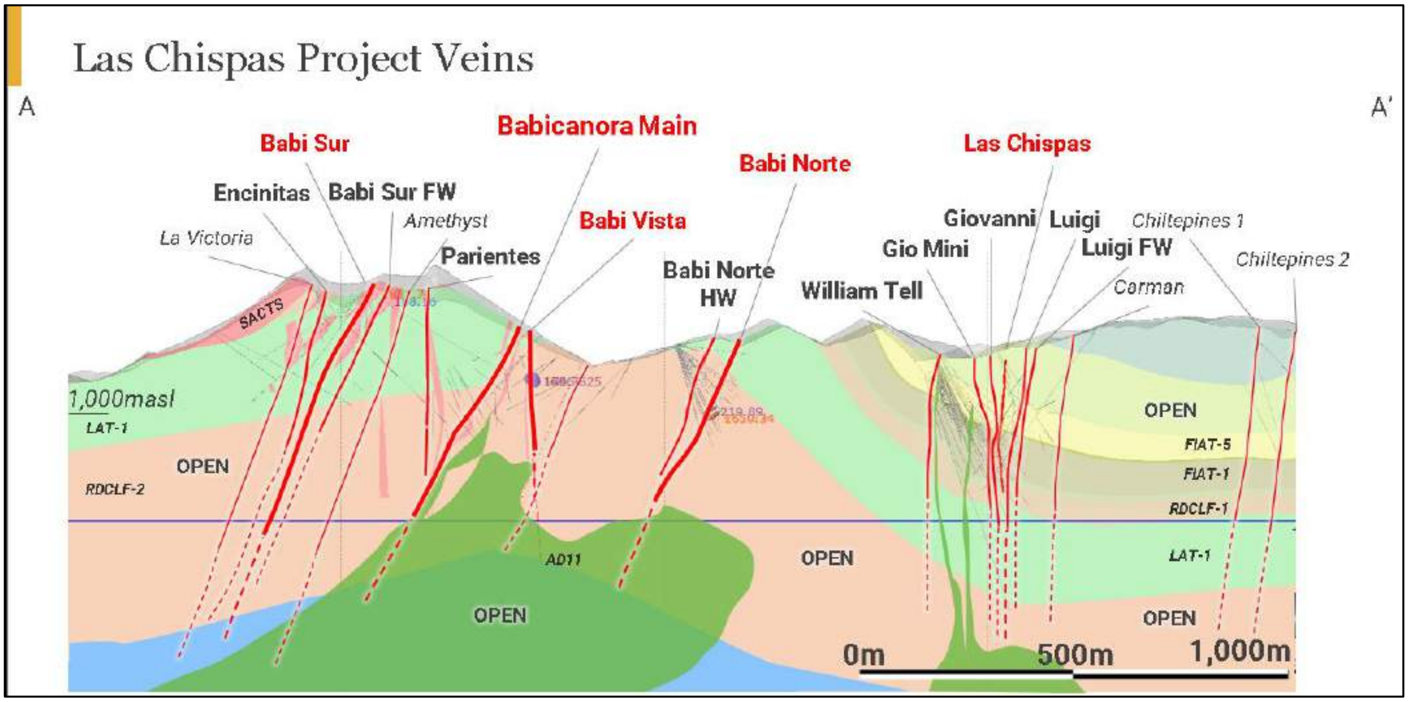
Source: SilverCrest, 2023.

Figure 7-13: Babicanora Main Vein Longitudinal Section



Source: SilverCrest, 2023.

Figure 7-14: Vertical Cross Section through Las Chispas Operation Veins, (looking northwest)



Source: SilverCrest, 2022.

Mineralization is hosted in structurally controlled veins with associated stockwork and breccias. A majority of the high-grade mineralization is located within medium-to coarse-grained lithic tuff (LAT1 unit).

Historic underground workings along the Babicanora Main Vein are located to the northwest portion of the vein, in the Babicanora Central Zone. The historic adit is accessible and has been rehabilitated by SilverCrest as a 4 m by 4 m adit that continues as a 230 m horizonal access. New development can now be accessed from the historic Babicanora Central adit that connects to a decline from the Santa Rosa portal. Details of the underground development are presented in Section 16.

Mineralization is characterized by quartz veins, stockwork and breccias. The mineralization structural zone strikes between 140° to 150° and dips approximately 60° to 70° to the southwest. Several 200° to 220° cross-striking faults and dense fracture sets intersect the Babicanora Main Vein. These intersections appear to influence mineralization by the development of high-grade, steeply southeast-plunging shoots. From observations underground at the nearby Las Chispas Vein, these cross-cutting faults or dense fracture sets can be mineralized for up to 20 m along an approximate 220° strike direction.

The historic Babicanora Central Mine had hangingwall stoping from the main adit level (1,152 masl) to the surface, approximately 130 m above (Dahlgren, 1883). The depth of historic underground workings is approximately 25 m below the Babicanora Central adit level. SilverCrest is currently mining and stockpiling historic mineralized material from historic underground mine shoots, in preparation for geotechnical controls to mine the main vein. The Babicanora Main Vein is in the footwall of the historic stoping.

Major mineralization lithological units are defined as:

- Lapilli Andesite Tuff (LAT1 unit). The LAT1 unit consists of an andesite lapilli tuff with minor ash and sparse matrix at the top, an intermediate fine sandstone in the middle, and andesite ash and polymictic tuff with abundant fine matrix at the base. The main alteration minerals in this unit are chlorite, hematite in fractures and weak to pervasive silicification. Argillization is apparent in unit rocks adjacent to faults. The LAT1 unit is approximately 200 m thick, overlies the RDCLF2 unit, and is also cut by trachyandesite and rhyolite dykes at Babicanora vein area. Due to its stratigraphic position, LAT1 is likely Upper Cretaceous in age. It is one of the most widely distributed units on the Las Chispas Operation.

  LAT1 is the best mineralization host unit in the Las Chispas district, due to its lithological composition. Intrusion of the trachyandesite and rhyolite dykes at shallow dips within LAT1 presents suitable structural traps for accumulation of large amounts of gold and silver. Examples are the Babicanora Main, Babi Vista, Babicanora Norte and Babicanora Sur veins.

- Dacite-Rhyodacite Crystal Tuff (RDCLF1 unit). This unit is mainly a Dacitic Tuff and minor Rhyodacite, with abundant biotite, moderate to abundant plagioclase grains, and weak quartz grains in a minor aphanitic, fine-grained matrix. Locally, this unit has moderate to weak fiamme structures and flattened pumice fragments. This unit is widely distributed throughout the Las Chispas Operation. Generally, this rock is unaltered, but in the areas where it is cut by Rhyolite (RD1) or Andesite (AD11) dykes, the rock shows evident of pervasive alteration and replacement halos of chlorite and carbonates, silicification and oxidation. Being siliceous and moderately competent, outcrops form relatively low topographic relief. This unit concordantly overlies LAT1 and is approximately 60 to 70 m thick. Veins hosted in this geological unit tend to be narrower, due to the tightness of their lithological composition. Examples are the upper Babicanora Main, Babicanora Norte NW, and Babicanora Sur veins.
- Rhyolite – Rhyodacite Tuff (RDCLF2 unit). The RDCLF2 unit is a crystalline tuff with abundant phenocrysts of quartz, alkali feldspar and plagioclase in an aphanitic matrix, locally with sporadic flattened fiamme structures and pumices fragments. The rock is generally unaltered, except in the areas where it is cut by RD1 and AD11 dykes. There the rock shows pervasive alteration and replacement halos up to several metres in size. The alteration generally consists of chlorite + pervasive carbonates, silicification and oxidation. RDCLF2 is the oldest outcropping lithological unit in the Las Chispas Operation. However, it overlies the LAVS volcano-sedimentary sequence. This unit is estimated to be approximately 200 m thick and stratigraphic correlation suggests an Upper Cretaceous age. Veins hosted in this geological unit tend to be narrower, due to the tightness of their lithological composition. Examples are the Babicanora Norte Main and Babi Vista Main veins at depth.
- Trachyandesite-Rhyolite Dykes (SACTS unit). The Trachyandesite-Rhyolite Dykes occur as medium-grained size, aphanitic matrix, and strong silicification altered rock with phenocrysts of argillized feldspar. The rock type is mainly trachyandesite, but rhyolite is present locally, likely due to extreme differentiation. In addition to silicification, this rock is observed with moderately to strongly pervasive hematite, commonly in halos, liesegang rings, and in fracture planes, produced by the leaching of pyrite, consistent with the presence of boxwork textures. The leaching of this pyrite is considered to have contributed to the formation of sulphuric acid in the epithermal fluid system that concentrated the high-grade gold and silver mineralization in the veins at the Babicanora area. This unit is emplaced oblique to the pseudo-stratification of the enclosing rock, giving the appearance of sills. Dyke thickness varies from 5 to 30 m, strikes NW60° SE and dips up to 65° to the southeast in the southern portion of the Las Chispas Operation. On surface, these dykes form relatively high relief features such as in the Babicanora area.

General lithologies are andesite to dacite with interbedded rhyolite. These units are crosscut by andesite dykes to the southeast and rhyodacite dykes to the northwest of the Babicanora Main Vein. Strong to intense silicification caps the ridges in the area with a 300 m by 400 m horizontal zone interpreted as possibly sinter (Figure 7-15) that covers the slopes in the northwestern portion of the Las Chispas Operation area.

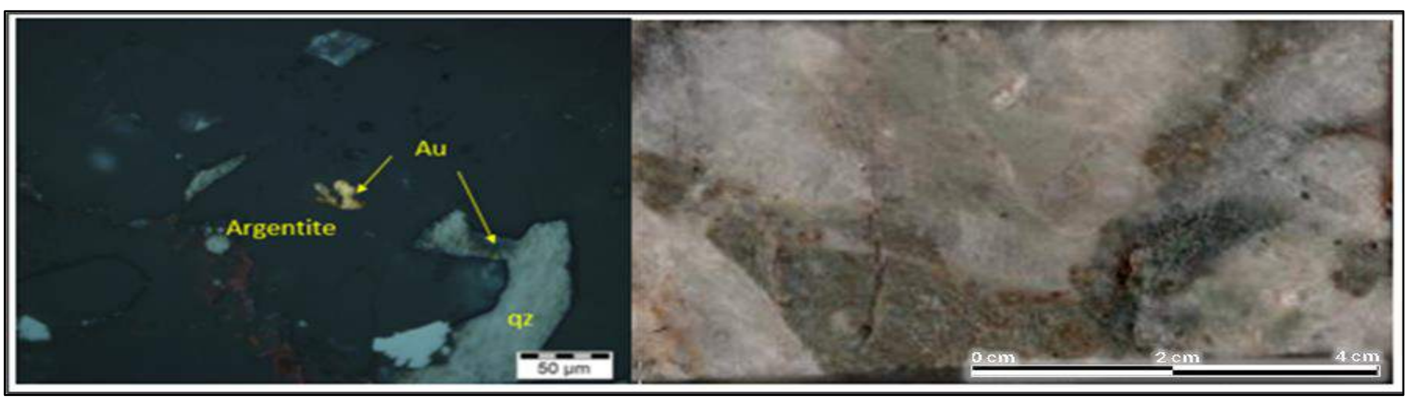
Mineralization within the Babicanora veins is characterized as a low (northwest portion) to intermediate (southeast portion) sulphidation system. SilverCrest has identified numerous sulphidation features including sinter capping on the ridges, quartz after calcite bladed textures (Figure 7-15 *C*), and massive chalcedonic-textured silica (Figure 7-15). These high-level features and textures point to the preservation of the mineralization system at depth.

Figure 7-15: A. Sinter Lamina, B. Quartz Replacement of Bladed Calcite with Minor Amethyst, C. Massive Chalcedonic Quartz

Source: SilverCrest, 2021.

The mineralization of the Babicanora veins has a strong magmatic component. The potassic alteration observed in thin section is crystalline, orthoclase and of magmatic origin. Adularia is also present, but to a more limited extent. Argentite, and acanthite are the principal silver minerals, electrum, and native silver are present. Gold occurs as native flakes and in association with pyrite and chalcopyrite (Figure 7-16). Gold and silver values have a strong correlation to each other and likely precipitated together during the crystallization of quartz.

Figure 7-16: Babicanora Thin Section with Gold and Argentite

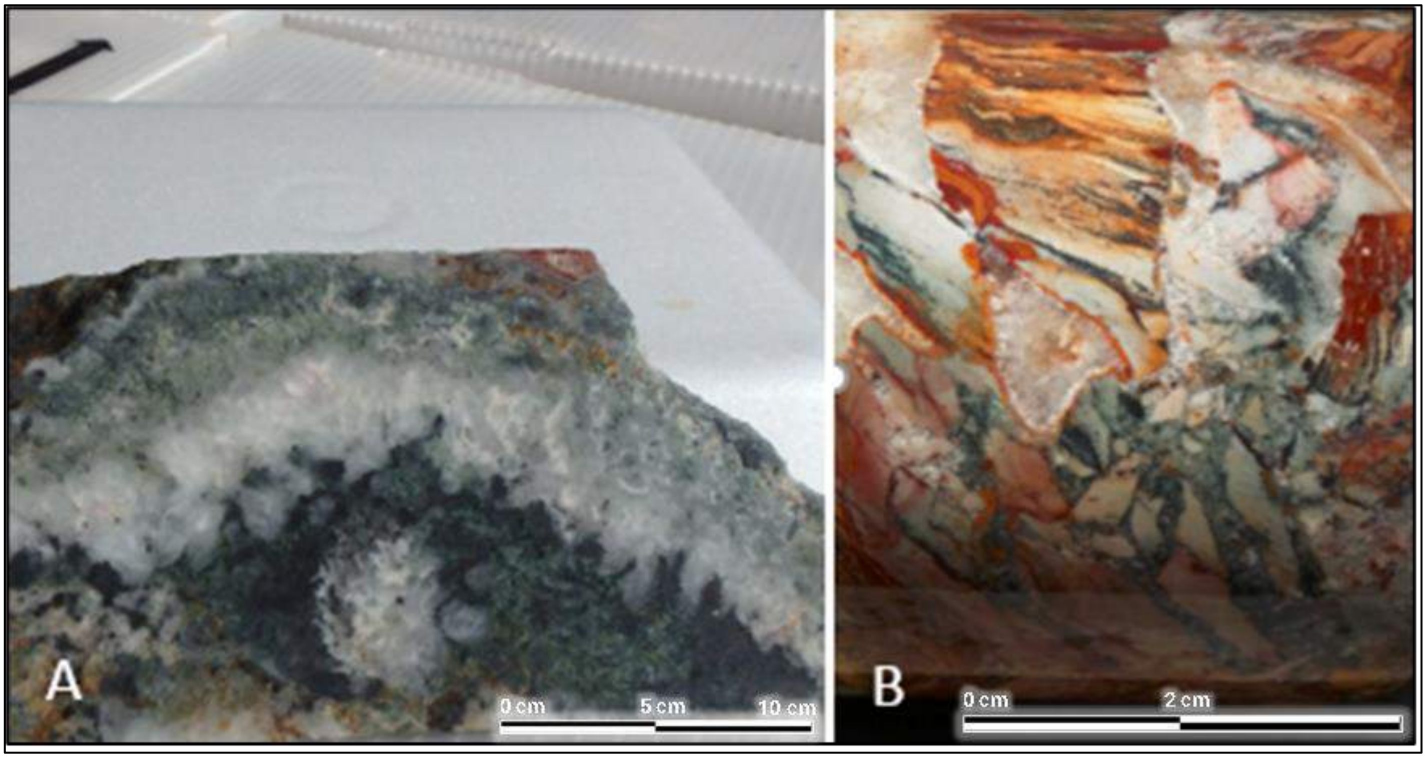


Source: SilverCrest, 2017.

Notes: (A) Thin section. A very fine particle of gold is dispersed within the quartz, and it is spatially associated with the argentite. Plane-polarized reflected light. (B) Core, taupe, brecciated fine grained quartz brecciated and recemented with coarse white quartz, fine grained disseminated pyrite throughout.

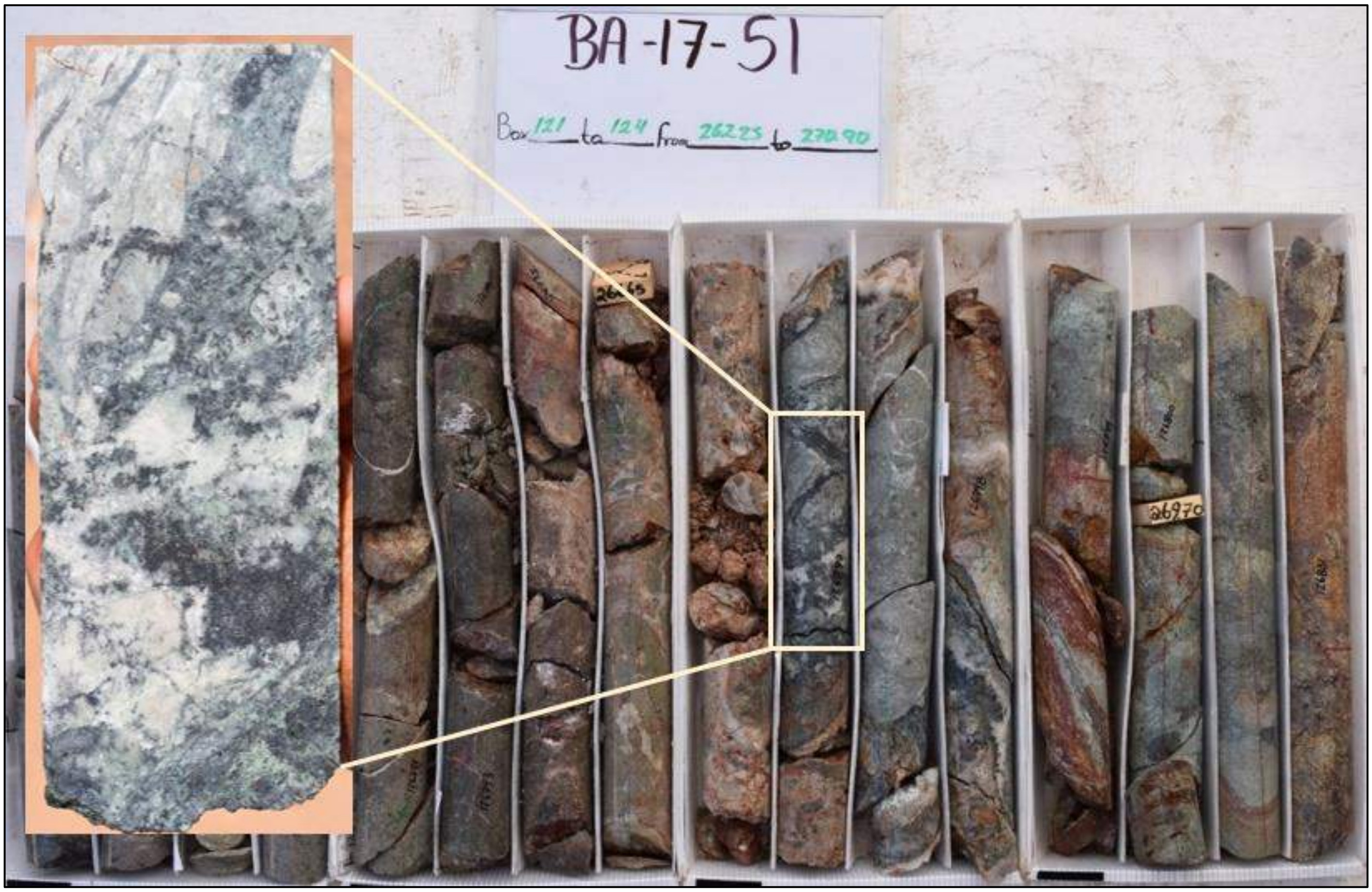
Contents of base metals are low in the Babicanora area. Zinc and lead are found mainly in green sphalerite and galena. Gold and silver mineralization can be characterized with three end-member types; 1) breccia hosted; 2) vein hosted; and 3) vuggy quartz hosted (Figure 7-17 and Figure 7-18).

Figure 7-17: Babicanora Vein Textures



Source: SilverCrest, 2018.

Figure 7-18: Drill Hole BA17-51 (Discovery Hole for Area 51 Zone); from 265.9 to 269.2 m, 3.3 m (3.1 m True Thickness) Grading 40.45 gpt Au and 5,375 gpt Ag, with Hematite Breccias, Coarse Banded Argentite, Native Silver, Electrum, and Native Gold.



Source: SilverCrest, 2017.

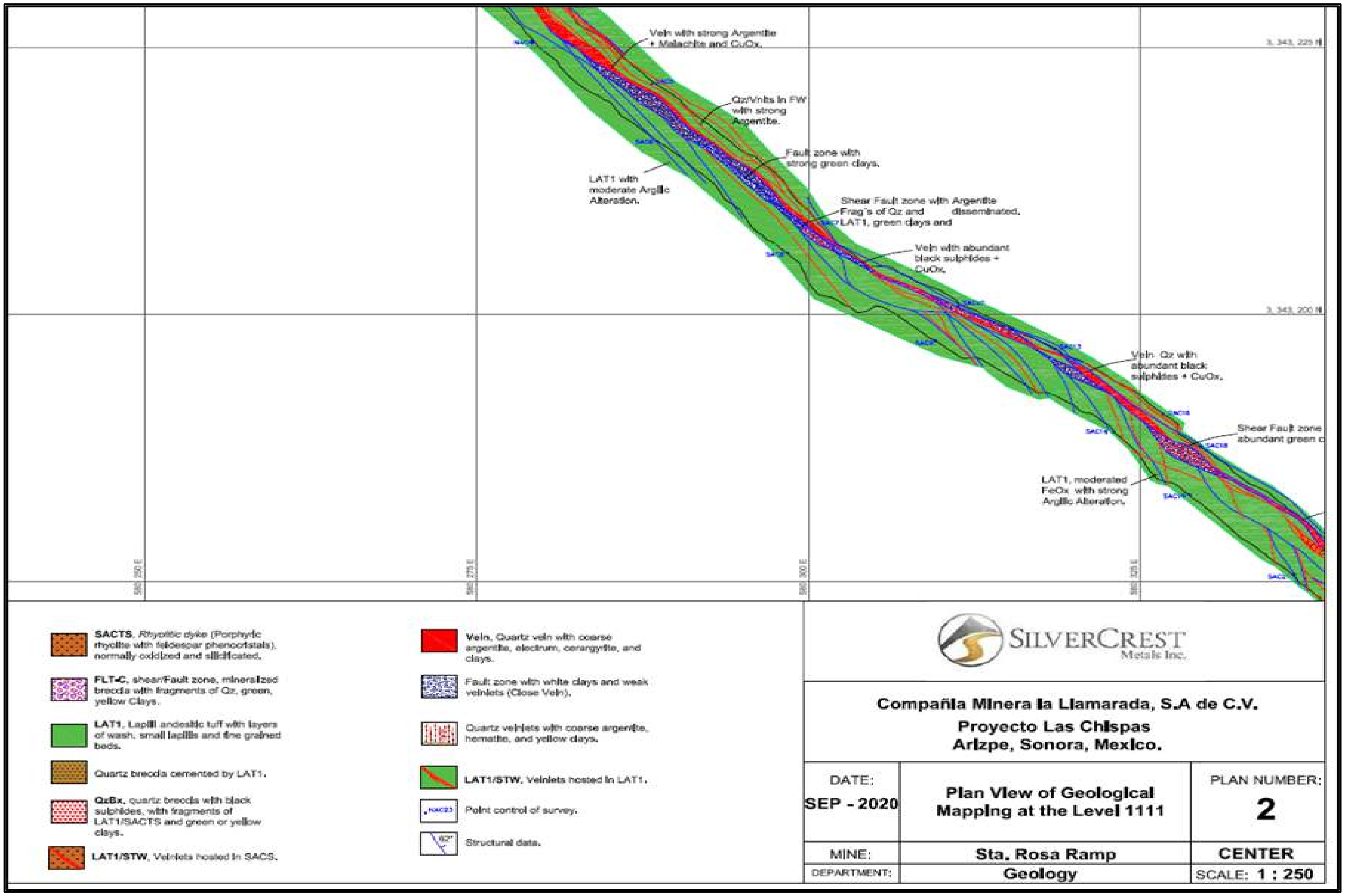
In June 2019, the Santa Rosa Decline intercepted the Babicanora Main Vein with banded textures and high-grade gold and silver mineralization (Figure 7-19) within 5 m of the predicted location, based on the computer-generated resource model using surface drilling.

Figure 7-19: Babicanora Vein Intercepted by Santa Rosa Decline in June 2019

Source: SilverCrest, 2019. Channel sample grading 336 gpt Au and 26,435 gpt Ag.

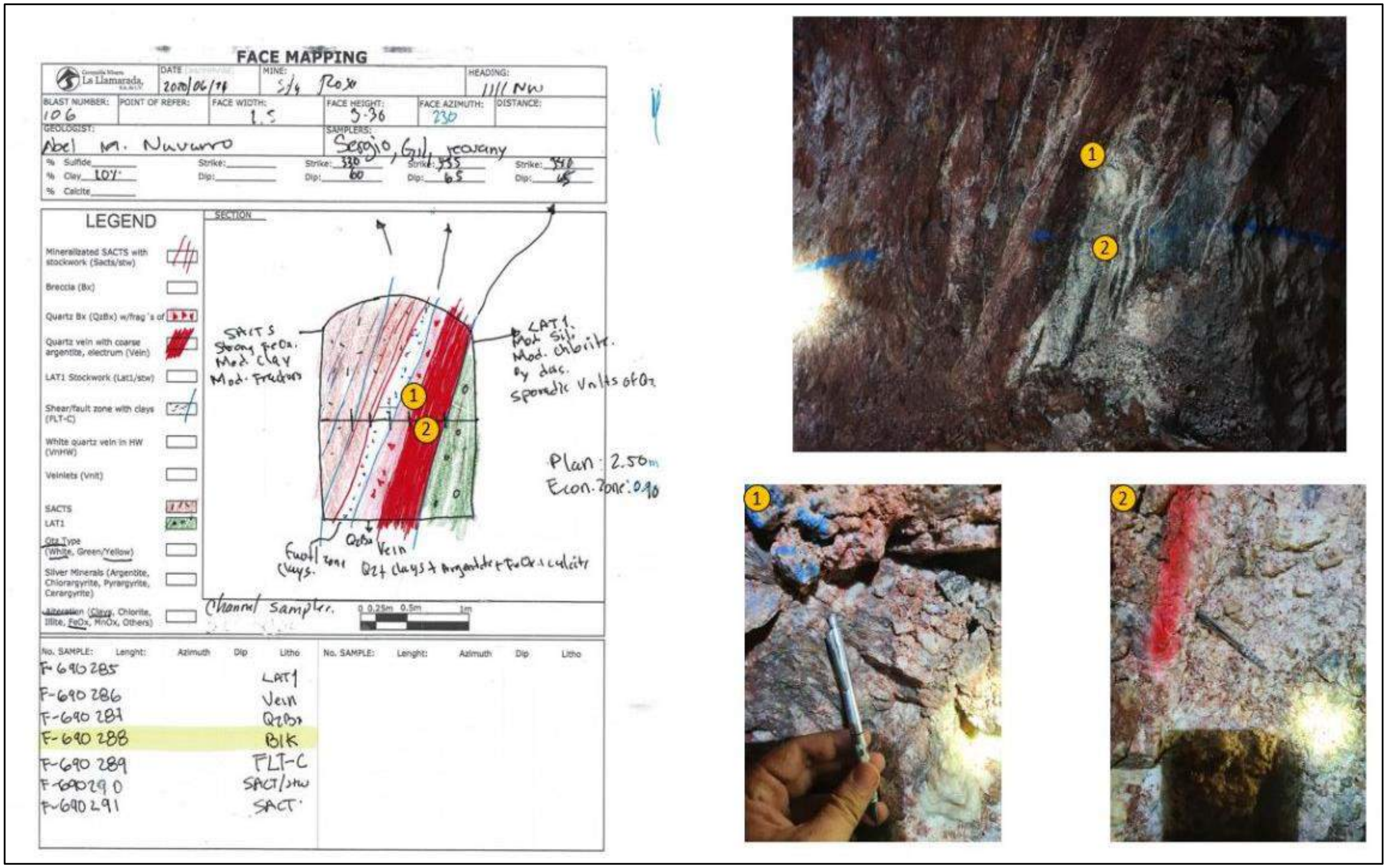
Following the Babicanora Vein intersection, underground in-vein development proceeded by drifting to the northwest and southeast along the strike of the vein. During drifting, a significant part of the vein was observed to be fractured and faulted and to contain clay material. This material was not logged in core drilling (low recovery intercepts) and sampled for geochemical analysis or metallurgical testing. This fault zone is a prominent, continuous feature within the vein. It ranges in thickness from a few centimetres up to 2 m and appears to span the entire length of the vein. The fault zone meanders within the vein from the hangingwall to footwall and back (Figure 7-20 and Figure 7-21). Post-mineralization relative movement is apparent, but the amount of displacement is unknown.

Figure 7-20: Underground Plan Map of Babicanora Main Vein, Area 51 Zone, Level 1111 (masl)



Source: SilverCrest, 2020. Fault Zone in Blue.

Figure 7-21: Babicanora Main Vein, Area 51 Zone, Face Map of Vein with Fault Zone (looking northwest)



Source: SilverCrest, 2020. Fault Zone as White Speckle Texture.

The fault zone is oxidized, and contains kaolin clays, limonite, hematite, minor manganese oxides, fine-grained native gold, and the silver halides chlorargyrite and idiorite.

The Babicanora HW and FW veins are sub-parallel to the Babicanora Main Vein. These veins are 5 m to 50 m from the Babicanora Vein and appear to intersect the Babicanora Main Vein near Area 51, potentially causing near-vertical high-grade shoots.

7.2.6.2 Babicanora Norte (Main), HW & FW Veins

Babicanora Norte Vein has a semi-continuous mineralization strike length of approximately 2 km with an average estimated thickness of 0.65 m. The mineralization is exposed on surface and known to extent to a depth of 300 m.

The mineralization of the Babicanora Norte veins resembles that at the adjacent Babicanora Main Vein, but without a significant fault zone. A majority of the high-grade mineralization is located within the RDCLF2 (rhyodacite flow) unit, near intersections of cross-cutting 220° striking faults and dense fracture sets. The RDCLF2 unit shows more brittle fracture compared to the LAT1 unit, which has constrained the mineralization vein as a consistently narrower and banded vein compared to Babicanora Main. Argentite and acanthite are the principal silver minerals. Pyrargyrite and polybasite are also present and gold occurs in electrum and native gold flakes in association with pyrite and chalcopyrite (Figure 7-22).

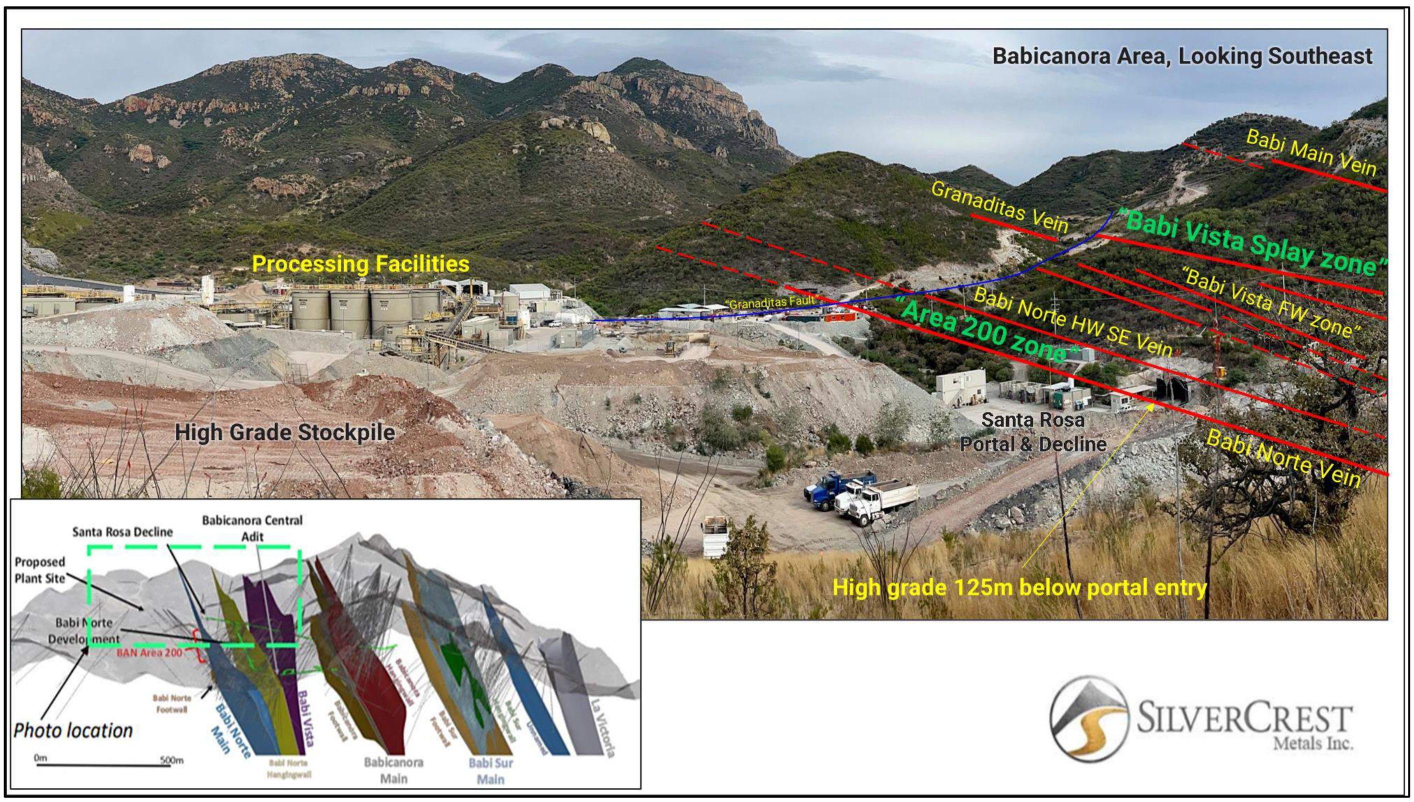
Figure 7-22: Drill Hole BAN18-10, From 93.0 to 95.5 m Grading 61.36 gpt Au and 2,834 gpt Ag with Visible Argentite, Pyrargyrite, Electrum, Native Silver, and Native Gold

Source: SilverCrest, 2018.

Base metals in Babicanora Norte veins are similar in nature to those described in the Babicanora veins, but the base metal contents are higher (up to 8%). Zinc and lead occur mainly in green sphalerite and galena. A chalky white mineral is immediately adjacent to high-grade silver and may be a silver halide similar to that in the Babicanora Main Vein. Geochemical analyses lack detectable arsenic and mercury. Gold and silver mineralization can be characterized as occurring as three end-member types; 1) breccia hosted, 2) vein hosted, and 3) vuggy quartz hosted.

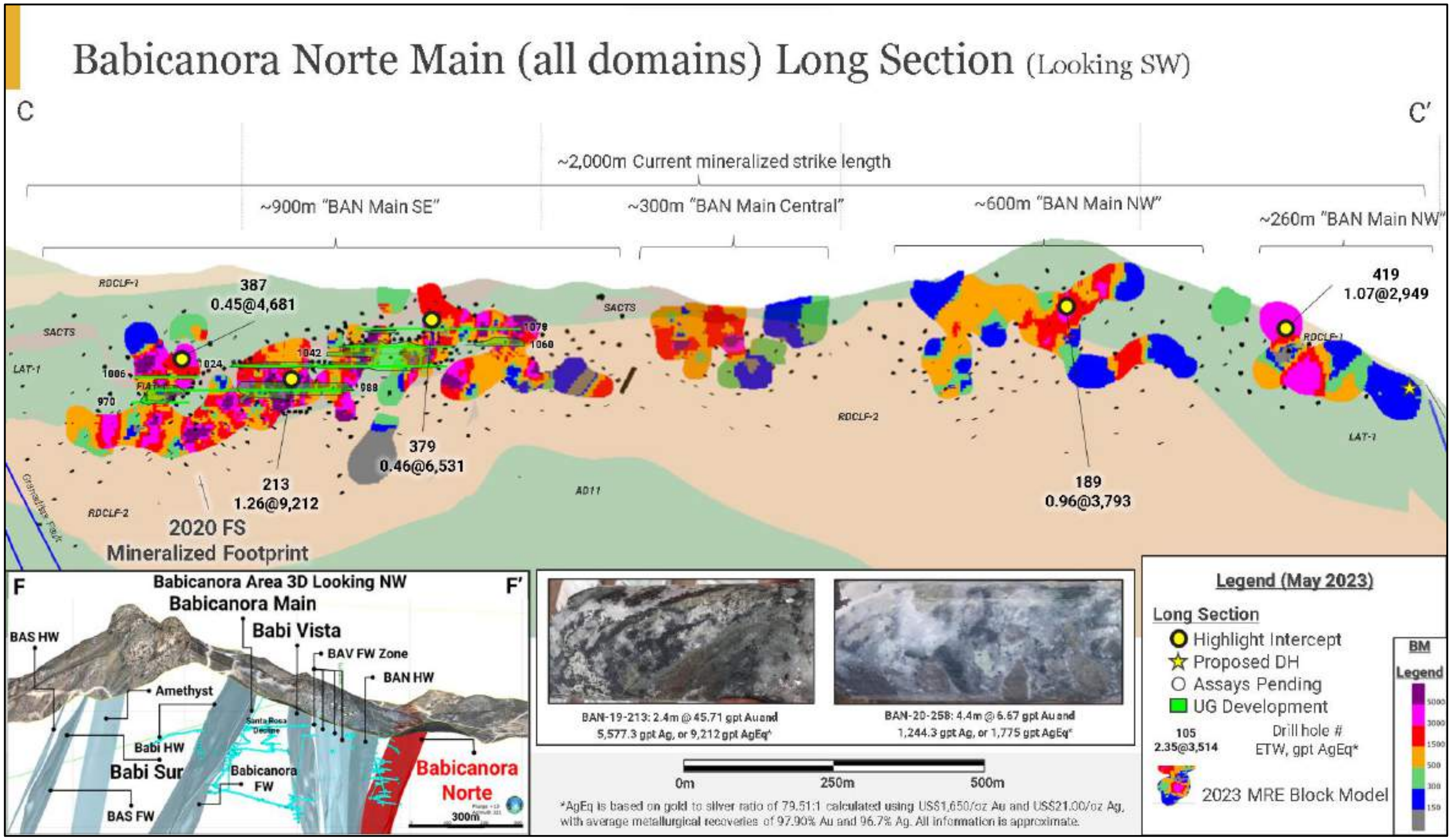
In February 2020, the Babicanora Norte Vein and Area 200 zone were discovered while completing step-out drilling down-plunge of the high-grade mineralization (Figure 7-23, Figure 7-24, and Figure 7-25). Drill hole BAN-19-200 grades 39.27 gpt Au and 3,473 gpt Ag, or 6,595 gpt AgEq (AgEq based on 79.51:1 Ag/Au) over 2.5 m downhole length, which includes 79.80 gpt Au and 7,380 gpt Ag, or 13,725 gpt Ag Eq over 0.7 m.

Figure 7-23: Location of Babicanora Norte Vein, Area 200 Zone



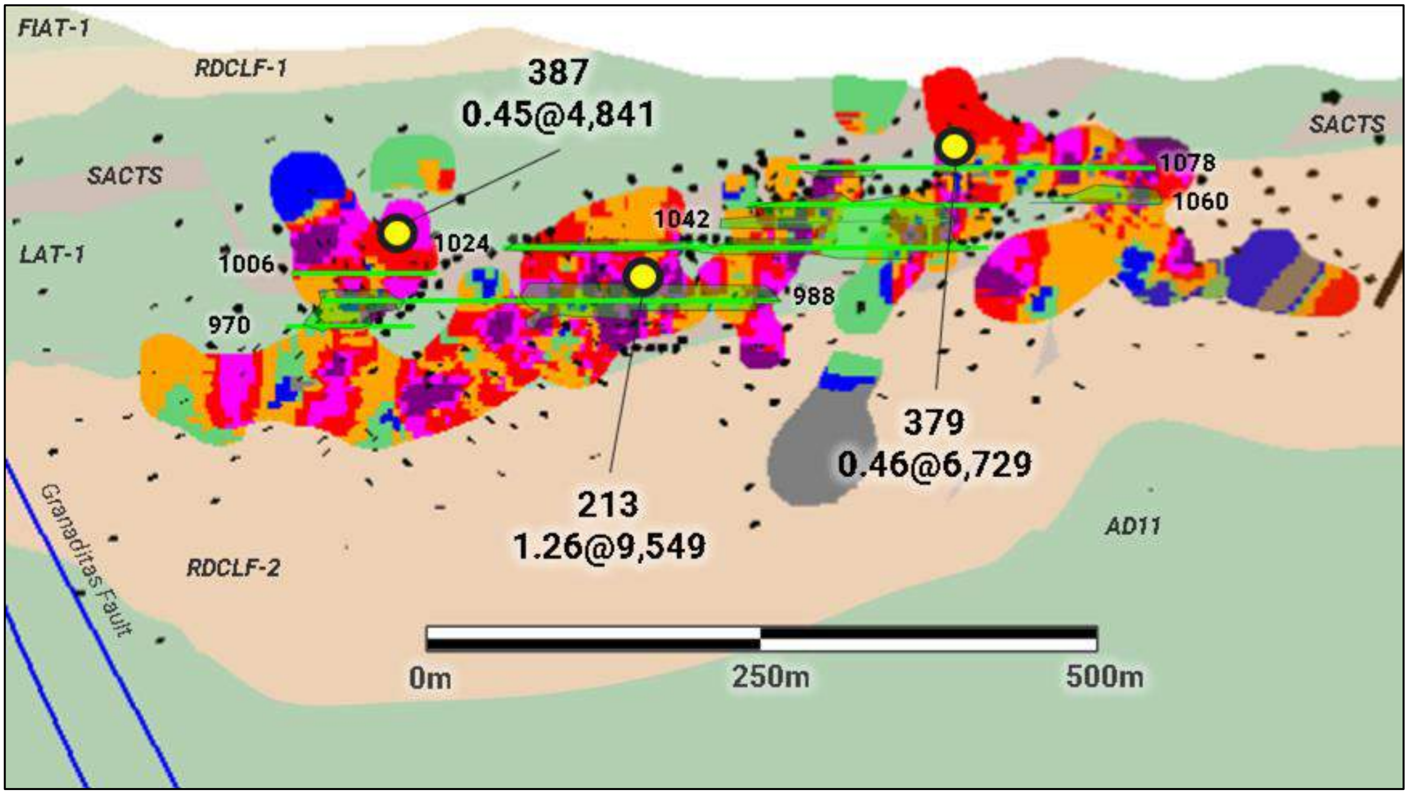
Source: SilverCrest, 2023.

Figure 7-24: Long Section of the Babicanora Norte Vein



Source: SilverCrest, 2023.

Figure 7-25: Longitudinal Section of the Babicanora Norte Vein Area 200



Source: SilverCrest, 2023.

The Babicanora Norte HW, FW, and splay veins are sub-parallel and located 5 m to 30 m from the main vein.

7.2.6.3 Babicanora Sur Vein Area

The Babicanora Sur Main Vein has a semi-continuous mineralization strike length of approximately 1.5 km with an average estimated thickness of 1.1 m. The Precious Metal Zone (PMZ) typical for epithermal veins has an average estimated height of 150 m. Mineralization is exposed on surface to a depth of 600 m.

The Babicanora Sur Main Vein is located approximately 300 m southwest of the Babicanora Main Vein and is on a parallel trend. This vein is similar to Babicanora Main, with a fault zone containing clays and associated minerals. The fault zone strikes between 140° to 150°, dips approximately 55° to 65° to the southwest, and is cross-cut by several 220° trending faults and dense fracture sets. Mineralization at Babicanora Sur is hosted in lapilli or lithic tuff and breccia with moderate to strong overprinting alteration (Figure 7-26). Argentite and acanthite are the principal silver minerals. Gold occurs in electrum and native gold flakes in association with pyrite and chalcopyrite.

As with the Babicanora Main Vein, core loss occurred when drilling the Babicanora Sur Vein and reconciliation while mining may show an impact on grade and thickness.

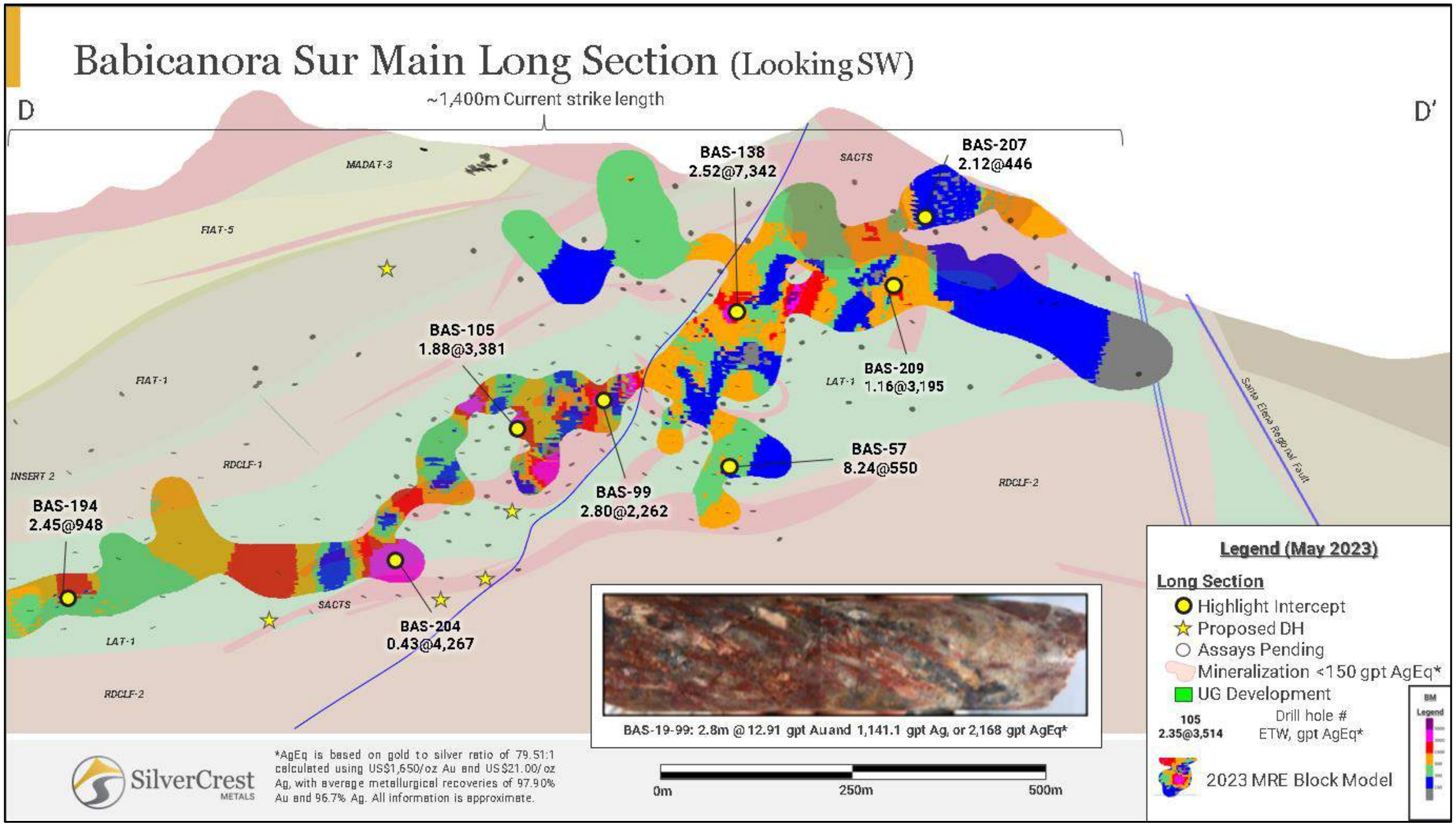
Figure 7-26: Drill Hole BAS22-209, from 159.00 to 160.45 m at 1.0 m (True Thickness) Grading 38.12 gpt Au and 165.0 gpt Ag

Source: SilverCrest, 2022.

In Q1 2023, the extents of the Babicanora Sur Vein were expanded while completing step-out drilling of Inferred Mineral Resources down-plunge of the high-grade mineralization (Figure 7-27).

The Babicanora Sur HW, FW, and splay veins are sub-parallel and 10 m to 40 m from the vein and are generally narrower than Babicanora Norte.

Figure 7-27: Long Section of the Babicanora Sur Vein



Source: SilverCrest, 2023.

7.2.6.4 Babi Vista (Main) Vein, HW & FW Veins

The Babi Vista Vein has a semi-continuous mineralization strike length of approximately 1.9 km with an average estimated thickness of 0.65 m. This includes the Granaditas Veins, which has been identified as the faulted continuation of the Babi Vista Main Vein. The structure is exposed on surface and extends to a depth of 450 m.

The Babi Vista Vein is located approximately 100 m northeast of the Babicanora Main Vein on a parallel trend. The vein strikes 140° to 150° and dips approximately 55° to 80° to the southwest. It is cross-cut by several 220° trending faults and dense fracture sets. Mineralization at Babi Vista is hosted in the LAT1 and RDCLF2 units with moderate to strong overprinting alteration. Argentite and acanthite are the principal silver minerals. Pyrargyrite, proustite and polybasite are also present and gold occurs in electrum and as native gold flakes in association with pyrite and chalcopyrite

In Q4 2022, the Babi Vista Vein was expanded to the northwest while completing step-out drilling down-plunge of the high-grade mineralization (Figure 7-28).

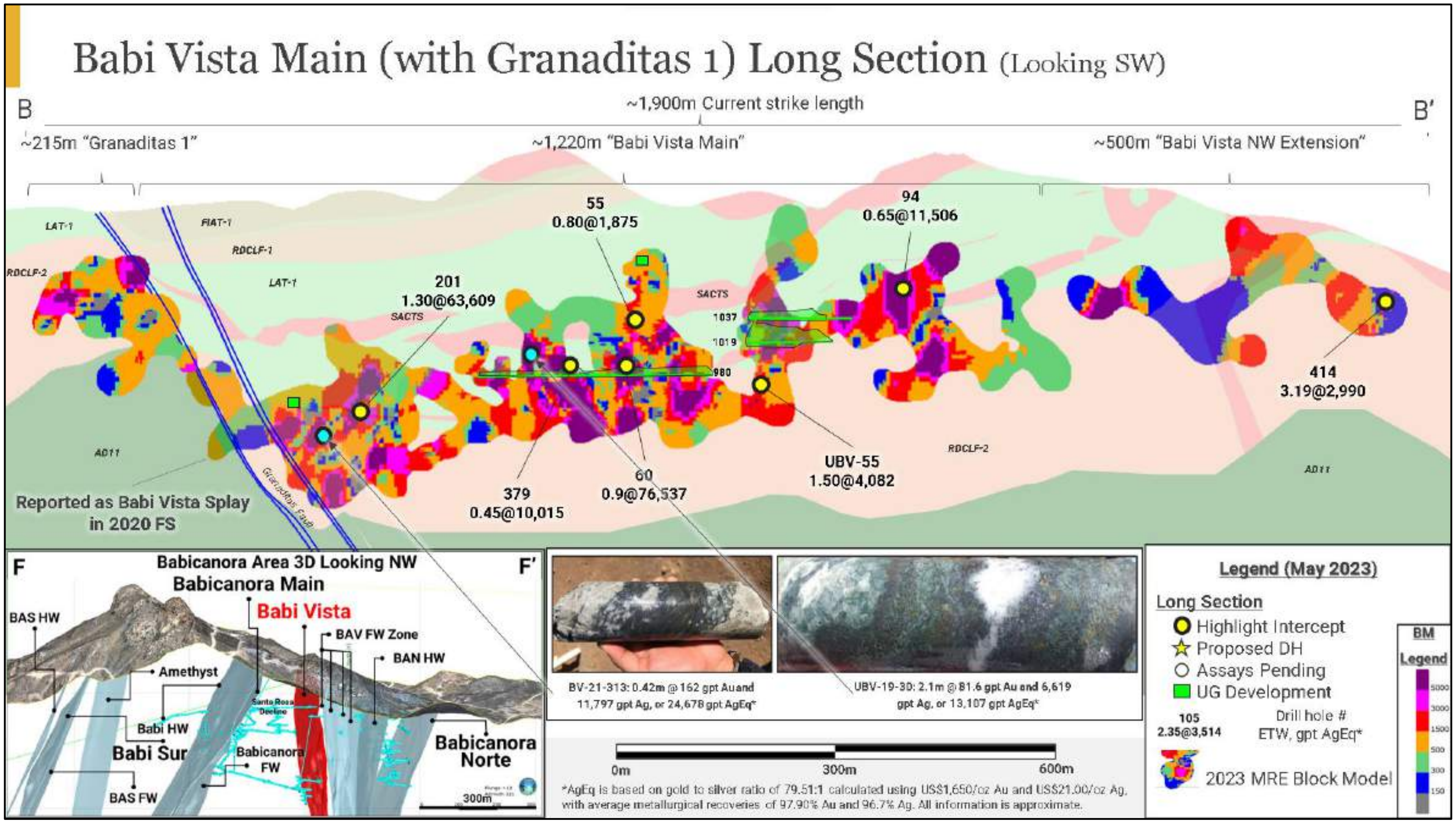
This vein is similar to the Babicanora Norte veins but lacks a significant associated fault zone. The Babi Vista HW, FW, and splay veins are sub-parallel and 10 m to 40 m from the Babi Vista Main Vein.

The southeast faulted continuation of the Babi Vista Vein was historically known as the Granaditas Vein. The Spaniards discovered the Granaditas Mine in 1845 (Dahlgren 1883) and subsequently mined it. Little information is available on this historic mine. After a local rancher provided an 1882 district map, SilverCrest was able to locate several adits, shafts, and dumps in the area. However, the shafts have not been entered due to unstable conditions.

Alteration at the Granaditas vein is consistent with the intermediate sulphidation model, with strong patchy silicification and strong clay alteration with zones of pervasive sericite and chlorite. Several drill holes have intersected fractured zones and encountered mafic andesite dykes at depth.

Elevated base metals values in the Granaditas drilling suggests that base metals increase to the southeast and may indicate deeper depths of emplacement of the mineralization.

Figure 7-28: Long Section of the Babi Vista Vein



Source: SilverCrest, 2023.

7.2.6.5 Los Parientes

The Los Parientes Vein is located near the southwest extent of the El Muerto Zone and follows a subparallel trend. It is a southeast-directed quartz breccia structure striking approximately 150° azimuth and near-vertical dipping. The vein has been mapped on surface for 250 m with thickness of approximately 0.30 m and has been sampled from surface chips with grades up to 27.7 gpt Au and 42 gpt Ag. This vein has been drilled to a spacing of approximately 50 m centres and is considered as Inferred Mineral Resources.

7.2.6.6 La Victoria

La Victoria area is defined by small workings near surface in the south-southwest portion of the Las Chispas Operation. The workings consist of 3 short and vertically off-set tunnels (La Victoria mines), approximately 30 m to 60 m in length. These old workings are in the Santa Elena Regional Fault Zone along with the Nueva Victoria historic working, which is 60 m in length and has 2 vertical shafts. The vein trends 140° and dips approximately 80° to the northeast. SilverCrest's sampling in the underground workings and on surface suggests that this mineralization in this structure is gold-dominated.

In June 2016, SilverCrest drilled three drill holes down-dip of the workings. Significant mineralization was not intersected, which suggests a possible offset in the mineral continuity at depth or epithermal zonation. Significant alteration was encountered in the drill holes, along with evidence of multiple stages of intrusive activity. The nature of the mineralization and alteration at La Victoria is currently understood as late-stage gold remobilisation hosted in fractures and fault zones that are closely related to the contacts of the youngest rhyolite dykes.

Additional drilling in La Victoria conducted in Q2 2019 and Q4 2022 extended the strike length of the mineralized structure to 530 m and it is currently part of the Inferred Mineral Resources.

7.2.6.7 Encinitas

Las Encinitas is a quartz vein located to the southwest of Babicanora Sur Main Vein Area. The structure has been identified by drilling and mapping to a strike length of approximately 400 m. The strike direction of Encinitas is approximately 140° azimuth with a 75° dip to the southwest. Mineralization in the area is gold dominant with an average Ag:Au ratio of 8:1.

In H2 2021, a drill program was conducted in the area, targeting approximately 400 m of mineralized strike length at 60 to 70 m drill centres. This portion of the vein is included in the Inferred Mineral Resources.

7.2.6.8 Las Chispas Vein

The Las Chispas Vein has a continuous mineralization strike length of approximately 1.5 km with an average estimated thickness of 3 m. Mineralization is exposed on surface to a depth of 400 m.

The Las Chispas Vein is located in the Las Chispas Area, in the northern portion of the Las Chispas Operation. It is the most extensively historically mined vein in the district.

SilverCrest's exploration work focused on defining the lithology, structure, alteration, mineralization, and channel sampling in unmined pillars and surrounding intact vein. Vein mineralization is described as an indulating and dilating quartz stockwork and breccia zone (as defined in underground mapping and in drill core) of 0.10 m to 7.9 m in true thickness, which typically encompasses narrow veins of quartz, visible sulphides, and calcite (Figure 7-29).

Figure 7-29: Drill Hole LC17-45; from 159.6 to 161.9 m at 2.3 m (1.9 m True Thickness) Grading 50.56 gpt Au and 5,019 gpt Ag with Coarse Argentite and Electrum

Source: SilverCrest, 2017.

The Las Chispas Vein strikes 150° and dips at approximately 75° to the southwest. Cross cutting the Las Chispas Vein are normal secondary faults trending 220° and dipping 65°. These secondary faults seem to have had an important role in generating zones of dilatation for emplacement of the high-grade shoots and breccia zones. Flat to steeply inclined, bedding-parallel faults are also present and offset the late-stage andesitic dykes by 10 m to 20 m and are associated with drag folds (Schlische 1995). A majority of the high-grade mineralization is within the lithic tuff units. Geological mapping in the Las Chispas Area and a typical cross section are shown are shown in Figure 7-30 and Figure 7-31, respectively.

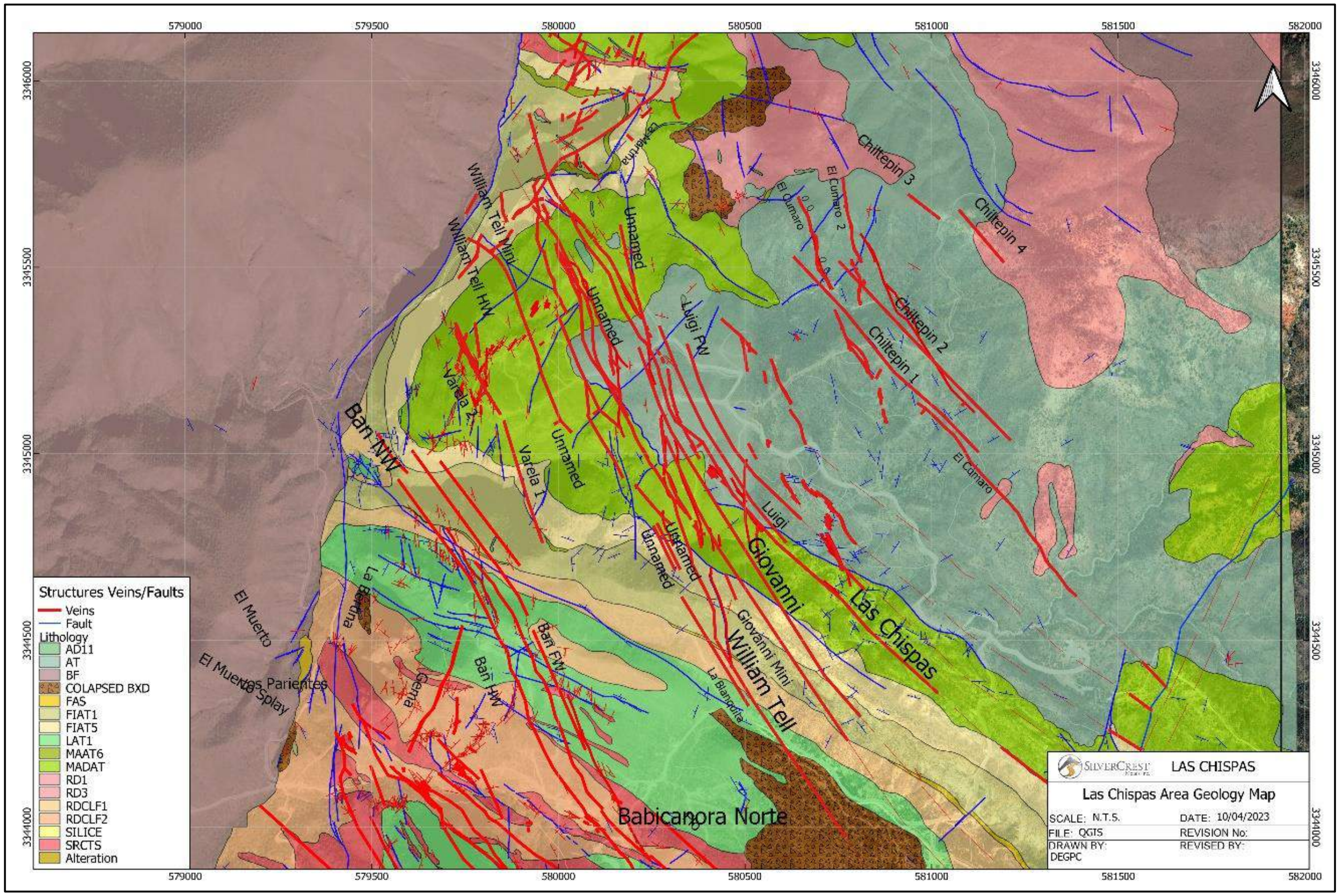
Alteration is similar to the other veins in the Las Chispas Operation. Silicification is extensive in mineralization zones. Multiple generations of quartz and chalcedony are commonly accompanied by calcite with minor adularia. Pervasive silicification in vein envelopes is flanked by sericite and clay alteration of the host rock. Intermediate argillic alteration (likely kaolinite–illite–smectite) forms adjacent to some veins. Advanced argillic alteration (kaolinite–alunite) is suspected within the Las Chispas Vein and confirmation studies of the alteration mineralogy have not been completed.

Propylitic alteration dominates at depth and peripherally to the mineralization, with abundant fine-grained chlorite and pyrite proximal to the mineralization. Iron-oxyhydroxides, manganese after pyrite, and other fine-grained sulphides are closely associated with the mineralization. Reactivation of the central fault hosting the mineralization provided a conduit from surface for deep weathering of the sulphides and possible supergene enrichment of the silver mineralization. The andesite dykes are weakly to moderately clay-altered with minor epidote along their narrow chill margins.

Mapping by SilverCrest confirms that the location and extent of mining represented on historic sections is accurate. From 2017 to 2019, underground rehabilitation, mapping and extensive sampling (over 8,000 samples) were completed from the 50 level to the 900 level (850 masl), covering most of the historic workings. Mapping and sampling on all levels is near completion.

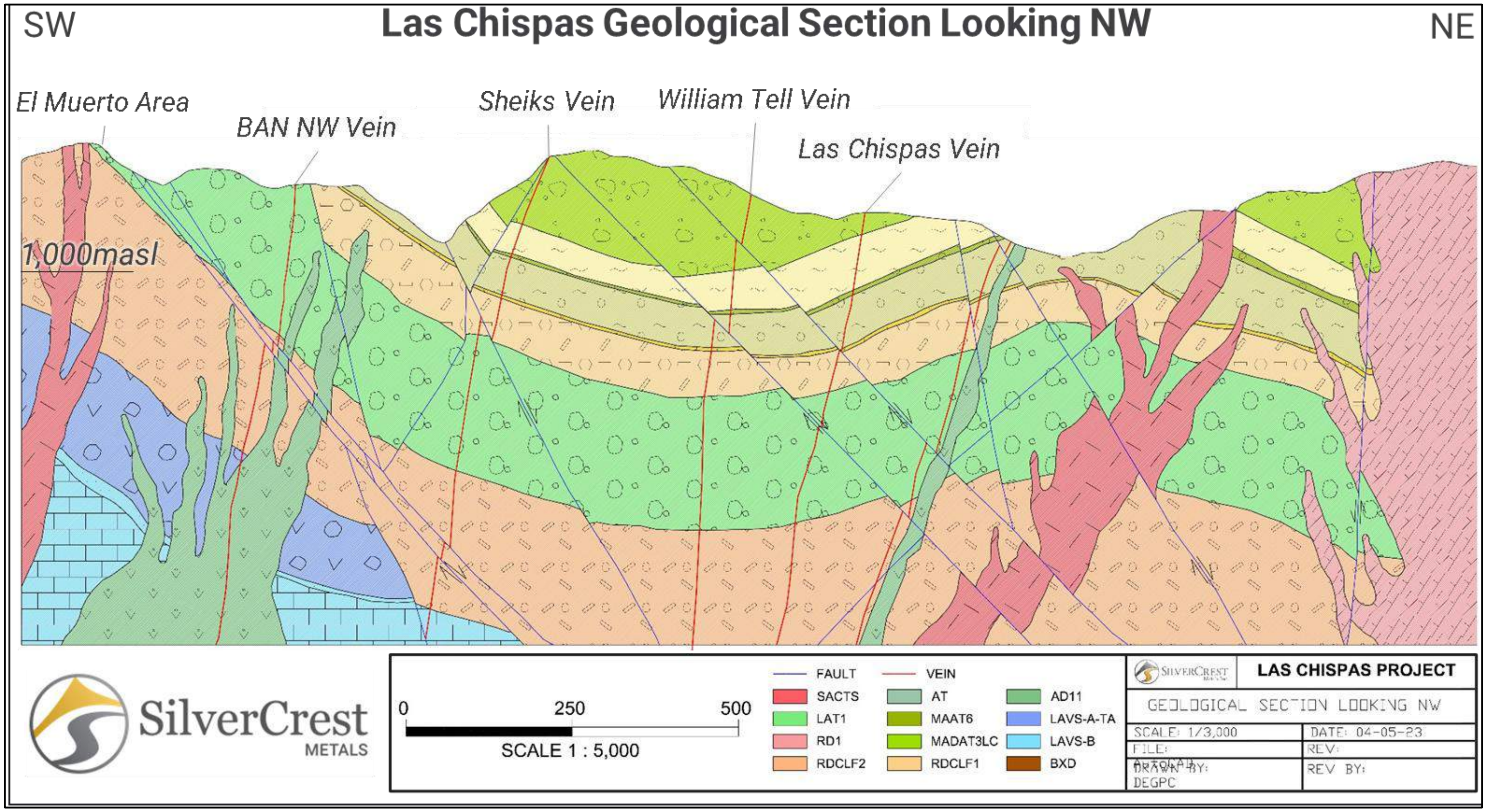
In November 2019, the Las Chispas Vein, Area 118 zone was discovered while completing step-out drilling down-plunge of the high-grade mineralization (Figure 7-32), based on the intersection in drill hole LC-19-118 of 44.30 gpt Au and 4,551 gpt Ag over an estimated true thickness of 8.6 m. This area occurs just below the current groundwater elevation and experienced little to no historic mining.

Figure 7-30: Plan View of Geological Mapping at the Las Chispas Area



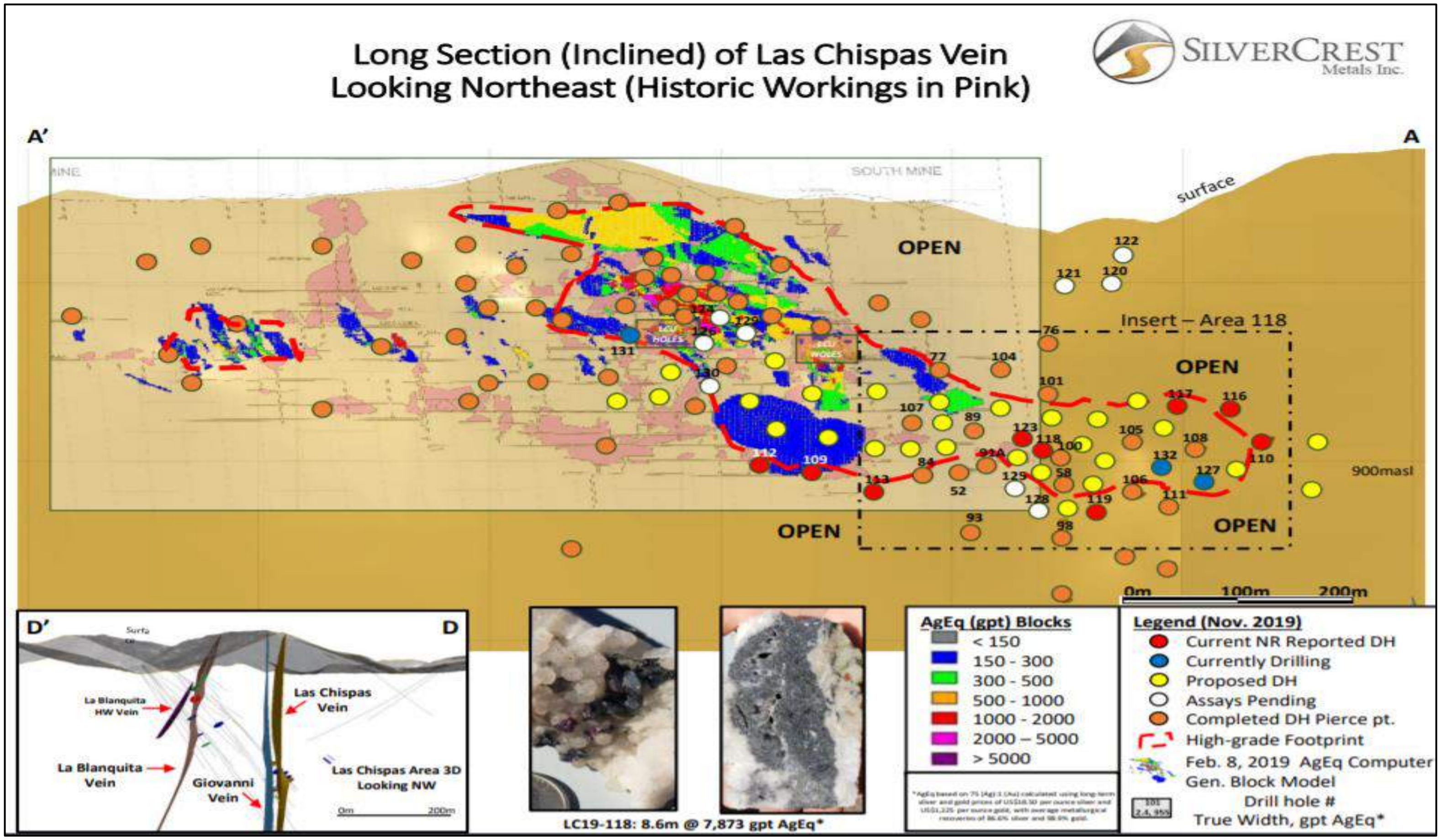
Source: SilverCrest, 2023. Refer to Figure 7-4 for Legend.

Figure 7-31: Typical Geological Cross Section through the Las Chispas Property (looking northwest)



Source: SilverCrest, 2023.

Figure 7-32: Long Section of Las Chispas Vein with Area 118 Zone



Source: SilverCrest, 2019.

7.2.6.9 William Tell Vein

The William Tell Vein is located 115 m to the west of, and oriented sub-parallel to, the Las Chispas Vein.

The William Tell vein mineralization is characterized as a quartz stockwork zone in the footwall of a continuous northeast–southwest fault striking 140° and dipping 65°. Underground mapping by SilverCrest indicates that mining of the main San Gotardo adit terminated against a cross-cutting fault (220°/70°) that SilverCrest interprets, based on drilling results, to have approximately 10 m of left lateral displacement.

The William Tell Vein is hosted in the same sequence of course- to fine-grained volcaniclastic, flows and pyroclastic units that are described for the Las Chispas Vein. Alteration consists of white clays, sericite and fine-grained chlorite with strong silicification. Within the mineralization structure and central vein, fine-grained pyrite, limonite, and iron oxides are present.

Historic mining of the vein is contemporaneous with mining of the Las Chispas Vein, although there is limited historic documentation available. The northern portion of the historic workings can be accessed from the same adit that connects to the San Gotardo level of the Las Chispas Vein. The extents of mapped workings total approximately 3 km horizontally over three levels and approximately 60 m vertically, from 450 level to 650 level. A shaft or a small stope extends from the lower working level. The vertical extent of this shaft/stope cannot be confirmed but based on historic documentation and drilling in the area, it is not considered to be significant.

Mining activity along this structure south of the projected fault cannot be confirmed. However, no open stopes were intersected by SilverCrest drilling where the structure was interpreted to be Surface workings are not apparent.

In 2016, underground channel sampling completed by SilverCrest confirmed high-grade mineralization defined in pillars and intact exposures (Figure 7-33 and Figure 7-34).

Figure 7-33: William Tell Underground Channel Sample No. 144840 Grading 13.4 gpt Au and 1,560 gpt Ag

Source: SilverCrest, 2016.

Figure 7-34: William Tell Vein, Drill Hole LC16-03, from 172 to 176 m, 4 m (1.5 m True Thickness) Grading 2.03 gpt Au and 683 gpt Ag

Source: SilverCrest, 2016.

7.2.6.10 Other Structures or Mineral Occurrences of Significance

Amethyst Vein

The Amethyst (Amatista) Vein is located 200 m southeast of, and parallel to, the Babicanora Main Vein. Historic information is limited, but there are many historic workings pits and trenches along the 1 km strike length of the structure on surface, which is a lineament.

The structure is steeply dipping and strikes 140°. It is cross-cut by several 200° to 220° trending faults and dense fracture sets that intersect the vein and hosts high-grade mineralization near the intersections. The mineralization is hosted in a sequence of 10° to 15° striking, northeast-dipping lithic tuffs of the LAT1 unit.

Espíritu Santo Vein

The Espíritu Santo workings are developed to the southeast of the Las Chispas and William Tell Veins. Two historic adits and a shaft are accessible and have been mapped and sampled.

Two structural trends appear to have been mined in the workings. The first, on an upper level, strikes 150° and dips 60°. The second structural trend, on the lower level, strikes 290° and dips 48°. The latter mineralization is a stockwork within the footwall that parallels the volcanic bedding contact. At surface, the exposed andesite volcanics are strongly silicified with moderate to strong clay alteration focused along the structural trends. Historic selective underground sampling shows grades at Espíritu Santo to be as high as 500 opt silver (Mulchay 1941). Historic dump samples returned seven assays with >111 gpt Au and 100 gpt to 892 gpt Ag (Mulchay 1941). Three drill holes were completed at the target, but with negligible results.

In Q4 2022, seven drill holes were completed in the Espíritu Santo and El Carman veins, to test the extension of the structure near old workings. All drill holes intercepted vein structure, but without significant gold or silver mineralization.

La Varela Veins

The La Varela workings are located approximately 300 m to the west of the William Tell Vein. Two veins strike 170° and are near vertical with an average thickness of 1 m. Higher grade precious metal mineralization is dominant in the southern part of the two veins. SilverCrest has rehabilitated the existing underground workings (an estimated 400 m) with mapping and sampling. Three drill holes have been completed in this area. Drill hole LC17-55 intersected 0.8 m grading 2.67 gpt Au and 272 gpt Ag.

Between Q4 2022 and Q1 2023, three drill holes were completed to test the deep extension of the Varela and Los Sheiks veins. Quartz veining was intersected near the targets, but no significant gold or silver mineralization was found.

La Bertina

The La Bertina Vein is located to the northwest of the Babicanora Area and is juxtaposed along the regional normal fault lineament. It is a northeast-directed quartz breccia structure with strike between 15° to 20° and dip of 80° to 85°. The vein has been mapped on surface for approximately 300 m with thickness ranging from 0.10 m to 0.15 m and has been sampled from surface chips with grades of up to 0.42 gpt Au and 10 gpt Ag.

During Q3 2022, a drill hole targeting the Gema Vein was extended to intersect La Bertina at depth. The vein was intersected and the best assay result was 9.94 gpt Au and 204 gpt Ag over 1.32 m.

El Cumaro

The El Cumaro Vein is located to the northeast of the Las Chispas Area and is a northwest- directed quartz vein structure with strike between 330° to 340° azimuth and with dip of 80°. The vein has been mapped on surface for approximately 600 m with thickness ranging between 0.30 m to 0.50 m and assayed samples have grades up to 3.43 gpt Au and 329 gpt Ag from surface.

Los Chiltepines

The Los Chiltepines Veins are located to the northeast of the Las Chispas Area and are a southeast directed set of sub-parallel quartz vein structures with strike of approximately 155° azimuth and with dip of approximately 85°. The vein has been mapped on surface for approximately 500 m with thickness of approximately 0.30 m to 0.50 m and assayed surface chip samples have grades up to 0.91 gpt Au and 270 gpt Ag.

Ranch Veins

The Ranch Veins are located to east of the Las Chispas area. The Ranch Vein is a quartz vein and quartz breccia structure with estimate southwest directed strike and with thickness of approximately 0.40 m to 0.50 m. Ranch Dos Vein is located immediately east of, and is parallel to, Ranch One Vein and is a quartz breccia structure up to 3.0 m thick. The veins have not been mapped on surface. The veins were discovered in 2018 as part of the infrastructure condemnation program, which led to completion of 16 holes totalling 4,660.8 m by early 2019. Assay results were low-grade with several wide intersections of calcite veins and veinlets. The best assay result was for a sample from drill hole RA-18-05 that graded 1.5 gpt Au and 252 gpt Ag over 0.51 m.

In Q4 2022 a drill program testing the northern extension of the Ranch Veins intersected quartz veining with silver and gold mineralization trending in a cross-cutting direction to the previously known structures. The best assay from this structure was sampled from drill hole RA-22-20, which graded 3.14 gpt Au and 255 gpt Ag over 0.52 m.

Flo Vein

The Flo Vein is located east of Babicanora Norte and is a southeast-directed quartz vein structure with strike of approximately 220° to 230° and dip of approximately 65°. The vein has been mapped on surface for approximately 320 m, is approximately 1.5 m thick, and has been sampled from surface. However, no assays returned values above detection limit.

La Martina

The La Martina Vein is a southwest-directed quartz breccia structure containing massive white quartz located northwest of the Las Chispas Area and is juxtaposed approximately along the regional normal fault. It strikes between 220° to 230° and dips 65° toward the east. The vein has been mapped on surface for approximately 320 m and is up to up to 1.0 m thick.

Gema Vein

The Gema Vein is a southwest trending quartz vein structure containing massive white quartz located northeast of El Muerto. The vein strikes between 200° to 220° azimuth and dips near-vertically. It has been mapped to a length of approximately 230 m and the structure is intersected by multiple north-south secondary veins.

During Q3 2022, 4 drill holes were completed to intersect the main structure Veins were intersected with gold and silver mineralization grading up to 0.83 gpt Au, and 126 gpt Ag over 0.75 m in drill hole GE-22-03.

Limestone and Skarn Target

The limestone and skarn target was developed from drill hole BD-21-01. This drill hole intersected limestone and skarn at an approximate depth of 700 m below surface, and a l 350 m from the nearest mineralized zone, which is the Babi Vista Main Vein.

Drill hole BD-21-01 targeted the projected depth of the limestone and intersected the unit with clear evidence of skarn development in multiple intercepts at depth. This type of alteration suggests the possibility of favourable conditions for a deep mineralization event within the unit, in the southeast portion of the Property, where it is interpreted that the carbonaceous horizons will be at shallower depths in the footwall block of the Granaditas Fault.

8 DEPOSIT TYPES

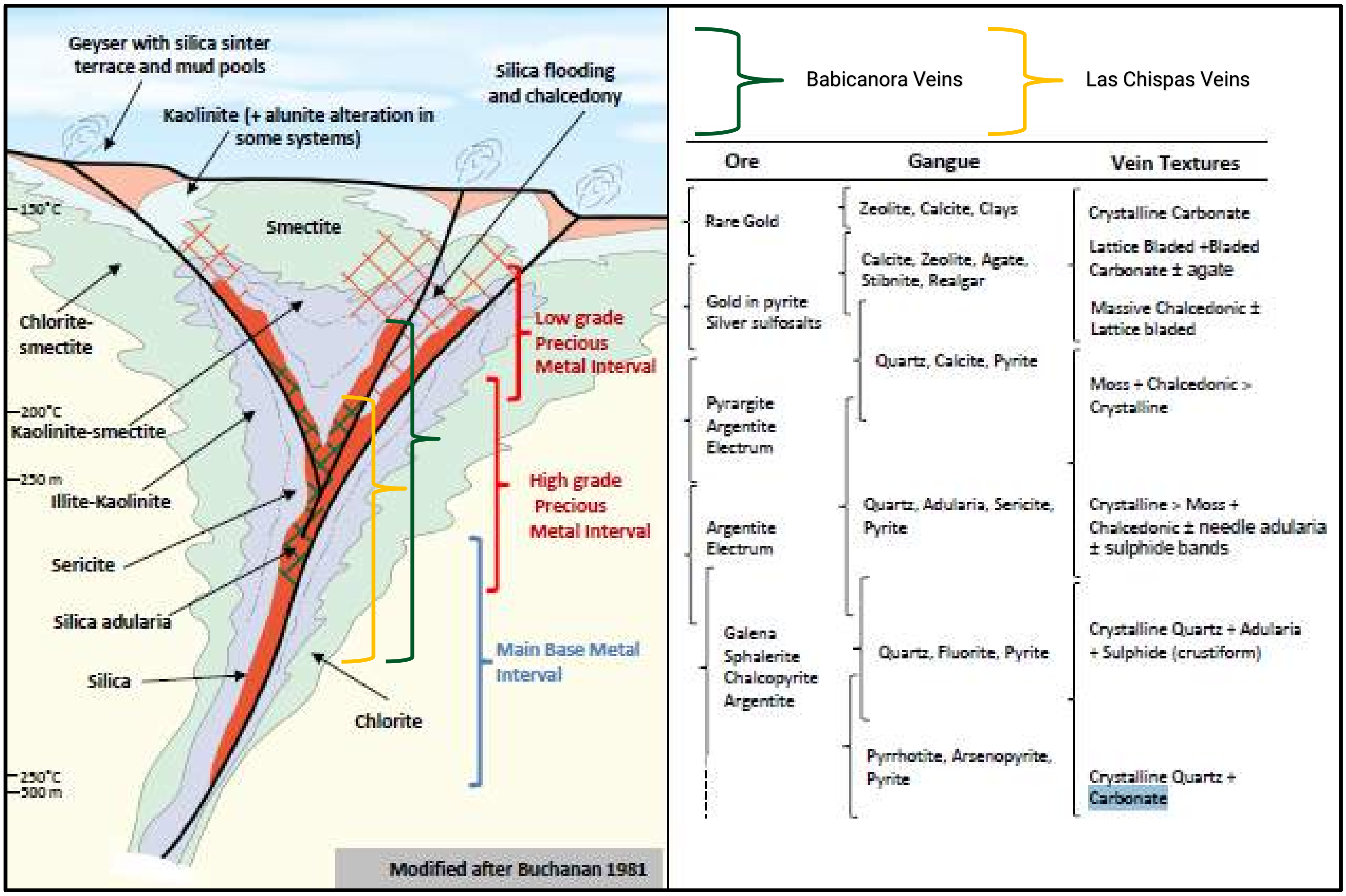
Mineral deposits in the Las Chispas district are classified as gold and silver, low to intermediate sulphidation epithermal systems, typical of many deposits in northeastern Sonora, including the nearby Santa Elena Mine (operated by First Majestic Silver Corp.) and the Mercedes Mine (Premier Gold Mines Ltd.). Elsewhere in the Sierra Madre, additional examples include the Dolores Mine (Pan American Silver Corp.) and Piños Altos Mine (Agnico Eagle Mines Ltd.) in the State of Chihuahua.

8.1 Low Sulphidation Epithermal

The terms low and intermediate sulphidation are based on the sulphidation state of the sulphide assemblages. Low sulphidation epithermal deposits are formed at shallow depths in hydrothermal systems related to volcanic activity (Figure 8-1). Low sulphidation deposits typically display all or most of the following characteristics (e.g., Sillitoe 1991; White and Hedenquist 1990):

- Hosted in volcanic rocks ranging from andesite to rhyolite in composition
- Hydrothermal fluids are characterized to be lower temperatures, have circum-neutral pH and are reduced
- Alteration consists of quartz, sericite, illite, kaolin, adularia and silica. Barite and fluorite may also be present
- Mineralization hosted in quartz and quartz-carbonate veins, veinlets and silicified zones
- Silica types range from opal through chalcedony to massive quartz. Textures include crustiform and colloform banding, drusy, massive and saccharoidal varieties. Calcite may form coarse blades and is frequently replaced by quartz.
- Deposits of this type may be overlain by barren zones of opaline silica
- Overall, sulphides typically comprise <5% by volume
- Sulphides may selectively average up to several per cent in abundance and consist of very fine-grained pyrite, with smaller amounts of sphalerite, galena, tetrahedrite and chalcopyrite.
- Gold may be present as discreet, very fine grains or may be silica or sulphide refractory
- Gold and silver grades are typically low, but may form extremely high-grade mineralized shoots
- Common associated elements are mercury, arsenic, antimony, tellurium, selenium, and molybdenum.

Figure 8-1: Detailed Low Sulphidation Deposit with Ore, Gangue and Vein Textures with Estimated Location of Las Chispas Epithermal Mineralization



Source: Buchanan, 1981.

Low sulphidation gold-silver epithermal systems commonly precipitate gold from hydrothermal fluids in near-surface hot spring environments. The mechanism most commonly evoked for gold precipitation is boiling. Boiling occurs as pressure decreases on ascending fluids. The physical and chemical changes that accompany boiling cause breakdown of the gold-bearing chemical complexes and precipitation of the gold. Because pressure from the overlying fluid column or rock column controls the level at which boiling occurs, the location of the boiling zone commonly occurs within a particular vertical depth range. However, this depth can change significantly with changes in the water table, sealing of the system, burial of the system through deposition of volcanic rocks, and emergence due to tectonic uplift. The boiling zone is typically within 500 m and rarely >1 km below surface at the time of mineralization.

8.2 Intermediate Sulphidation Epithermal

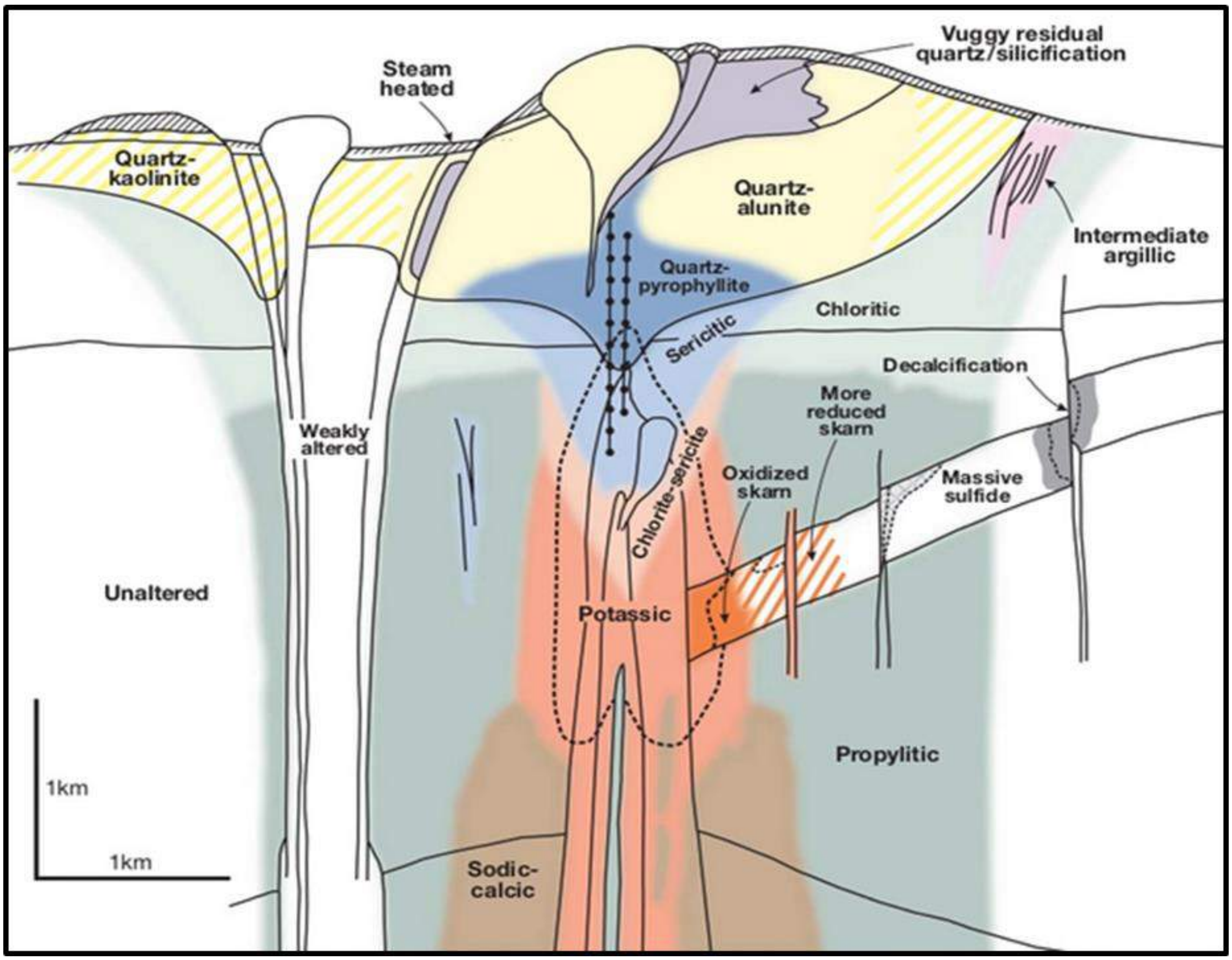
Intermediate sulphidation epithermal systems are less common but share some characteristics of the low and high sulphidation types. Like the high sulphidation types, intermediate types also occur mainly in volcanic sequences of andesite to dacite composition within volcanic arcs.

Like the low sulphidation type, intermediate type mineralization normally occurs in veins, stockworks and breccias. The veins can be rich in quartz, with manganiferous carbonates like manganese-rich calcite or rhodochrosite plus adularia, which typically hosts the gold mineralization. Gold occurs as native metal, tellurides and in a variety of gold-rich base metal sulphides and sulfosalts. Low-iron sphalerite, tetrahedrite-tennantite and galena commonly are the dominant sulphide minerals. The overall sulphide content of the deposits is in the range of 5% to 20% by volume.

Alteration associated with intermediate type deposits consists of a mixture of high and low sulphidation assemblages that may overprint each other, depending on the evolution of the fluids. Silica (vuggy), advance argillic (alunite, pyrophyllite, diaspore, dickite, and sericite), argillic (kaolinite), anhydrite, barite, sericite, illite, and adularia may be present or absent within the system (Figure 8-2).

Permeable rocks that host intermediate type deposits may allow the mineral fluids to form a large tonnage of low-grade, bulk-minable stockwork mineralization (Ralf 2017).

Figure 8-2: Illustration of Intermediate Sulphidation Hydrothermal Systems



Source: Sillitoe, 2010.

9 EXPLORATION

Prior to SilverCrest acquiring the Las Chispas Operation in 2015, no drilling had been completed on the northwest to southeast-oriented Las Chispas and Babicanora mineralization corridors. This trend is approximately 3.5 km long and 3.5 km wide.

SilverCrest exploration began work on the Las Chispas Operation in March 2016, with the primary focus on the Las Chispas, William Tell, and Babicanora Veins. From March to October 2016, the Phase I exploration program consisted of initial drilling, surface and underground mapping and sampling, and rehabilitating approximately 6 km of underground workings. Core drilling of 22 holes during Phase I is described in Section 10 of this Report.

From October 2016 to February 2018, the Phase II exploration program consisted of drilling, additional surface and underground mapping and sampling, further rehabilitation of 4 km of underground workings, plus auger and trenching of 42 surface historic mineralization dumps. Drilling of 161 additional holes during Phase II is described in Section 10.

From February 2018 to February 2019, the Phase III exploration program consisted of drilling, additional surface and underground mapping and sampling, and completing approximately 11 km of underground rehabilitation, the majority of which is located on the Las Chispas Vein in the historic mine. Core drilling of 256 additional holes during Phase III is described in Section 10.

The continuation of Phase III exploration program (Phase III Extended) from February 2019 to October 2020, consisted of infill drilling to potentially support conversion of Inferred to Indicated Mineral Resources. This phase also includes in-vein development mine face-mapping and chip-channel sampling on the Babicanora Vein in the Area 51 Zone. The following exploration data and information was collected during this period.

- Additional core drilling of 1,137 holes; approximately 70% infill and 30% expansion. The cut-off date for drill hole assays was October 16, 2020. Infill drilling provides support for conversion of Inferred to Indicated Mineral Resources;
- Babicanora Vein underground in-vein development for approximately 800 m and 2,671 m of continuous sampling, and 646 chip-channel samples collected for geochemical analysis. Results of this work were used in the Mineral Resource modelling described in Section 14 of this Technical Report, reconciliation for model verses mining, and tracking tonnes and grade for stockpiling.
- Las Chispas Vein underground historic in-vein pillars and historic development for approximately 10 km, with 6,739 chip-channel samples collected for geochemical analysis. Results of this work were used in the Mineral Resource modelling; and
- Survey and mapping of historic workings, Santa Rosa underground decline, and Babicanora (Area 51 Zone) in-vein and waste development.

From October 2020 to June 2022, the Phase IV exploration program consisted mainly of expansion drilling of known veins, and infill drilling from surface and underground to convert Inferred to Indicated Mineral Resources. Part of the drilling was also dedicated to test several geological theories with the intention of using that knowledge for the selection of the Mineral Resource modelling parameters; this campaign was called the “Resource and Reserves program”. The Phase IV of exploration drilling totalled 1,041 (surface and underground) for 198,927 m. A total of 61,114 core samples were assayed during this phase.

From June 2022 to March 2023, the Phase V exploration program consisted of expansion drilling of known veins for defining Inferred Mineral Resources. Part of the drilling was also dedicated to completing the Resource and Reserves program to test potential Mineral Resource modelling parameters. Finally, part of the program targeted early-stage exploration targets outside of current Mineral Resources. This program amounted to 223 drill holes for 64,755 m. A total of 40,262 core samples were assayed during this phase. From these, 51 drill holes, 7,176 m were part of the Mineral Resources and Reserves program, 134 drill holes for 43,219 m were allocated to expansion drilling of known veins, and 38 drill holes, for 14,361 m, were for new exploration targets.

From the start of drilling in March of 2016 at Las Chispas to March 21, 2023, 2,890 core holes for 690,123 m were completed with 247,033 drill samples collected and analyzed, as described in Section 10 of this Report.

9.1 Underground Exploration at Las Chispas Historic Mine

Initial access to the underground historic workings, the majority located in the Las Chispas (Historic Vein) Mine, commenced with an underground rehabilitation program in February 2016. Rehabilitation included removal of backfill, construction of a network of bridges and ladders across open stopes, installation of safety cables, removal of obstructions and unsafe overhead supports, construction of new overhead supports, rough rock scaling, and development of a control survey (Figure 9-1). This work was ongoing until September 2019, when the company entered a phase of maintenance for all rehabilitation done on the historic underground Las Chispas Mine.

As of the effective date of this Report, SilverCrest estimates that approximately 11.0 km of underground workings have been rehabilitated.

As part of the rehabilitation program, an underground mapping and sampling program began in February 2016. Collection of a series of select chip samples was followed by a systematic and continuous saw cut channel sampling program along the rehabilitated underground workings (see the lower left image Figure 9-1). Samples were collected as transverse samples perpendicular to mineralization and as longitudinal samples taken along footwall or hangingwall contacts through stopes. A total of 6,739 chip and channel samples have been collected and used for the Mineral Resource modelling, as of the Effective Date of this Report. From these samples, 1,094 assay results graded above a cut-off of 150 gpt AgEq (using an Au:Ag ratio of 1:75), with averages of 4.05 gpt Au and 504 gpt Ag.

Figure 9-1: Photos of Las Chispas Underground Rehabilitation Activities

Source: Barr et al., 2019.

A total of 94 samples have been collected from historic underground backfill muck at Las Chispas, grading an average 2.1 gpt Au and 256 gpt Ag. These samples and volumes are excluded from the current Mineral Resource Estimate.

Table 9-1 shows summary statistics of underground chip and channel sampling for the Las Chispas workings, Table 9-2 and Figure 9-2 shows other historic underground workings in the Las Chispas Area. Table 9-3 shows sample results from the Babicanora Area workings.

Table 9-1: Las Chispas Vein – Significant Channel Sampling Results Before February 2019

Las Chispas	Mean Au	Mean Ag	Mean AgEq(1)
200L	0.050	7	11.1
300L	1.008	141	216.6
350L	2.329	333	507.9
400L	1.688	266	392.8
450L	3.237	440	682.6
500L	2.549	337	527.8
550L	1.784	256	389.9
600L	0.410	57.6	88.3
700L	0.121	15.5	24.5
743L	0.615	118	164.3
Average	0.903	131	199.17
Number of Samples	3,923	3,923	3,923
Maximum Value	136	10,000	20,200
Minimum Value	0.002	0.2	0.575
Standard Deviation	3.713	444	704.0
Number of Samples >150 AgEq	-	-	805.0

Note: (1) AgEq is based on a silver to gold ratio of 75:1, calculated using long-term prices of $1,225/oz gold and of $17.0/oz silver, with average metallurgical recoveries of 95% gold and 90% silver.

Table 9-2: Las Chispas Area, Other Vein Targets – Significant Channel Sampling Results Before February 2019

Las Chispas	Mean Au	Mean Ag	Mean AgEq*
El Erick	1.85	118	256.4
El Sheik	1.16	75.8	162.8
Espíritu Santo	0.02	11.2	12.4
Lupena	0.45	39.4	73.0
Varela	0.22	26.5	43.1
WT500L	1.05	62.8	141.4
WT600L	1.29	146	242.4
Average	0.91	73.9	142.0
Number of Samples	1,292	1,292	1,292
Maximum Value	52.2	3,220	5,455
Minimum Value	0.01	0.2	0.0
Standard Deviation	3.44	221	431.1
Number of Samples >150 AgEq	-	-	237

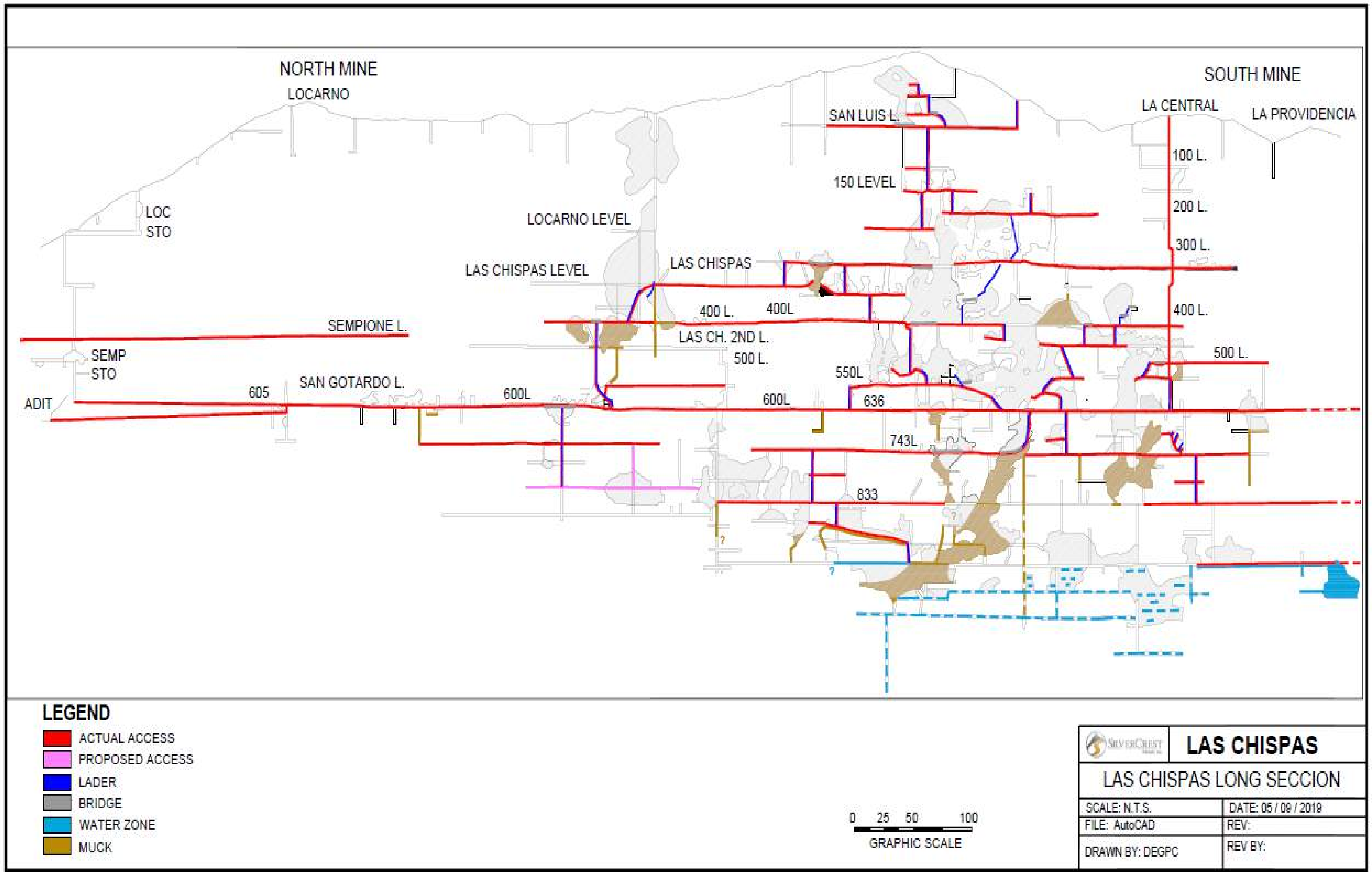
Note: (1) AgEq is based on a silver to gold ratio of 75:1, calculated using long-term gold and silver prices of $1,225/oz gold and $17.0/oz silver, with average metallurgical recoveries of 95% gold and 90% silver.

Table 9-3: Historic Babicanora Main Vein, Other Vein Targets – Significant Channel Sampling Results Before February 2019

Las Chispas	Mean Au	Mean Ag	Mean AgEq(1)
Babicanora	0.41	26.1	56.6
Babicanora de Abajo	0.07	7.7	12.6
Bertina	0.08	4.6	10.9
Buena Vista	0.03	7.1	9.1
El Muerto	0.62	33.4	80.1
Jabali	0.15	10.3	21.9
Sementales	0.49	18.7	55.0
Average	0.31	16	39
Number of Samples	756	756	756
Maximum Value	20.80	821	2,381
Minimum Value	0.01	0.2	1.0
Standard Deviation	1.22	51.9	135.8
Number of Samples >150 AgEq	-	-	52

Note: (1) AgEq is based on a silver to gold ratio of 75:1, calculated using long-term prices of $1,225/oz gold and $17.0/oz silver, with average metallurgical recoveries of 95% gold and 90% silver.

Figure 9-2: Las Chispas Historic Longitudinal Section Showing the Mine Workings (looking northeast)



Source: SilverCrest, 2023. Based on schematic from Pedrazzini circa 1921.

9.1.1 Underground Surveying for the Historic Las Chispas Mine

A network of control points was first established by a SilverCrest surveying crew when access to workings were rehabilitated and secured. Control points were established at approximately 15 m intervals using portable drills, survey chains, distance lasers, and a handheld Brunton compass. The control network was then re-surveyed by third-party contractor, Precision GPS, with a professional surveying crew using a Trimble VX Total Station on level 600 to level 150. The centre line of each drift was collected, a dataset of 178 points. The purpose of this survey was to adjust the tape and Brunton compass survey completed previously by SilverCrest staff. This underground control network is the base reference for all underground sampling and drilling activities.

9.2 Surface Exploration

Surface exploration focused on geological mapping and delineation of the numerous historic shafts and portals present in the Las Chispas Operation. As of the effective date of this Report, approximately of 14.5 km² has been mapped by SilverCrest geologists. Several historical waste piles were identified near the historical portals. These dumps are referred to as historical stockpiles, following completion of the work described below.

Surface historic stockpile augering, trenching, and sampling were completed. As of the effective date of this Report, assay results have been received for 1,340 surface stockpile samples, averaging 1.12 gpt Au and 107 gpt Ag, or 185 AgEq. Select grades from the dump sampling range up to 4,548 gpt AgEq. The mapping data are georeferenced and being used to develop a geographic information system (GIS) database for Las Chispas.

In 2017, historic mineralization rock stockpiles were sampled by a trenching and auger program to collect data, identify stockpiles volumes, and to calculate precious metal grades. Data were collected from field measurements using a global positioning system (GPS) instrument and trenching rock and sediment material in the stockpiles. The stockpiles were subsequently surveyed between December 14, 2017, and January 26, 2018, using a Trimble Spectra Total Station Model TS-415. Samples were sent to ALS Chemex (ALS) in Hermosillo for preparation, and then to the ALS laboratory in North Vancouver for gold and silver analysis.

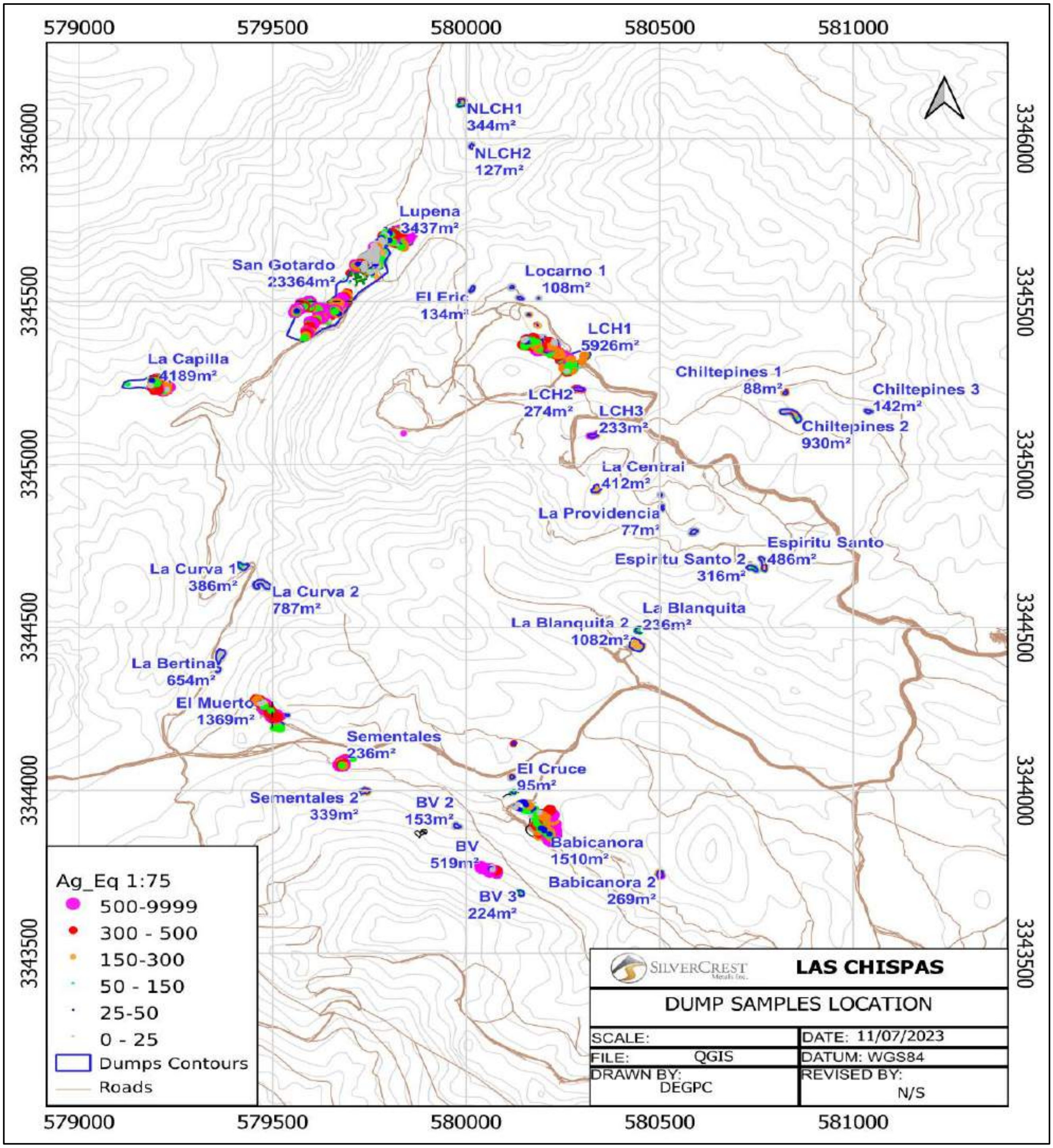
In total, 41 historic stockpiles at 20 locations within the Las Chispas Operation area were sampled by auger or trenching between July 2017 and January 2018. Table 9-4 summarizes the stockpiles names and Figure 9-3 shows the locations.

Table 9-4: List of Surface Historic Stockpiles (Dumps, Muck and Tailing) Mapped in the Las Chispas Operation Area

Dump Name	Sample Style
North Chispas 1, 2	Trench
La Capilla (LCA), tailings	Auger
San Gotardo (LCD)*	Trench
Lupena (LUP)*	Trench
El Eric	Trench
Locarno 1, 2, 3, 4	Trench
Las Chispas 1, 2, 3 (LCH)	Trench
La Central	Trench
Maria	Trench
Chiltepines 1, 2, 3	Trench
La Providenca 1, 2, 3	Trench
Espíritu Santo 1, 2	Trench
La Blanquita 1, 2	Trench
La Curva 1, 2	Trench
La Bertina 1, 2	Trench
El Muerto 1, 2	Trench
Sementales 1, 2	Trench
Buena Vista 1. 2, 3	Trench
Babicanora 1*, 2	Trench
El Cruce 1, 2, 3	Trench
Total	**41**

* Historic stockpiles have been significantly depleted by the company with processing to date.

Figure 9-3: Location of Surface Stockpiles and Historic Mine Stockpiles Mapped and Sampled by SilverCrest Phase III Surface Geological Mapping and Lithological Program



Source: SilverCrest, 2023.

To initially determine the feasibility of evaluating historic stockpiles, an auger program was implemented in July 2017. A standard mechanical gas-powered auger was used to complete the test program. Auger drilling was only found to be useful for one stockpile (La Capilla tailings), due to issues with large rocks and low sample recovery.

The auger program began by setting up north-south oriented base lines near the centre of a stockpile. First, a compass, a GPS, and tape were used to mark a hole, then flag and tag it with 10 m between each flag. Depending on the size of the site, a specific number of parallel gridlines were emplaced running east-west and 10 m apart. Second, a tripod was situated over the surface of a flagged hole and a pulley attached at the top. Next, the standard penetration test equipment was aligned at the tripod’s centre and the initial hole within 1 m proximity o the flagging. Two personnel manned the sampler with one on the capstan, to drive the sampler into the soil surface and down until either the sampler hits a fixed depth of 1 m or until it could not go any deeper. If a rock prevents downward movement of the auger, it must either drill down by uplifting it or pushing it into the wall, or the piercer can be used to pulverize the rock. When a fixed depth or bedrock is reached, the sampler is pulled up to the surface and the contents placed on a tarp for spreading and homogenization. Each interval was bagged and tagged with the hole ID and interval. The process of three personnel manning the sampler and capstan was repeated at 1 m interval depths.

In 2016 and early 2017, initial testing of stockpile material was completed by hand-cut trenches for sample collection. Trenches were hand excavated to approximately 0.5 m in the face of stockpiles with collection of samples every 1 m. The program results indicated that most stockpiles contained significant precious metals to warrant further evaluation.

From mid-2017 to January 2018, mechanical trenching was completed on all accessible historic stockpiles. A backhoe was used to dig trenches approximately 1.5 m deep and pile the excavated material next to the trench for sampling and description. Samples were labelled with an interval ID, GPS coordinate and depth sampled. Sample weights were 3 kg to 5 kg. The backhoe continued to work on an interval until either the soil was reached, or the walls collapsed into the trench. The excavation process continued until the backhoe reached the marked end of the trench. Additionally, a supervisor analyzed the piles for quartz percentage and historic trash, while describing the grain size and rock type.

9.2.1 Surface Mapping

SilverCrest initiated a comprehensive surface mapping and drill core relogging program in November 2018 to support development of a detailed stratigraphic section and three-dimensional (3D) lithological model across the Babicanora and Las Chispas Areas. The work resulted in an improved understanding of the regional and local structures, location of various intrusive phases, and an understanding of the relationship between host rock lithology and mineralization styles observed in drill core. The resulting 3D model was used to guide exploration targeting in previously overlooked areas and additional discoveries were made during the Phase III program, as follows:

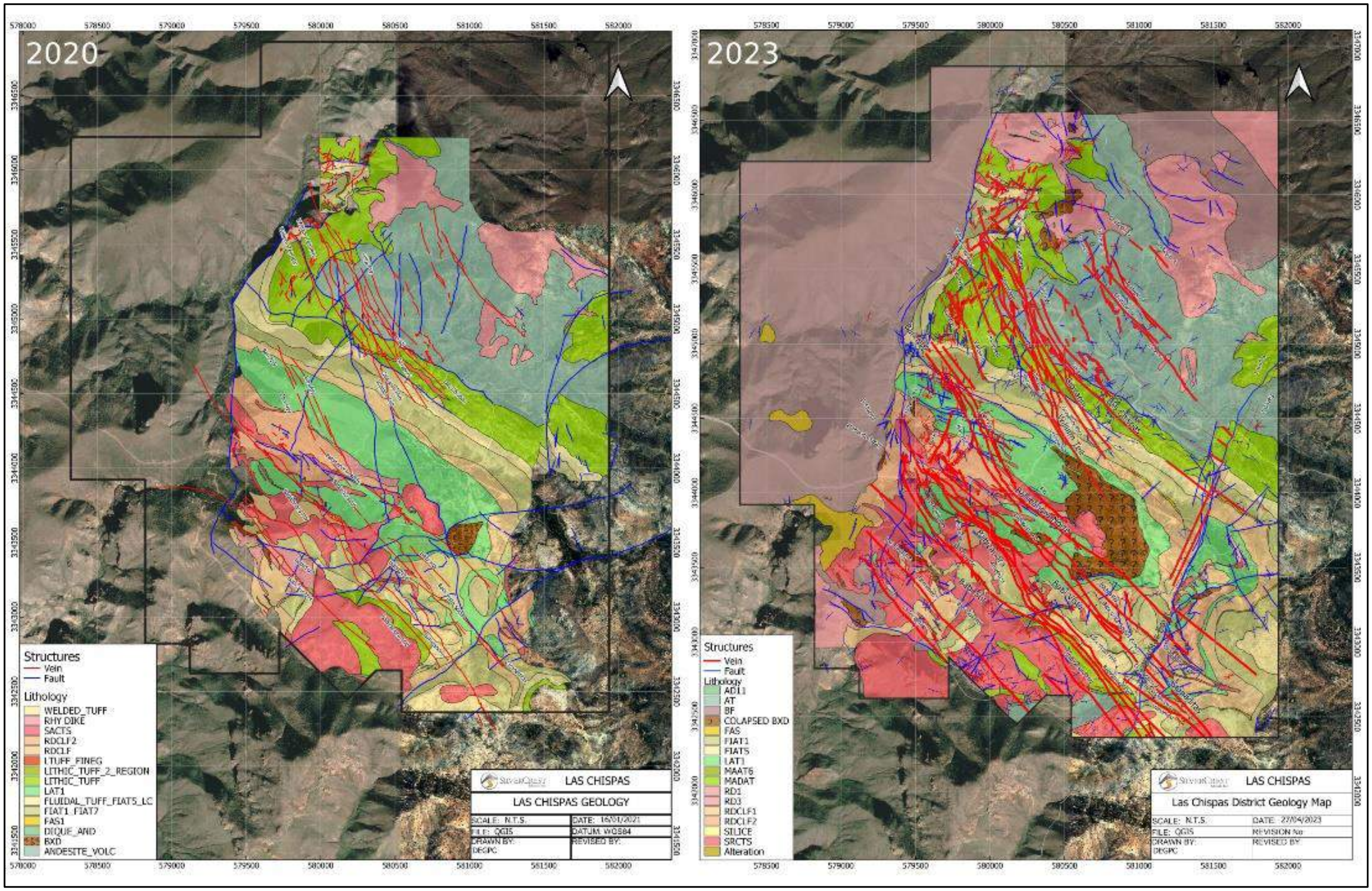
- Mineralization footprint expansion of the Babicanora, Babicanora Sur, Babicanora Norte, Babi Vista, Las Chispas and various other minor veins
- Deep targets under Las Chispas and Babicanora Areas related to specific lithology host rocks, cross-cutting structures, and geochemical zonation
- Chiltepin Area, northeast of the Las Chispas Area
- La Victoria Vein mineralization within respect to host lithologies
- Mineralization along the Babicanora caldera ring structure and associated rhyolite/andesite dikes.

Additional surface mapping was completed through Q1 2023 to support the targeting for expansion drilling and Inferred Mineral Resources. During this mapping program, the following conclusions were made:

- Mineralization footprint expansion along the Babicanora Norte Vein to the northwest
- Further evidence of a potential deep mineralized zone seen in limestone and skarn units on site
- Several cross-cutting structures on lesser veins have been discovered including Gema Vein, Martina Vein, and Babi Gaby
- Understanding on lithologies and currently known vein systems.

Geological Mapping and Lithological Modelling on the Las Chispas Operation is illustrated in Figure 9-4.

Figure 9-4: Progress of SilverCrest Geological Mapping and Lithological Modelling on the Las Chispas Operation



Source: SilverCrest, 2023.

9.3 Underground Channel Sampling in the Babicanora Area

SilverCrest is now in the process of underground mining and development in the Babicanora Area. With the first blast on February 27, 2019, SilverCrest commenced development of the exploration decline, now the main mining production decline and called the “Santa Rosa Decline”. On June 20, 2019, the Babicanora Vein was intersected. In the following days, in-vein development began with surveying, geological mapping, and establishment of sampling protocols. High grades were mapped and sampled on the first day of intersection (Figure 9-5). From June 20, 2019, to June 30, 2022, approximately 5.2 km of in-vein underground development was completed in all Babicanora Area Veins.

9.3.1 Underground Channel Sample Collection for Grade Control and Mineral Resource Estimation in Babicanora Mine

This subsection describes SilverCrest’s procedure for grade control sample collection on the face of in-vein drifting. The procedure consists of the following steps:

- Underground continuous channel samples were marked horizontally across the face by a geologist, based on mapping of lithology or mineralization contacts, using spray paint prior to sample collection.
- Sample lengths varied by width of the geological contact and were set to a minimum of 0.30 m in mineralization to a maximum of 1.5 m in waste.
- Two long cuts separated by 10 cm were made parallel to the sample line using a pneumatic rock saw and the cuts were 5 cm deep; then several short cuts perpendicular to the sample line are made at the contacts and between contacts.
- The rock is removed from the channel using a small sledge hammer and hand maul or pneumatic chipper, depending on equipment availability, and placed on a small tarp on the floor.
- The channel is inspected by the geologist for uniform width and depth across the sample, and to verify that the minimum sample mass is approximately 1 kg.
- Samples were collected and placed into clear plastic sample bags with a sample tag, secured with a zip tie, labelled, and stored in a fenced and locked storage facility at the mine prior to being transported by SilverCrest personnel to the SGS laboratory in Arizpe for analysis.
- A single field duplicate is collected from each face, unless determined otherwise by the geologist, from a second channel that is cut within the mineralized zone immediately above and adjacent to the primary sample.
- Locally, samples were collected along development ribs as longitudinal samples, along backs and overhead stope pillars as transverse samples, and along some crosscuts as transverse samples. The SilverCrest collection program was eventually modified to allow identification of each sample type in the geological database; these rib and back samples were used for grade control only and were excluded from Mineral Resource Estimation.

Figure 9-5: Underground Intersection of Babicanora Main Vein, Area 51 Zone, Santa Rosa Decline, 1096 masl

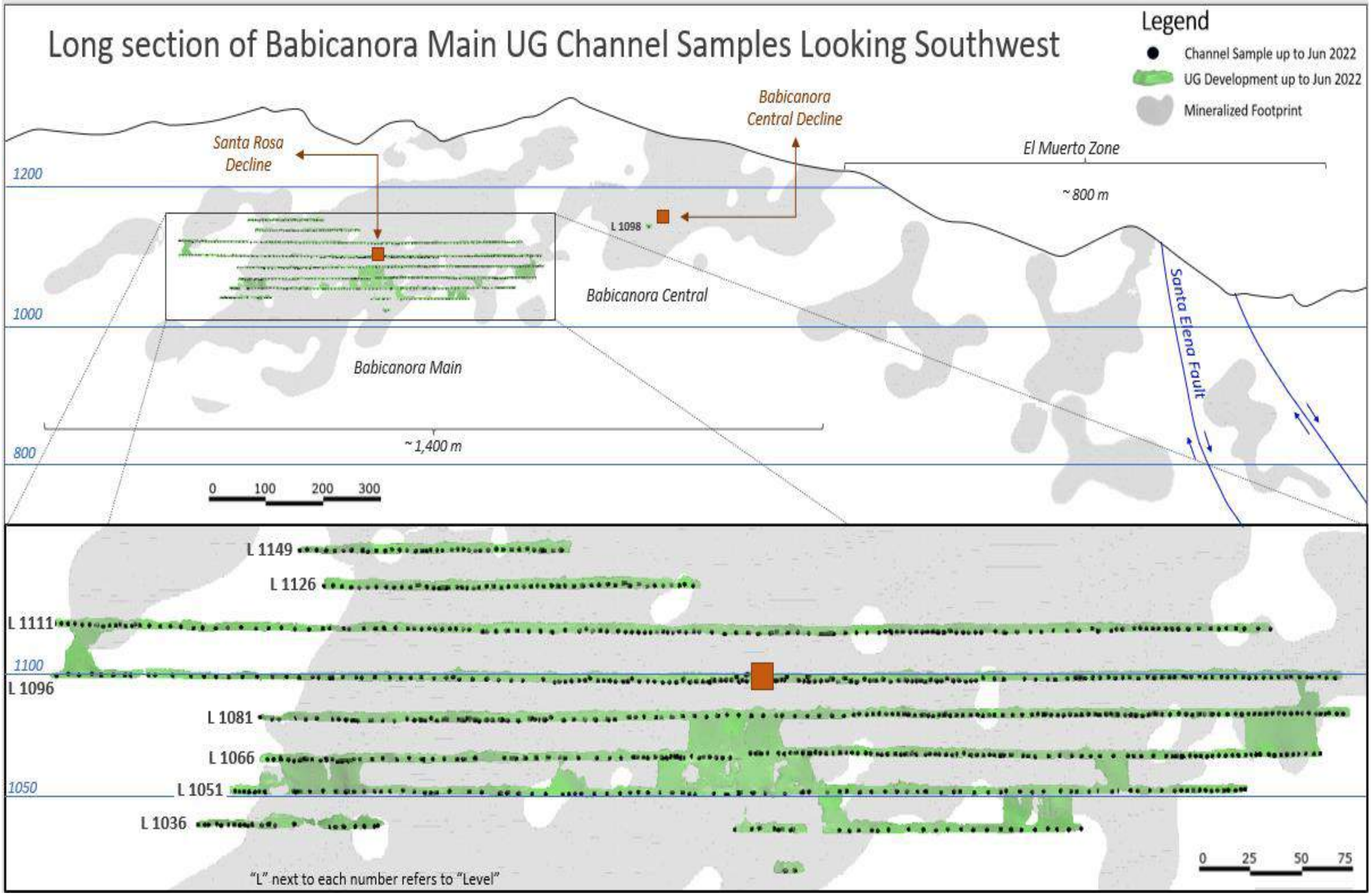
Source: SilverCrest, 2020.

A total of 8,178 underground channel sample results were collected as of the data cut-off date (Table 9-5). In Babicanora Main vein system, approximately 4 km of strike length were sampled, with most of it in the Babicanora Main vein. In the Babicanora Norte vein system, approximately 850 m of strike length were sampled. In Babi Vista vein system, approximately 500 m were sampled.

Table 9-5: Summary of Channel Samples by Vein and Level as of June 30, 2022

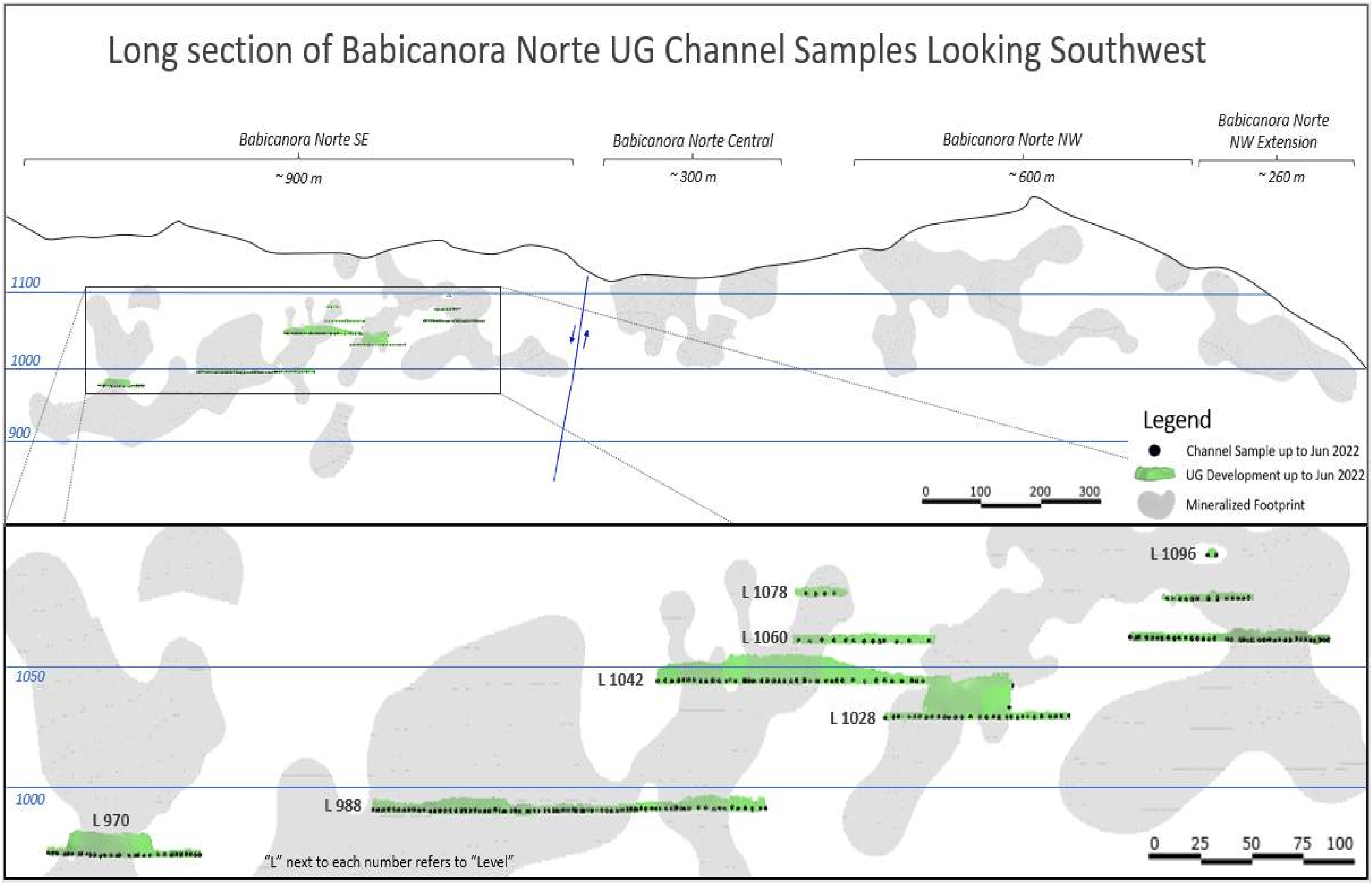
Vein	Level	Number of Channels	Number of Samples	Strike Length
Babicanora	1021	2	25	7
	1036	54	348	276
	1051	105	711	532
	1066	145	816	525
	1081	141	917	538
	1096	161	1,008	641
	1111	142	996	602
	1126	50	221	190
	1149	36	156	135
Subtotal		**836**	**5,198**	**3,446**
Babicanora Hangingwall	1051	18	92	57
	1066	8	41	35
Subtotal		**26**	**133**	**92**
Babicanora Footwall	1036	1	4	3
	1051	11	58	31
	1066	38	187	122
	1081	54	296	174
	1096	31	130	125
	1126	5	19	18
	1149	1	5	3
Subtotal		**141**	**699**	**476**
Babicanora Central	1098	1	3	3
Subtotal		**1**	**3**	**3**
Babicanora Norte	970	30	150	84
	988	77	337	209
	1028	31	163	104
	1042	41	226	148
	1060	50	269	188
	1078	21	134	71
	1096	2	25	10
Subtotal		**252**	**1304**	**814**
Babicanora Norte HW SE	997	12	68	38
Subtotal		**12**	**68**	**38**
Babi Vista	980	110	498	330
	1019	40	178	125
Subtotal		**150**	**676**	**455**
Babi Vista Footwall	988	21	97	47
Subtotal		**21**	**97**	**47**
Total		**1,439**	**8,178**	**5,371**

Figure 9-6: Long Section of the Babicanora Main vein showing the channel samples descripted in Table 9-5



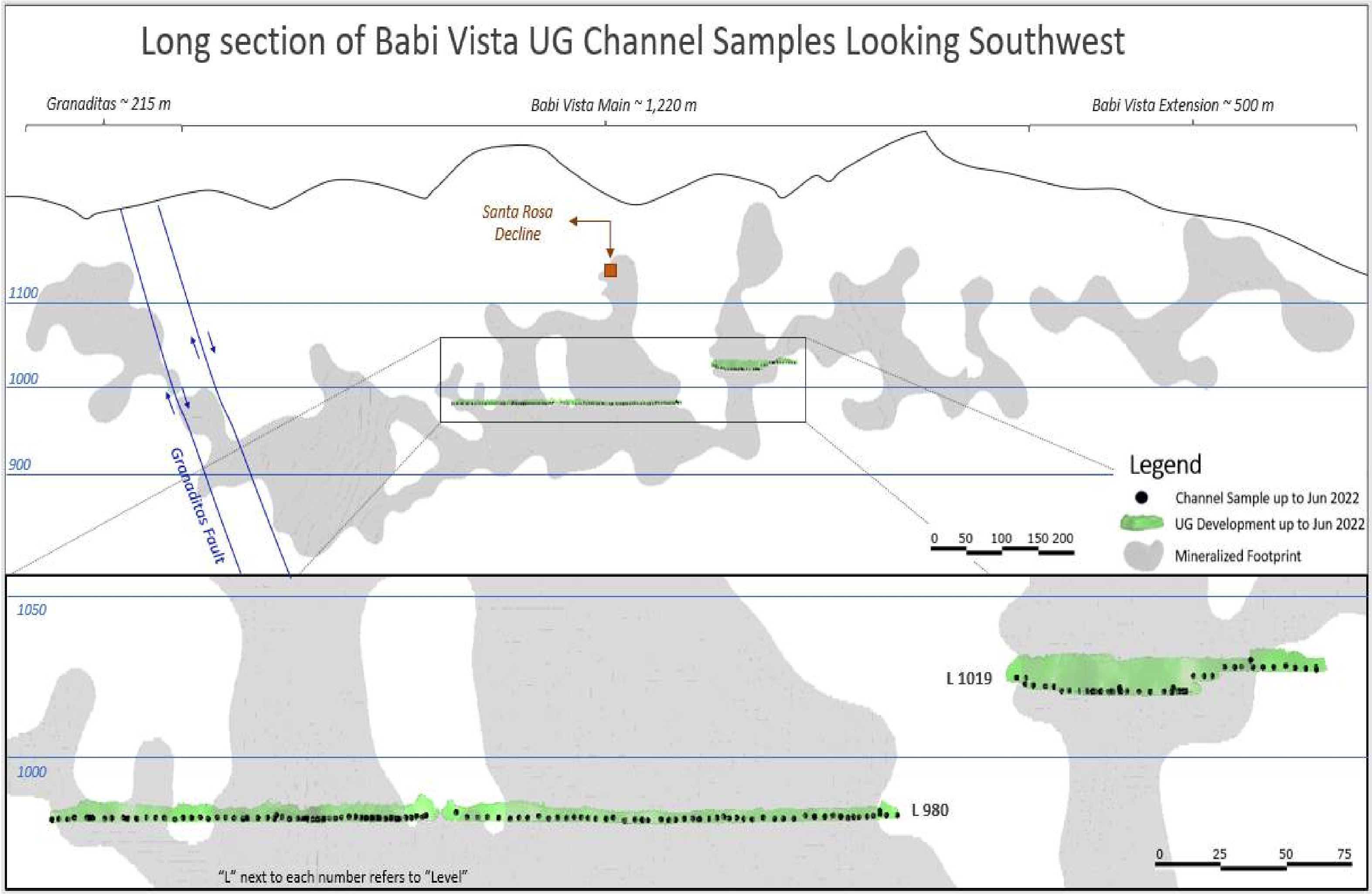
Source: SilverCrest, 2023.

Figure 9-7: Long Section of the Babicanora Norte vein showing the channel samples descripted in Table 9-5



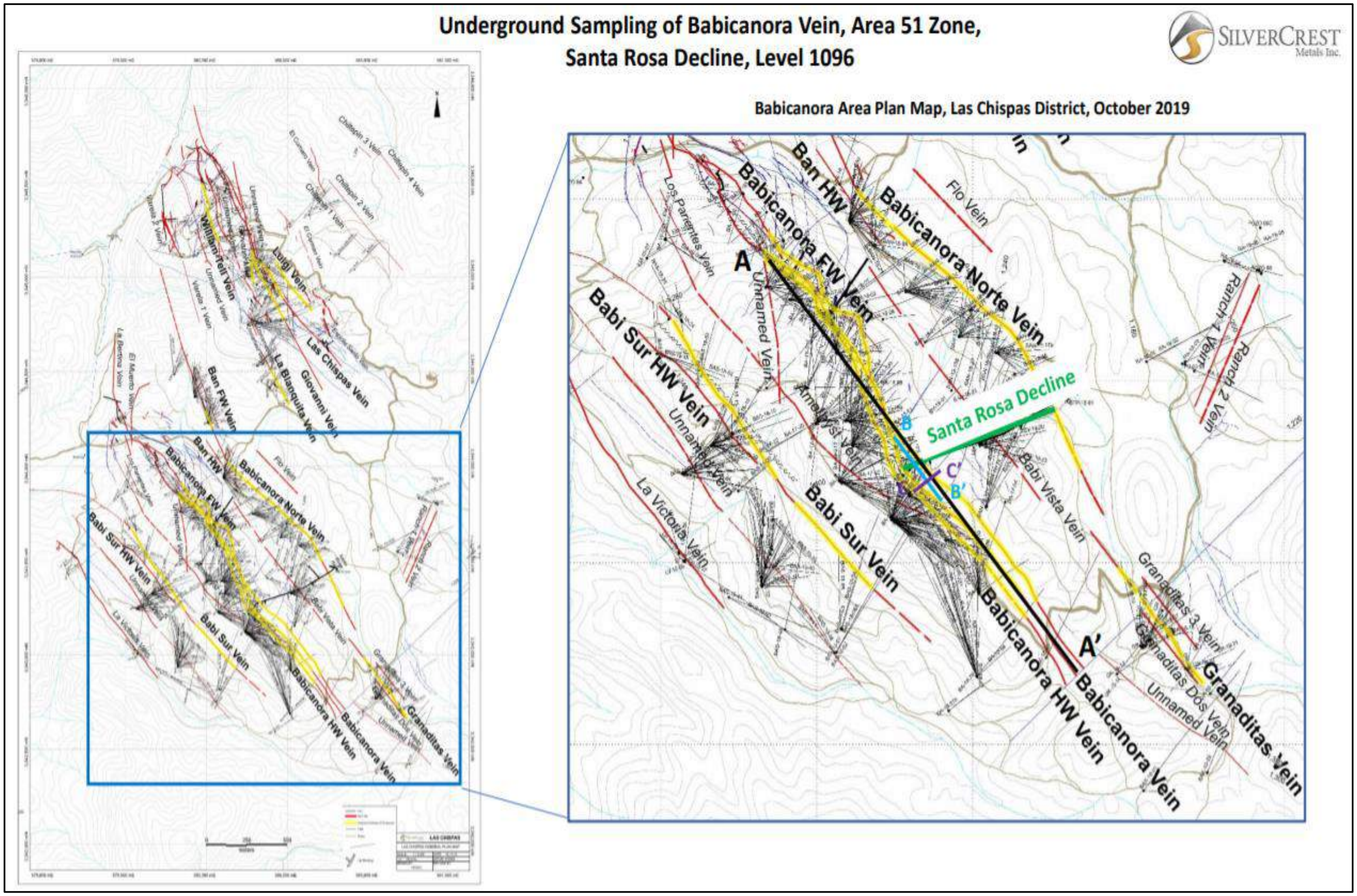
Source: SilverCrest, 2023.

Figure 9-8: Long Section of the Babi Vista vein showing the channel samples descripted in Table 9-5



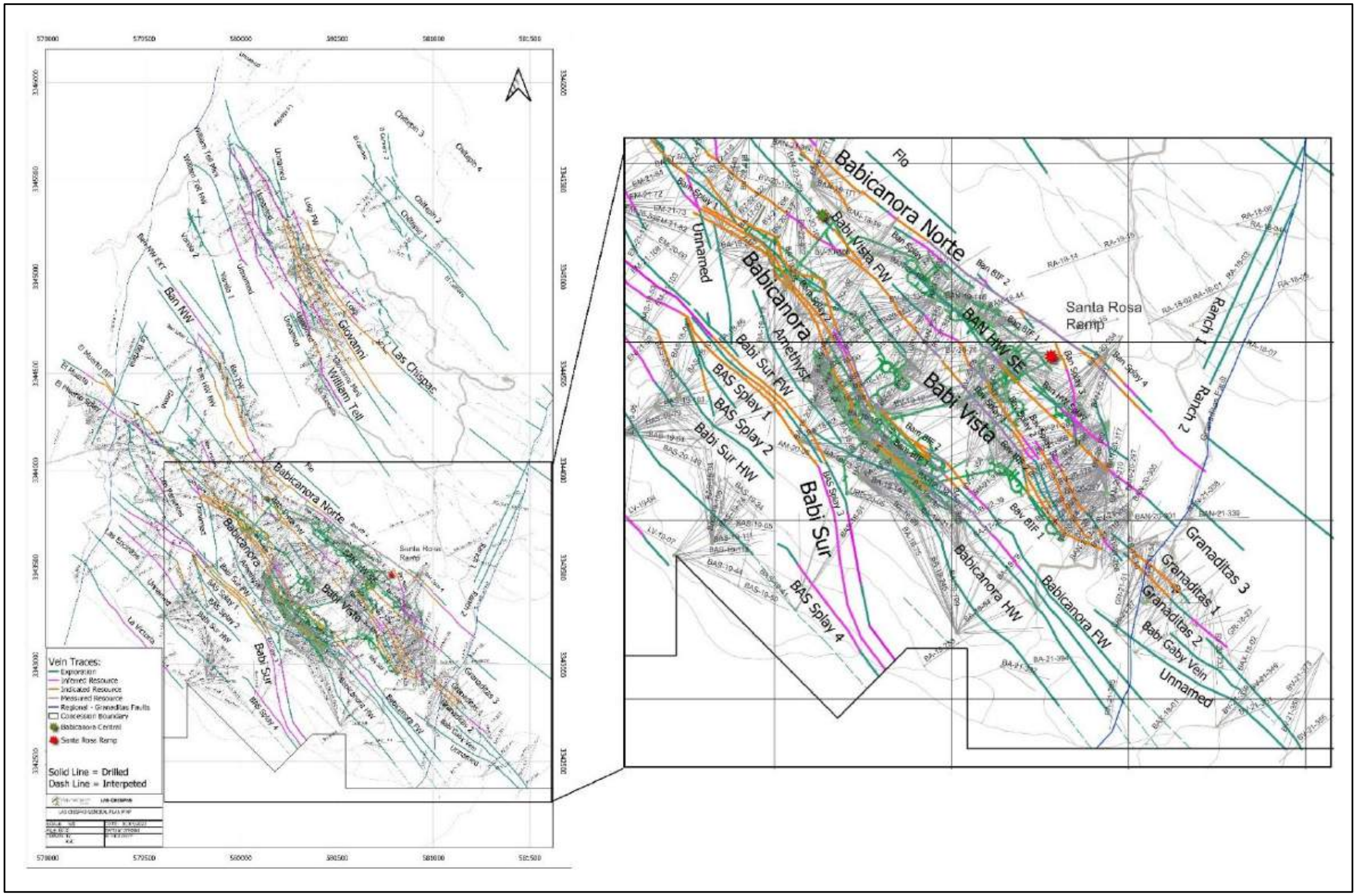
Source: SilverCrest, 2023.

Figure 9-9: Location of Las Chispas District Veins, Santa Rosa Decline and Intersection with Babicanora Main Vein



Source: SilverCrest, 2019.

Figure 9-10: Location of Las Chispas District Veins, Santa Rosa Decline and Intersection with Babicanora Main Vein



Source: SilverCrest, 2023.

9.4 Aerial Drone Topographic, Underground Exploration and Drill Hole Surveys

In February 2019, an aerial drone survey to collect light detection and ranging (LiDAR) data over the Las Chispas Operation was completed by Precision GPS from Hermosillo, Mexico. The survey used an MD4-1000 drone with a LiDAR module.

During the Phase III and Phase III Extended exploration programs, Precision GPS assisted with surveys of underground decline and drifts, and drill hole collar surveys up to October 16, 2020. Starting with Phase IV, SilverCrest has been responsible for surveying drill hole collars with the on-site operational team using a Trimble R12 GNSS.

9.5 Airborne Geophysics

A helicopter-borne magnetic, spectrometer, and VLF survey was flown over the Las Chispas Property in March, 2021, by TerraQuest Ltd. from Markham, Canada. The survey included a total of 2,910 line-km at 50-m line spacing. The information collected from the survey has assisted in Property-scale mapping of surface lithology and conductive/resistive geological features.

10 DRILLING

10.1 Program Overview – March 2016 to March 2023

SilverCrest completed their Phase I and Phase II drilling programs between March 2016 and February 2018. The Phase III drilling program included drilling up to February 2019. The Phase III Extended drilling program, starting in February 2019, focused on in-fill and expansion drilling and was completed on October 16, 2020, with a total of 309,383.85 m of drilling in 1,137 drill holes.

Phase IV included drilling from October 2020 to June 2022, and focused mainly on infill and expansion of known veins with a total of 198,926 m of drilling in 1,041 drill holes, this Phase is known as the “Resource and Reserve” or “R&R Drill Program”. Phase V includes drilling from June 2022 to March 2023, which focused on expansion drilling for Inferred Mineral Resources with a total of 64,755 m of drilling in 223 drill holes.

From the start of drilling in March 2016 to March 2023, a total of 2,840 drill holes were completed for 690,124 m drilled with 247,033 samples collected for geochemical analysis. Drilling data to March 21, 2023, was used in the Mineral Resource and Mineral Reserve Estimate.

The Phase I drilling program targeted near-surface mineralization, lateral extensions of previously mined areas, and potential deep extensional mineralization proximal to the historic workings. The Phase II drilling program focused on surface drilling at the Las Chispas, Babicanora, William Tell, and Giovanni veins and on underground drilling at the Las Chispas and Babicanora veins. The Phase III drilling program focused on surface drilling at the Babicanora, Babicanora FW, Babicanora HW, Babicanora Norte, Babicanora Sur, Granaditas, Luigi, and Giovanni veins and underground drilling at the Las Chispas veins. The Phase III Extended drilling program was an infill program to support potential confidence category upgrades, and test for expansion of multiple veins.

Phase IV drilling targeted the Babicanora Main, Babicanora Norte, Babicanora Sur, Babi Vista, Encinitas, Amethyst and Las Chispas Vein systems. Phase V focused on expansion drilling along the Babicanora Norte, Babicanora Sur, Ranch, La Victoria, Espíritu Santo, and Babi Vista Vein systems. Table 10-1 summarizes these drilling programs and drill hole locations.

Table 10-1: Summary of Drilling and Sampling Completed by SilverCrest to March 2023

Vein	Drill Location	Number of Drill Holes	Length Drilled (m)	Number of Samples	Length of Samples (m)
Phase I (March 2016 to October 2016)					
Las Chispas[1]	Surface	19	5,461.40	3,516	5,243.10
La Victoria	Surface	3	931.2	711	924
Subtotal		**22**	**6,392.60**	**4,227**	**6,167.10**
Phase II (October 2016 to February 2018)					
Las Chispas [1]	Surface	54	14,123.95	10,395	11,233.30
	Underground	21	1,992.90	1,782	1,780.20
Babicanora[2]	Surface	70	21,137.60	8,876	9,781.60
	Underground	14	1,446.70	1,252	1,415.40

Vein	Drill Location	Number of Drill Holes	Length Drilled (m)	Number of Samples	Length of Samples (m)
Granaditas	Surface	2	653.45	594	653.5
Subtotal		**161**	**39,354.60**	**22,899**	**24,864.00**
Phase III (February 2018 to February 2019)					
Las Chispas[1]	Surface	4	1,176.90	831	907.3
	Underground	7	622.8	526	562.4
Babicanora	Surface	22	9,508.75	1,815	1,930.60
Granaditas	Surface	23	7,144.80	5,978	6,037.20
Babicanora Norte	Surface	40	11,810.70	7,233	7,767.90
Babicanora Sur	Surface	7	3,069.30	967	995.3
Ranch	Surface	10	3,305.80	1,856	2,105.30
Test Wells	Surface	12	1,103.00	623	952.9
Subtotal		**125**	**37,742.05**	**19,829**	**21,259.00**
Phase III (February 2018 to February 2019)					
Las Chispas[1]	Underground	12	1,576.80	960	1,008.60
Babicanora[2]	Surface	52	17,075.40	5,328	5,676.10
	Underground	10	1,078.50	770	879.6
Babicanora Norte	Surface	18	3,884.10	1,853	2,241.80
	Underground	3	1,147.20	702	783.8
Babicanora Sur	Surface	32	8,160.40	3,749	4,382.90
Ranch	Surface	4	646	360	393.4
Subtotal		**131**	**33,568.40**	**13,722**	**15,366.00**
Phase III Extended (February 2019 to October 2020)					
Las Chispas[1]	Surface	150	44,902.44	16,807	15,294.10
Babicanora[2]	Surface	245	73,949.45	20,557	20,184.33
	Underground	59	3,207.25	2,459	2,038.36
Babicanora Norte	Underground	44	11,350.60	5,018	5,201.09
	Surface	262	63,915.15	17,667	15,626.83
Babicanora Sur	Surface	127	38,008.75	10,407	10,307.18
Babi Vista	Surface	183	57,941.26	5,050	4,062.82
El Muerto Zone	Surface	40	8,498.10	2,898	2,636.21
Ranch	Surface	3	709	196	188.41
La Victoria	Surface	8	2,263.30	1,542	1,613.60
Los Chiltepines	Surface	16	4,638.55	2,379	2,408.33
Subtotal		**1,137**	**309,383.85**	**84,980**	**79,561.26**
Phase IV (October 2020 to June 2022)					
Las Chispas[1]	Surface	13	4,475.45	754	604.97
Babicanora[2]	Surface	21	6,655.75	1,898	1,825.73

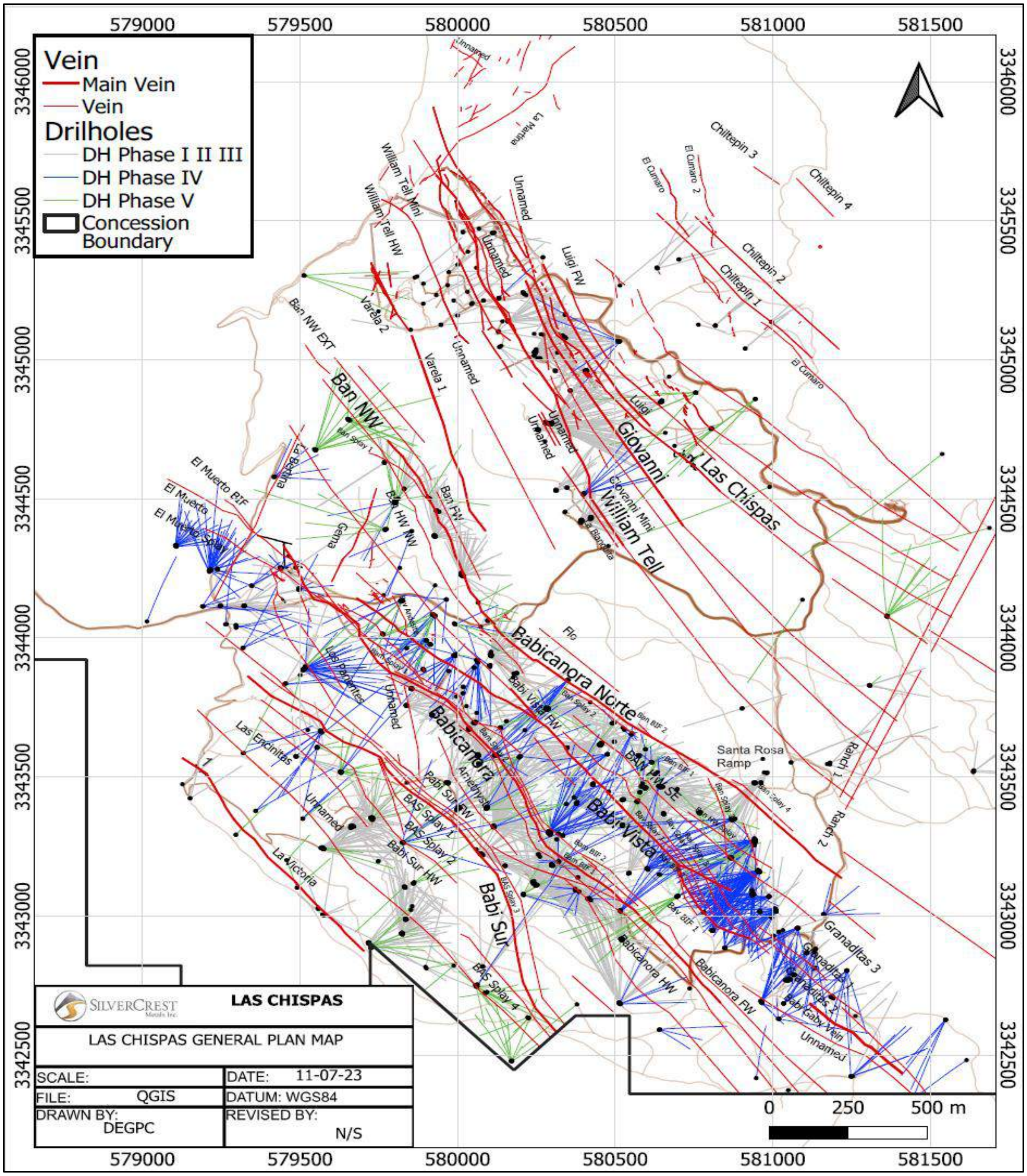
Vein	Drill Location	Number of Drill Holes	Length Drilled (m)	Number of Samples	Length of Samples (m)
	Underground	294	9,392.17	6,805	6,911.10
Babicanora Norte	Surface	73	21,618.23	6,105	5,957.59
	Underground	153	8,738.46	4,271	3,987.24
Babi Vista	Surface	260	90,888.34	21,314	19,924.94
	Underground	68	5,286.90	1,815	1,795.59
Babicanora Sur	Surface	4	1,102.80	389	362.78
El Muerto Zone	Surface	102	34,499.86	11,489	11,733.31
Granaditas	Surface	36	9,602.95	3,755	3,530.82
Encinitas	Surface	8	2,486.60	1,287	1,419.37
Amethyst	Surface	9	4,179.40	1,232	1,229.95
Subtotal		**1,041**	**198,926.91**	**61,114**	**59,283.39**
Phase V (June 2022 to March 2023)					
Babicanora[2]	Surface	6	1,152.30	583	546.79
	Underground	17	4,429.65	1,917	1,803.37
Babicanora Norte	Surface	52	12,121.38	7,270	7,059.12
	Underground	18	2,693.25	1,507	1,477.69
Babi Vista	Surface	16	4,816.95	2,524	2,570.88
	Underground	9	1,996.30	1,158	1,142.87
Babicanora Sur	Surface	65	22,614.15	13,759	14,232.46
El Muerto Zone	Surface	2	570.50	396	409.90
La Victoria	Surface	7	1,384.05	1,034	1,082.50
Ranch	Surface	14	5,974.55	4,194	4,631.73
Espíritu Santo	Surface	8	3404.45	3118	3386.6
Gemas	Surface	4	1,455.35	961	1,043.12
Las Chispas Extension	Surface	2	1,057.00	879	947.10
Varelas	Surface	3	1085.5	962	1085.499
Subtotal		**223**	**64,755**	**40,262**	**41,420**
Total		**2,840**	**690,124**	**247,033**	**247,920**

Notes: (1) Las Chispas area totals include some re-drilled holes and holes drilled at Las Chispas, William Tell, Giovanni, Giovanni Mini, La Blanquita, La Varela, Luigi, and other unnamed veins in the Las Chispas area.
(2) Babicanora Area totals include holes drilled at Babicanora, Babicanora FW, Babicanora HW, Babicanora Norte, Babicanora Sur, Babi Vista, Amethyst Vein, and other unnamed veins in the Babicanora Area.

Surface collar locations were initially surveyed using a handheld GPS unit, then professionally surveyed by a local contractor. A survey was completed by external consultant David Chavez Valenzuela in October 2018. This survey was performed using a GNSS Acnovo GX9 UHF instrument. The most recent surveys were completed by Precision GPS from Hermosillo, Sonora, Mexico using a Trimble VX10 Total Station and a Trimble R8 GNSS GPS RTK system. The survey provided drill collar locations, information on roads, and additional detail on property boundaries.

Underground drill hole collars were surveyed by Precision GPS using the underground control points established for each of the workings. All holes were downhole surveyed as single-shot measurements with a Flex-it® tool starting at 15 m with measurements at every 50 m to determine deviation. The survey measurements were monitoring downhole deviations and for significant magnetic interference from the drill rods that would prevent accurate readings.

Figure 10-1: Las Chispas Drill Program Phase Map & District Veins



Source: SilverCrest, July 2023.

10.2 Drilling Results

The information in the following sub-sections is summarized from Barr (2016, 2018), and Barr et al. (2019).

10.2.1 Phase 1: March 2016 to October 2016

During the Phase 1 drilling program, 4,227 core samples totalling 6,167.1 m were collected and assayed. The program targeted the historic Las Chispas Vein to verify the location of the vein and the existence of mineralization along trend of mapped historic workings. All drill holes intercepted quartz stockwork veinlets, veining and (or) breccia, along with variable amounts of gold and silver mineralization. The results confirmed presence of the mineralization structure or vein and suggested that relatively unexplored and unmined areas exist proximal to the historic workings.

Additional drilling targeting the William Tell Vein intercepted the mineralization structure or vein in four (4) of seven (7) drill holes.

The 2016 program also included three (3) holes (LV16-01, LV16-02, and LV16-03) in the La Victoria Area, located 800 m southwest of the Babicanora Vein. These holes intersected only low-grade mineralization.

10.2.2 Phase II: October 2016 to February 2018

During the Phase II drilling program, 22,899 core samples totalling 24,864.0 m were collected and assayed. The program targeted delineation and expansion of known vein targets at the Las Chispas, William Tell, and Babicanora veins and tested new targets, such as the La Varela, La Blanquita, Granaditas, and Amethyst veins.

10.2.3 Phase III: February 2018 to February 2019

During the Phase III drilling program, 33,551 core samples totalling 36,625.1 m were collected and assayed. The program targeted delineation and expansion of known vein targets in the Babicanora Area, including the Area 51 Zone, Babicanora HW, Babicanora FW, Babicanora Norte, Babicanora Sur veins, in addition to the Giovanni vein in the Las Chispas area. Newly-tested targets for the Phase III program included the Babicanora Norte, Babicanora Sur, Granaditas, Luigi, Amethyst and Ranch veins.

10.2.3.1 Babicanora (Main) Vein

Delineation and expansion drilling in the Babicanora Area during Phase III focused on the southeast portion of the Babicanora Vein, mainly the delineation of the high-grade Area 51 Zone. This drilling was accessed via a high-elevation road from the ridge crest permitting drill access to the vein from the hangingwall side. Numerous high-grade intercepts were encountered in this area.

Drilling established strong lithological control on the upper portion of the Area 51 Zone, where welded dacite-rhyodacite crystal tuff (RDCLF) overlies a more permeable lapilli or lithic tuff, which is host to the high-grade mineralization. Mineralization transects the contact; however, it is reduced in both thickness and grade due to permeability contrasts between the lithic and welded tuff units. The orientation of this lithological contact appears to be a controlling feature on the southeast-directed plunge of mineralization within the Babicanora Vein. A lower boundary is less well defined.

10.2.3.2 Babicanora Footwall (FW) Vein

The Babicanora FW Vein is immediately adjacent to the Babicanora Vein and was discovered at the same time as the Babicanora Vein Area 51 Zone, in late-2017. This vein can be observed on surface in select locations and underground in the Babicanora Central Adit and Santa Rosa Decline.

10.2.3.3 Babicanora Norte Vein

Surface drilling commenced on the Babicanora Norte Vein in March 2018 and the vein was discovered with the second drill hole, BAN18-02. The vein is located near the portal of the Babicanora Central Adit and projects under historic mine stockpiles. Initial drilling was directed 50 m below a shallow shaft where the high-grade vein was intercepted. After discovery, the Babicanora Norte Vein was systematically drilled to the northwest and southeast along strike.

In contrast to the Babicanora Vein, the Babicanora Norte Vein is hosted in welded RDCLF as a discordant extensional vein of consistent width and sharp contacts with host rock. Current interpretation of drilling results has identified a flexure in the Babicanora Norte Vein with change in orientation from 160º degrees azimuth in the northwestern portion to 125° azimuth. This flexure may represent a local fault, consistent with displacement of local lithologies.

10.2.3.4 Babicanora Sur Vein

The Babicanora Sur Vein is located approximately 300 m southwest and is oriented parallel to the Babicanora Vein. Drilling commenced on Babicanora Sur in the southwest portion of the Las Chispas Operation area, based on availability and access of surface drill rigs on roads constructed in the Babicanora Area.

10.2.3.5 Granaditas Vein

The Granaditas Vein is parallel to the Babicanora and Babicanora Norte veins and consists of similar southeastward-plunging high-grade precious metal mineralization. However, copper, lead and zinc grades increase to the southeast and down-plunge, confirming that the zonation of mineralization originates to the southeast of the Babicanora Area. Drilling during Phase III focused on delineating the high-grade footprint.

10.2.3.6 Luigi Vein

The Luigi Vein was discovered in the footwall of the Las Chispas Vein in mid-2017, but remained unnamed until there was sufficient drilling to delineate a mineralization vein. The Phase III program focused on delineating the vein through underground drilling on the 550 and 600 Level of the historic Las Chispas workings.

10.2.3.7 Ranch Veins

Surface drilling commenced in the Babicanora Ranch area during Phase III, with 13 holes sited as condemnation holes in the area surrounding potential processing facilities. Results were low-grade, with several wide intersections of calcite veins and veinlets.

10.2.3.8 Espíritu Santo Vein

The Espíritu Santo historic workings are located to the southeast of the Las Chispas and William Tell Veins. Phase III drilling here targeted two adits and a shaft in this area and three (3) holes were completed. Results were negative and the drilling was considered to be below the potential projected plunge of mineralization.

10.2.4 Phase III Extended: February 2019 to October 2020

10.2.4.1 General

Expansion and in-fill of the Babicanora and Las Chispas Areas during the Phase III Extended program focused on all the main veins (Babicanora, Babicanora FW, Babicanora Norte, Babicanora Sur, Babi Vista and Las Chispas) with adjacent footwall and hangingwall veins and splays to support potential classification upgrades of Mineral Resources.

A systematic drill hole vein piercing pattern of approximately 35 m by 35 m was used to support the conversion of Inferred to Indicated Mineral Resources.

In August 2020, the gold to silver ratio (Ag:Au) used for estimating AgEq was changed from 75:1 to 86.9:1 (see Section 14.1.14), to in order to reflect updates in metal prices and metallurgical recoveries.

10.2.4.2 Babicanora (Main) Vein

Drilling on the Babicanora Vein continued to establish lithological controls on the upper and lower precious metal mineralization boundaries, where welded rhyodacite to dacite crystal lithic tuff (RDCLF1 unit, Figure 7-2) overlies more permeable lapilli or lithic tuff (LAT1 unit), which is the main host to high-grade mineralization. Underlaying the lapilli tuff and establishing the lower boundary is a similar welded unit of rhyodacitic tuff (RDCLF2 unit). The downward plunge of the in-vein high-grade mineralization appears to be limited, based on recent drilling that shows vein intersections with low to no grade. These results may indicate the presence of a barren zone to the southeast toward the source of mineralization, typical of epithermal systems (Figure 7-9).

The Babicanora Vein has a near-parallel hangingwall and footwall vein.

10.2.4.3 Babicanora Footwall (FW) Vein

The Babicanora FW Vein is immediately adjacent to the Babicanora Vein and infill drilling has defined the limits of high-grade mineralization showing several semi-continuous zones or pods. These zones are associated with near-vertical crosscutting structures and shallower southeast plunging in-vein mineralization related to the lapilli tuff host, as observed in association with Babicanora mineralization similar to the adjacent Babicanora Vein.

10.2.4.4 Babicanora Norte (Main) Vein

After discovery in March 2018, the Babicanora Norte Vein was systematically infill drilled to the northwest and southeast along strike. Infill drilling has defined the limits of high-grade mineralization, showing several semi-continuous zones or pods similar to the nearby Babicanora FW Vein; however, the lithological relationship of mineralization in this vein is within the RDCLF2 unit, which is considered to be a less favourable host. The southeast plunge of high-grade mineralization is still present.

Numerous high-grade in-fill drilling intercepts were made in a newly defined zone, named Area 200 (Figure 7-9).

The Babicanora Norte Vein has near-parallel hangingwall and footwall veins.

10.2.4.5 Babicanora Sur (Mar) Vein

The Babi Sur Vein is located approximately 300 m southwest of, and is oriented parallel to, the Babicanora Vein. Infill drilling has defined the limits of high-grade mineralization, showing several semi-continuous zones, or pods, similar to the nearby Babicanora FW Vein.

The Babi Sur Vein has a near-parallel hangingwall and footwall vein (Figure 7-15).

10.2.4.6 Babi Vista (Main) Vein

The Babi Vista Vein is located approximately 250 m northeast of, and is oriented parallel to, the Babicanora Vein. Drilling commenced on Babi Vista using both underground drilling from access on the Santa Rosa Decline (while developing to the Babicanora Vein), and surface drilling. Discovery and infill drilling defined the limits of high-grade mineralization and showed the presence of several semi-continuous zones, or pods, similar to the nearby Babicanora Norte Vein (Figure 7-12).

The Babi Vista Vein has a near-parallel footwall vein.

10.2.4.7 Babi Vista Vein Splay

The Babi Vista Vein Splay is located along the southeast strike of the Babi Vista Vein and appears to be a splay off the main Babi Vista Vein. The orientation and zones of mineralization are similar to the Babi Vista Vein. Infill drilling defined the limits of high-grade mineralization and demonstrated presence of several semi-continuous zones or pods similar to those encountered at the nearby Babicanora Norte Vein.

10.2.4.8 Las Chispas Vein

The Las Chispas Vein is located approximately 1 km northeast of the Babicanora Area and is an area of historic mining activity. The Phase III Extended drilling focused on delineating and in-filling the newly defined Area 118 that had no previous mining on the vein. Infill drilling defined the limits of high-grade mineralization and showed that not only is the LAT1 lithology a favourable host, but also that the FIAT unit (fluvial andesitic tuff, Figure 7-2) appears to be a stratigraphically less favourable host (Figure 7-15).

The Las Chispas Vein has several hangingwall and footwall veins, including the Giovanni, GioMini, Luigi and Luigi FW veins. Las Chispas Vein is the dominant vein in this area.

10.2.5 Phase IV: October 2020 to June 2022

10.2.5.1 General

During the Phase IV drilling program, 61,114 core samples totalling 59,283.39 m were collected and assayed. The drill program targeted delineation and expansion of known vein targets in the Babicanora, Babicanora Norte, Babi Vista, and

Babicanora Sur veins. Through this drilling several bifurcations and splays were intercepted in multiple vein systems. Newly tested targets in Phase IV include the Las Encinitas and Amethyst Veins.

This phase of drilling also incorporated the underground definition drilling program, which was planned to decrease the drill spacing to 10 to 15 m spaced centres within the Mineral Reserves of the Babicanora Area. This program is currently ongoing, and the information has been used to support both short-range and long-range models.

10.2.5.2 Babicanora Main Vein, HW, FW, Splays and Bifurcations

Drilling in Babicanora Main, including its HW, and FW veins and splays and bifurcations, focused on testing of geological theories about the controls on mineralization around high-grade shoots and to re-drill the areas where previous drilling had poor recovery. The information obtained from this program was used to define the Mineral Resource estimation parameters. Further drilling was completed along the lithic (LAT1 unit) and rhyolite (RDCLF1 unit) upper contact, in order to define the controls along the mineralized zone.

The Babicanora Area was targeted by the ongoing definition drilling program. This reduced the spacing of the drill hole pierce points from 30 to 35 m centres to 10 to 15 m.

The drill program on El Muerto Zone, located within the Babicanora Vein Area, focused mainly on the infill of Inferred Mineral Resources along the main pods to Indicated Mineral Resources. It also targeted expansion of known veins along strike in the system.

10.2.5.3 Babicanora Norte Main Vein, HW, FW, Splays and Bifurcations

Babicanora Norte Main drilling aimed to prove the extent of the high-grade shoots down-plunge and down-dip, in order to aid definition of the Mineral Resource modelling parameters. Expansion of the Babicanora NW pod along strike to the northwest identified 300 m of previously untested strike length. This phase also targeted the expansion of the Babicanora HW SE vein and infill of the currently identified high-grade shoots to spacing to support conversion to Indicated Mineral Resources. The Babicanora Norte HW Splay was identified during this program.

The Babicanora Norte Vein System was targeted during the ongoing definition drilling program. This drilling reduced the drill hole pierce point spacing from 25-30 m to 10-15 m centres.

10.2.5.4 Babi Vista Main Vein, HW, FW, Splays and Bifurcations

Drilling in the Babi Vista Main vein was completed to support conversion of Inferred to Indicated Mineral Resources around the Babi Vista Splay Zone, which was identified as being part of the Babi Vista Main Vein, and expansion along strike and high-grade shoots.

Expansion drilling resulted in the discovery of an additional 500 m of mineralized strike length previously untested to the NW of the structure, which was drilled to Indicated Mineral Resource spacing around high-grade shoots. This area is referred to as the “Babi Vista NW Extension” pod. While testing the extension of this pod to depth, the “Babi Vista Andesite” structure was identified.

A program aiming to test the extension of high-grade shoots inside of previously defined Mineral Resource, in order to support the modelling parameters was conducted in Babi Vista Main Vein.

A zone of sub-parallel veining located on footwall (north) side of the Babi Vista Main Vein was discovered during the infill-drilling program on the Babi Vista Splay Zone. The area consists of a set of quartz veins, veinlets, and stockwork that splay off the main structure. These splays have been named Babi Vista Splay 1 to 3 and, along with the Babi Vista FW vein, have collectively been labelled as "Babi Vista FW Zone".

Granaditas drilling tested the extension of the structure to the southeast and infilling of the high-grade material to Indicated Mineral Resources. The Granaditas Vein system was identified as the continuation of the Babi Vista System on the footwall block of the Granaditas Fault.

The Babi Vista System has been targeted by the ongoing definition drilling program. This drilling reduced the spacing of the drill hole pierce points from 25to 30 m to 10to 15 m centres in the mineralized zones within the Mineral Reserves to support the mine plan.

10.2.5.5 Babicanora Sur Main Vein & Las Encinitas

During Phase IV, very limited drilling was completed in the Babicanora Sur Main Vein. The drilling of this vein focused on the testing the structure near surface around a vein intercept in a drill hole from an earlier phase that was re-interpreted as part of Babicanora Sur.

A drill program targeted the Las Encinitas structure that had been mapped on surface for approximately 200 m of strike length. The vein was drilled at approximately 50 m centres and extended the mineralization for an additional strike length of 400 m.

10.2.5.6 Las Chispas Vein

Drilling in Las Chispas was limited to the remaining program that was planned after the cut-off date for the Phase III of drilling. This plan targeted expansion of the Las Chispas Main and Giovanni veins along strike and to depth.

10.2.6 Phase V: June 2022 to March 2023

10.2.6.1 General

During the Phase V drilling program, 40,262 drill core samples totalling 41,420 m were collected and assayed. The program targeted mainly the expansion along strike and to depth of known veins, with the objective of defining new Inferred Mineral Resources. Newly tested targets from Phase V include the Las Gemas and La Bertina systems.

10.2.6.2 Babicanora Main Vein, HW, FW, Splays and Bifurcations

Drilling in the Babicanora System during Phase V focused on the ongoing definition program being conducted from the underground development. This plan targeted primarily the Babicanora Main Vein and secondarily the Babicanora FW and Babicanora HW veins. This drilling had the objective of reducing the drill hole spacing inside of the Mineral Reserves to an average centre spacing of 10 to 15 m, in order to support the mine plan.

Limited drilling from surface targeted the extension of the high-grade shoot near surface in Babicanora Main. Additionally, two drill holes targeted the connection of mineralized pods in El Muerto Zone.

10.2.6.3 Babicanora Norte Vein, HW, FW, Splays and Bifurcations

The Babicanora Norte Main Vein was targeted for expansion along the known projection along strike to the northwest and southeast ends. This included a program to define the newly discovered Babicanora Norte NW Extension to inferred resource spacing. Part of the program was directed to test Babicanora Norte Central, and Babicanora Norte SE on trend with open mineralization.

The ongoing definition drilling program continued to work on reducing the drill spacing inside the Mineral Reserves in Babicanora Norte SE and Babicanora Norte HW SE, and their splays, with the objective to support mine production.

10.2.6.4 Babi Vista Main Vein, HW, FW, Splays and Bifurcations

The surface drill program in Babi Vista targeted infill drilling to inferred spacing on the Babi Vista Andesite vein, and the extension of the open mineralization of shoots along strike, to depth and near surface.

Underground drilling in Babi Vista consisted mainly in the definition drilling program and some exploration drill holes that were planned to provide inputs into the Mineral Resource modelling parameters.

10.2.6.5 Babicanora Sur Main Vein

Phase V drilling in Babicanora Sur Main Vein was planned to expand to the extents of mineralization to depth at the southeast end and to near surface at the northwest end. The program extended the mineralized footprint of the vein by approximately 600 m and was drilled to an average of 50 to 60 m spacing. These portions of the vein are part of the Inferred Mineral Resources.

10.2.6.6 La Victoria Vein

During Phase V, a total of seven drill holes targeted La Victoria Area for testing the extents of the structure mapped on surface. This work resulted in the identification of approximately 550 m of mineralized material within the structure that remains open on all directions. This vein is part of the Inferred Mineral Resources.

10.2.6.7 Ranch Area

From Q4 2022 to Q1 2023 a drill program testing the northeast extension of the Ranch Veins intersected quartz vein mineralization on a cross cutting trend to the main target. This structure is currently interpreted to be the southeastern extension of Los Chiltepines or Espíritu Santo trends. Mineralization was first discovered on the footwall block of the Granaditas Fault. Since then, veining that could represent the displaced continuity of this mineralization has also been intersected on the hangingwall block too.

This is an open exploration target and SilverCrest plan to continue to test this vein in the future at different elevations and in other lithological settings. The potential strike length of this structure is between 1.5 to 2 km long.

10.2.6.8 Espíritu Santo Vein

The Espíritu Santo and El Carman workings were targeted by seven drill holes in Phase V that tested300 m of strike length around the old works in the area. The projection of this vein remains open for future testing. Historic documents note the production of multi-kilo ounce grades of silver from the historic mine.

10.2.6.9 Gema Vein

The Gema vein system was targeted by four drill holes that tested 250 m of surface mapped strike length. The program intersected quartz veining, which remains open for future drilling at depth and along strike.

10.2.6.10 Las Chispas Vein

Las Chispas Vein southeast extension was targeted by two exploration drill holes on Q1 2023. The program intersected quartz stockwork on the expected targets with the highest-grade assay containing 0.95 gpt Au and 125 gpt Ag.

10.2.6.11 Varela Area

During Q4 2022, three drill holes tested the deep extension of the Varela and Los Sheiks veins and intersected weak quartz veining. No significant gold or silver mineralization was found during this program. Channel samples on the historic workings in these veins have shown high-grade gold and silver mineralization, and it continues to be considered a future exploration target for the Company.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

To date, four types of sample collection programs were conducted on the Las Chispas Operation:

1. Underground and surface sampling as chip samples and (or) channel samples
2. Stockpile/backfill sampling as intact muck from historic draw points and (or) placed or remobilized muck within underground development
3. Drill core sampling as hand-split core or wet saw-cut core
4. Surface stockpile trenching and sampling.

The sample collection approaches being conducted by SilverCrest are described in the following subsections. SilverCrest established a sample processing facility where core samples are logged, bulk density measurements collected, drill core is photographed, sampled, bagged and tagged, and stored on site prior to being transported to the laboratory by SilverCrest staff. Underground chip samples are bagged and tagged at the point of collection and are also stored at the sample processing facility. All coarse reject materials and pulps are stored in a covered building.

11.1 Underground Chip Sample Collection Approach (up to December 2021)

This subsection describes SilverCrest's approach to underground rock sample collection for historic underground workings and newly developed in-vein drifting, which consisted of the following steps:

- Underground continuous chip and channel samples were marked by a geologist, per lithology or mineralization contacts, using spray paint prior to sample collection.
- Samples were collected using a small sledgehammer, a hand maul and chisel, and a small tarp on the floor to collect the chips, or a power saw for channelling.
- Samples were collected and placed into clear plastic sample bags with a sample tab, secured with a zip tie, labelled, and stored in the semi-secure core storage facility at Las Chispas prior to being transported to ALS Chemex Hermosillo or the Bureau Veritas Minerals Laboratories (Bureau Veritas), also located in Hermosillo.
- Samples were collected along development ribs as longitudinal samples, along backs and overhead stope pillars as transverse samples, and along some crosscuts as transverse samples. The SilverCrest collection program was eventually modified to allow identification of each sample type in the geological database.
- For the historic workings, SilverCrest initiated a follow-up program to collect duplicate and new samples using a power saw to cut a channel along the initial chip path. Saw-cut samples were collected at approximately every five to eight samples, depending on access.
- Each sample path was labelled with a sample number written on a piece of flagging tape, which was anchored to the development wall.
- SilverCrest's senior geologist and exploration manager conducted a follow-up review of the sampling program to ensure that all development drifts near the mineralization zone were sampled, that transverse samples were properly collected across veins, and that the samples were clearly and properly labelled.

11.2 Underground Muck/Stockpile Sample Collection Approach (up to December 2021)

Underground muck and (or) stockpile sample collection steps consisted of:

- Samples were collected at random within the existing historic muck and material stockpiles in the Las Chispas, William Tell, and Babicanora workings.
- The average mass of the samples collected was approximately 4 kg.
- Sample spacing along continuous muck piles was approximately 10 m, suggesting that each sample could represent approximately 20 t to 40 t of material, depending on the size of the pile.
- Sample collection was completed by hand or shovel, from near surface material, as non-selective collection to represent both the fine and coarse fragment portions of the muck piles.
- The muck samples were then collected and placed into clear plastic sample bags with a sample tab, secured with a zip tie, labelled, and stored in the semi-secure core storage facility at Las Chispas prior to being transported to ALS Chemex, Hermosillo.
- SilverCrest's senior geologist and Vice President of Exploration and Technical Services conducted a follow-up review of the sampling program to ensure all appropriate muck piles were sampled and the samples clearly and properly labelled.

11.3 Drill Core Sample Collection Approach

This subsection describes SilverCrest's approach to drill core sample collection which consisted of the following steps:

- Project geologists logged the drill holes, and the senior geologist reviewed the logs.
- For a newly discovered vein, the first 10 drill holes were completely sampled. Additional drill holes could be entirely sampled, if such sampling was needed to establish an understanding of geology and mineralization.
- Sample intervals were laid out for mineralization, veining, and structure. Approximately 10 m before and after each mineralization zone was included in the sampling intervals. A minimum of 0.5 m sample lengths of mineralized material was taken up to a maximum of 3 m in non-mineralization rock.
- Each sample interval was either split using a hand splitter or cut using a wet core saw, perpendicular to veining, where possible, to leave representative core in the box and to reduce any potential bias in the sampled mineralization submitted with the sample.
- Half of the core was placed into clear plastic sample bags with a sample tab, secured with a zip tie, labelled, and stored in the semi-secure core storage facility at Las Chispas before being transported to ALS Chemex Hermosillo.
- SilverCrest's senior geologist and vice president of exploration and technical services conducted a follow-up review of the core sampling program to ensure that each core sample was properly split/cut, that the sample intervals were clearly marked, that representative core samples remain in the core box, and that sample tags were stapled to the core boxes in sequential order.

11.4 Bulk Density Determinations

A total of 641 bulk density measurements were collected on site by SilverCrest using the water immersion method. Core fragments >5 cm in length were dried and weighed prior to being suspended and submerged from a scale in a bucket of water using a wire basket. The measurements tested various mineralized and unmineralized material types at approximately 20 m downhole intervals. Where rock material was highly fragmented or strongly clay altered, samples were not collected. The bulk density ranged from 1.53 to 4.02 t/m^3 with a mean value of 2.52 t/m^3.

Seventy-two (72) samples were tested by ALS Chemex. Hermosillo for wax-coated bulk density to validate the on-site measurements. The samples were collected from non-mineralization hangingwall and footwall materials, and mineralized material free of clay alteration. The overall average bulk density was 2.50 t/m^3, with 2.50 t/m^3 and 2.49 t/m^3 for Las Chispas Area and Babicanora Area, respectively.

In November 2018, two (2) samples were collected and sent by SilverCrest to Geotecnia del Noroeste S.A. de C.V. based in Hermosillo, Sonora, for wax coated dry bulk density testing. Each sample was split into two (2) subsamples. The measured values ranged from 2.48 t/m^3 to 2.60 t/m^3, with an average dry bulk density of 2.56 t/m^3.

A uniform mean bulk density of 2.55 t/m^3 was applied to all rock types in the Mineral Resource Estimate based on the results of the bulk density test work completed above by SilverCrest and two laboratories.

A total of 21 independent verification samples were collected by the P&E site visit QP during a March 2022 site visit to the Property, and the bulk density of all samples was measured by water displacement method at ALS in Hermosillo. A comparison between the Company's database results and P&E's independent verification samples analyzed at ALS is given in Table 11-1. The QP considers there is acceptable correlation between the data collected by SilverCrest and P&E.

Table 11-1: Summary of Bulk Density Measurements at Las Chispas Operation

Measurements Collected By	No. of Samples	Minimum Value	Maximum Value	Mean Value
Sil/Onsite	641	1.53	4.02	2.52
SIL/ALS Hermosillo	72	-	-	2.50
SIL/Geotécnica del Noroeste S.A. Hermosillo	2	2.48	2.60	2.56
P&E/ALS Hermosillo	32	2.31	2.81	2.49

11.5 Sample Analytical Methods

All assays were completed by ALS Chemex Hermosillo, ALS Chemex Vancouver, BC, Canada, and Bureau Veritas, Hermosillo.

11.5.1 ALS Chemex Laboratories and Bureau Veritas

ALS Chemex has developed and implemented strategically designed processes and a global quality management system at each of its locations that meets all requirements of International Standards ISO/IEC 17025:2017 and ISO 9001:2015. All ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures.

Bureau Veritas is a leading provider of laboratory testing, inspection, and certification, operating in 1,430 offices and laboratories in 140 countries. Bureau Veritas is ISO 9001 compliant and, for selected methods, ISO 17025 compliant and has an extensive Quality Assurance/Quality Control (QA/QC, or QC) program to ensure that clients receive consistently high-quality data. Both ALS Chemex and Bureau Veritas are independent of SilverCrest.

SilverCrest personnel delivered all the samples collected from the Las Chispas site to either ALS Chemex, Hermosillo or Bureau Veritas, Hermosillo. Standard analytical procedures were as follows:

All samples were received, registered, and dried:

- All samples were crushed to 75% (ALS Chemex, Hermosillo) or 70% (Bureau Veritas) <2 mm, then mixed and split with a riffle splitter.
- A split from all samples were then pulverized to 80% (ALS Chemex, Hermosillo) or 85% (Bureau Veritas) <75 µm.
- All pulverized splits were submitted for multi-element aqua regia digestion with inductively coupled plasma (ICP)-mass spectrometry (MS) detection.
- All pulverized splits were submitted for gold fire assay fusion with atomic absorption spectroscopy (AAS) detection (30 g).

Silver analyses were conducted per the following criteria:

- Samples returning grades above the upper detection limit of >100 gpt silver from ICP analysis were re-run using aqua regia digestion and ICP-atomic emission spectroscopy (AES) detection, and diluted to account for grade detection limits (<1,500 gpt).
- Where silver grades were ≥1,500 gpt Ag, the sample was re-run using fire assay fusion (FA) with gravimetric detection.

Gold analyses were conducted per the following criteria:

- During Phase I (March 2016 to October 2016), all samples were analyzed for gold by 30 g fire assay with AAS detection.
- During Phase II (October 2016 to February 2018), samples were analyzed by ICP-MS. Where gold values were >1 gpt Au, the samples were re-run using FA with gravimetric detection, and where gold values were >10 gpt Au, the samples were re-run using 30 g FA with AAS detection.
- During Phase III (February 2018 to February 2019), selective metallic screen analysis was completed at SGS Durango.
- During Extended Phase III (February 2019 to October 2020), gold and silver were analyzed using 30 g FA with gravimetric finish.
- For the definition and exploration drilling undertaken from October 2020 to June 2022, gold was analyzed using 30 g FA with gravimetric finish.
- Samples returning grades of >10,000 ppm of zinc, lead, or copper from ICP-MS analysis were re-run using aqua regia digestion with ICP-AES finish.

11.5.2 SGS (Arizpe)

SGS entered into Agreement with SGS de Mexico S.A. de C.V, a subsidiary of the global SGS SA, to construct and operate a sample preparation and analytical laboratory in the nearby community of Arzipe, Mexico. The facility commenced operations and receiving grade control samples from Las Chispas in April, 2022. When fully certified, the laboratory will serve as the primary analytical facility to support production and exploration activities.

SilverCrest delivered all samples collected from underground mine as channels, chips, or mucks to the SGS Arizpe facility and prepared as follows:

- All samples were received, registered, dried at 105°C, and weighed.
- All samples were crushed to 75% <2 mm, homogenized and a 500 g split generated with a riffle splitter.
- The 500 g split was pulverized to ≥85% <75µm (the "primary pulp").

Only channel samples collected from underground ore development headings were submitted for 34 element trace analysis, using the following:

- A 1 g split was collected from the primary pulp and dissolved with Aqua Regia at a 3:1 ratio.
- The solution was analyzed using ICP-OES.
- Overlimits analysis using ICP-OES was conducted on samples containing Cu, Pb, Zn in excess of 10,000 ppm.

All samples collected from the underground were submitted for gold and silver analysis by Fire Assay and Atomic Absorption Spectrometry (AAS), using the following method (GO_FAG37V):

- A 30 g split was collected from the primary pulp and fused with lead oxide flux at 1100°C any gold or silver in the sample was extracted into a lead button
- The lead was removed by cupellation, resulting in a gold and silver bead.
- The doré bead was then dissolved with HCl and HNO3.
- The solution was analyzed using AAS for:
  - Au with a lower detection limit of 0.01 gpt, and upper limit of 100 gpt
  - Ag with a lower detection limit of 10 gpt.

Samples exceeding 100 gpt Au were then tested using by Fire Assay and Gravimetric measurement, using the following method (GO_FAG33V):

- A 30 g split was collected from the primary pulp and fused with lead oxide flux at 1100°C any gold or silver in the sample was extracted into a lead button.
- The lead was removed by cupellation, resulting in a gold and silver bead.
- The doré bead was dried then weighed with a micro balance.
- The doré bead was dissolved with HCl and HNO3.
- The residual solid gold was dried and measured by micro balance using the gravimetric method with a lower detection limit of 0.5 gpt.
- Silver determined by difference in mass, with a lower detection limit of 10 gpt.

11.6 SilverCrest Internal QA/QC Approach

Descriptions of the QA/QC protocol for Phases I through III programs (Sections 11.6.1 through 11.6.3) have been summarized from Barr (2018) and Barr and Huang (2019). The QP has reviewed the QA/QC data for all three of these phases of drilling and concurs with the following assessment.

11.6.1 Phase I QA/QC Program

At the exploration stage, SilverCrest implemented a program of certified reference material (CRM or standards), blank sample insertions for all sample types being collected, and duplicate samples for some underground chip samples.

For review and assurance of analytical accuracy in the lab, CRMs are inserted at an interval of 1:50. The CRMs being used by SilverCrest are CDN-ME-1312 and CDN-ME-1409. A total of 99 CRM samples were reviewed by the QP, as was a scatter plot showing the analytical results for the CRMs plotted in relation to their referenced error of two standard deviations.

For monitoring of in situ contamination or contamination of sample crushing, grinding and sorting equipment, SilverCrest inserted a benign rock sample at an interval of 1:50. The material used for blanks was collected from a nearby silica cap. A total of 101 blank insertions were noted in the database and results were reviewed by the QP. Of these, only one is located adjacent to a sample with >50 gpt Ag.

11.6.2 Phase II QA/QC Program

During the Phase II program, SilverCrest implemented a program of CRM and blank sample insertions for all sample types being collected, and duplicate samples for some underground chip samples, core pulps, and coarse rejects.

11.6.2.1 Certified Reference Standards

Commercial standards in 1 kg plastic bottles were sourced from CDN Resource Laboratories Ltd. (CDN Labs). The CRM material is selected to contain Ag/Au grades and a matrix that is consistent with the grades of the known mineralization and similar lithology to the host rocks. At the Las Chispas Operation's core logging facility, 70 g of the reference material are weighed, placed in a paper envelope, and added to the sample stream as directed by the field geologists. Insertion frequency of the standards is approximately 1:50 samples.

A total of 612 standards were inserted into the sample stream during this phase of drilling. Each standard and corresponding sample number were recorded in a QA/QC sample tracking spreadsheet.

A CRM failure is defined by receipt of a standard >3 deviations (SD) above or below the expected value in either gold or silver. In cases where the standard failures occurred in "non-mineralization" rock (generally in zones returning <0.1 gpt Au or <5 gpt Ag), no action is taken. The protocol for re-assaying the standard failures is to re-analyse the pulps within a range of 10 samples above and 10 samples below the failed standard.

11.6.2.2 Assay Confirmation and Re-analysis

Assessment of the CRM performance concluded that CDN-ME-1301 had a significant number of failures (47%). Whereas CDN-ME-1505 and CDN-ME-1312 had relatively fewer failures. CDN-ME-1601 had a high failure rate, but with a statistically insignificant population. A total of 16 batches (including 306 samples) that were identified as having potential error due to performance of the CRMs. CDN-ME-1301 and CDN-ME-1505 were re-submitted to ALS using coarse reject materials. New reference standard sample material was added at the lab by a SilverCrest geologist. At the time of the re-runs, CDN Labs Ltd., had run out of CDN-ME-1301, so CDN-ME-1601 was used instead, as the Ag/Au values are similar.

Comparison of the re-analyses and the original gold and silver assay grades were completed using a relative percent difference (RPD) and scatterplot approach. This approach was selected to assess whether the assays reproduced with a reliable precision and to identify whether high RPD values were associated with high- or low-grade ranges. Since the re-analyses were conducted using coarse reject material, the expected performance threshold would be 90% of the samples with <20% RPD. The results of the analysis indicate that approximately 81% of silver assays and 63% of gold assays reproduced with <20% RPD. It is noted, however, that the sample pairs with anomalous RPD values are in the low-grade range where Ag <45 gpt and Au <0.65 gpt.

A total of 16 CRMs were inserted with the batch re-analyses. CRM performance results show that there were no failures with CRM ME-1505 and 40% failure rate of CRM ME-1601, consistent with the original analyses. The results suggest that analytical method during the fire assay fluxing process may affect the results. However, the error may be produced during the manual preparation of the CRM for sample insertion. To resolve the homogeneity issue, the standards are now ordered pre-packaged.

11.6.2.3 Blanks

For monitoring of in situ contamination or contamination of sample crushing, grinding, and sorting equipment, SilverCrest is inserting ~1 kg of non-mineralization rock samples at a sample interval of 1:50. The material being used for blanks is collected from a nearby silica cap and the particle size is >2 cm. Blanks were inserted both randomly and at the end of suspected mineralization intervals to check for contamination carry-over between samples.

The failure threshold for the blanks is five (5) times the detection limits of the analytical method, 25 gpt Ag and 0.25 gpt Au for fire assay (gravimetric). A total of 555 blank samples were inserted during the drill program. Blank failures are indicated by returning results >5 times the detection limit. No evidence of sample contamination was observed on review of the analytical results.

11.6.2.4 Duplicate Program

A total of 126 duplicate samples were collected for assessment of sample analytical precision. The samples were collected from drill core (n = 38), underground channel samples (n = 56), and surface stockpile samples (n = 32). Sample rejects were first homogenized, and a subsample was prepared from a 250 g split. This subsample split was then pulverized and both pulp duplicates (analytical duplicates) selected from this split. This method of duplicate preparation allows for assessment of sample preparation at the reject stage (comparison of original assay with assay from the new coarse reject split), in addition to assessment of sample preparation at the pulp stage by comparing the two new pulp splits.

The duplicate sample pairs were assessed using RPD and scatterplot methods. This approach was selected to assess whether the assays reproduced with a reliable precision and to identify whether high RPD values were associated with high- or low-grade ranges. The expected performance threshold for duplicate re-analysis using coarse reject material would be 90% of the samples with <20% RPD, and for pulp materials would be 90% of the samples with <10% RPD. The results of the analysis indicate that Ag duplicate analysis reproduce successfully above the 90% threshold for both coarse reject and pulp samples. Where the Au duplicate analysis indicated that only 81% of the coarse rejects had RPD of <20%, and only 63% of pulps had <10% which did not meet the expected threshold. Sample pairs with anomalous RPD values are in the low-grade range, where Ag is <45 gpt and Au <0.65 gpt.

11.6.3 Phase III QA/QC Program

11.6.3.1 Certified Reference Standards

Commercial standards in 1 kg plastic bottles were sourced from CDN Labs. The CRM was selected to contain gold/silver grades, a matrix consistent with the grades of the known mineralization, and lithology similar to the host rocks. At the Las Chispas Operation's core logging facility, approximately 100 g of reference material is weighed, placed in a paper envelope, and added to the sample stream as directed by the field geologists. These samples are used to test the precision and accuracy of both gold and silver assays and to monitor the consistency of the laboratory's performance. Insertion frequency of the standards is approximately one in every 50 samples (2.9%).

A total of 389 standards were inserted into the sample stream during this phase of drilling. Each standard and corresponding sample number were recorded in a QA/QC sample tracking spreadsheet. Standard results >2 SD and <3 SD are flagged for review.

A CRM failure is defined by receipt of analytical results for a standard that is >3 SD above or below the expected value of either gold or silver. The protocol for re-assaying the standard failures is to re-analyse the pulps within a range of 10 samples above and 10 samples below the failed standard. In cases where the standard failures occurred in a batch of samples comprised of "non-mineralization" rock (generally in zones returning <0.1 gpt gold or <5 ppm silver), no action is taken.

Assessment of the CRM performance concluded that CDN-ME-1601 had a significant number of failures (33.3% in silver and 25% in gold, respectively), whereas CDN-ME-1505 was (11.1% for silver, 0% for gold). Both standards were used infrequently (combined only 31 samples, or 8% of standard insertions) and provided insufficient data to properly validate overall standard performance. Use of the CRM CDN-ME-1601 was discontinued.

Standard CDN-GS-P4A was the primary standard used during the Phase III drill program. This standard had a failure rate of 14.2% for gold and 1.1% for silver. This is a high failure rate for gold that should be investigated further.

SilverCrest purchases its standards in 1 kg plastic bottles and individual standard packages are prepared on site. This leads to a variety of potential issues with standard performance, including contamination of the standard from dust in the air, contamination from a scoop that is not properly cleaned between samples, and a loss of homogeneity from sample settling within the bottle (especially with regard to gold). Purchasing pre-packaged 100 g standards from the standard providing laboratory would help resolve these issues.

It is also worth noting that the gold value of CDN-GS-P4A is 0.738 gpt, which is much lower than the average grade of mineralized material at Las Chispas. Using multiple standards covering a range of gold values, including overlimit values, would provide a more robust QA/QC database.

11.6.3.2 Blanks

To monitor for contamination or contamination of sample crushing, grinding, and sorting equipment, SilverCrest inserted a benign rock sample at an interval of one for every 20 samples. The material used for blanks was collected from a nearby silica cap. A total of 644 blank insertions were noted in the database reviewed by the QP.

The failure threshold for the blanks is five (5) times the detection limits of the analytical equipment: 0.25 gpt Au and 25 gpt Ag for the fire assay (gravimetric) method and 1 gpt Ag for the aqua regia (ICP) method. No contamination was identified in the fire assay stream, for high-grade analysis (one gold sample returned a value of 0.23 ppm Au; however, the previous sample was below the detection limit, therefore contamination was not a factor).

Minor contamination could have been observed in the ICP silver analytical stream, where five (5) of the six (6) failing blanks followed high-grade silver samples. However, the overall failure rate of 1.4% is not considered to indicate any systematic contamination issues.

11.6.3.3 Duplicate Program

A routine duplicate sampling program has not been conducted as part of the Phase III program.

11.6.4 Extended Phase III QA/QC Program

11.6.4.1 Certified Reference Materials

CRMs in 1 kg plastic bottles were sourced from CDN Labs. The CRMs were selected to contain silver/gold grades, a matrix consistent with the grades of the known mineralization, and a similar host rock lithology to the host rocks in the Las Chispas Operation area. At the drill core logging facility, approximately 100 g of a CRM was weighed, placed in a paper envelope, and added to the sample stream as directed by the field geologists. These samples were used to test the precision and accuracy of both gold and silver assays and to monitor the consistency of the laboratory's performance. The CRM insertion frequency was approximately one to every 43 samples (2.3%).

A total of 81,262 drill core samples were analyzed during the Extended Phase III program. A total of 1,869 CRMs were inserted into the sample stream during this phase of drilling. Each CRM and corresponding sample number were recorded in a QA/QC sample tracking spreadsheet. Results >2 SD and <3 SD were flagged as 'cautionary for review'.

A CRM failure was defined by receipt of analytical results for a CRM that were >3 SD above or below the expected value in either gold or silver. The protocol for re-assaying the CRM failures was to re-analyse the pulps within a range of 10 samples above and 10 samples below the failed CRM. In cases where the CRM failures occurred in a batch of samples consisting of "non-mineralized" rock (generally in zones returning <0.1 gpt Au or <5 gpt Ag), no action was taken.

SilverCrest uses multiple standards covering a range of gold and silver grades, including overlimit values, which allows for a more robust assessment of the QA/QC database. The standards used during the Extended Phase III drill program include: CDN-ME-1805 (2.67 gpt Au and 2,236 gpt Ag), CDN-ME-1806 (3.425 gpt Au and 365 gpt Ag), CDN-ME-1901 (7.74 gpt Au and 371 gpt Ag), and CDN-GS-P6A (0.738 gpt Au and 81 gpt Ag). Assessment of the CRM performance concluded that all four (4) CRMs performed reasonably well with an overall failure rate of approximately 3% for both gold and silver. CRMs with the most failures were CDN-ME-1805 for both gold and silver and CDN-GS-P6A for gold only. Both CRMs were used infrequently. CDN-ME-1901, the primary CRM used throughout Extended Phase III, comprised 69% of the CRM data and returned very few failures at a failure rate of 1% for gold and 4% for silver.

11.6.4.2 Blanks

To monitor for contamination or contamination of sample crushing, grinding, and sorting equipment, SilverCrest inserted a non-mineralized rock sample at an interval of one for every 19 samples (5.3%). The material used for blanks was collected from a nearby silica cap. A total of 4,344 blank insertions were observed in the database reviewed by the QP.

The failure threshold for the blanks is 10 times the detection limits of the analytical equipment: that is, 50 gpt Ag and 0.5 gpt Au for the FA (gravimetric) method. No material contamination was identified in the FA stream, and the QP does not consider contamination to be a concern for the Mineral Resource Estimate.

11.6.4.3 Duplicate Program

A routine duplicate sampling program was not conducted as part of the Extended Phase III program.

11.6.5 Phase IV QA/QC Program – Drilling

All samples recovered from diamond drilling were analyzed at the ALS laboratory. The QAQC program used for these samples is summarized below.

11.6.5.1 Certified Reference Materials

CRMs continued to be sourced, selected and utilized in the same manner as described in Section 11.6.4.1. The CRM insertion frequency was approximately one to every 25 samples (4.0%) for the definition drilling samples and approximately one to every 32 samples (3.1%) for the exploration drilling samples.

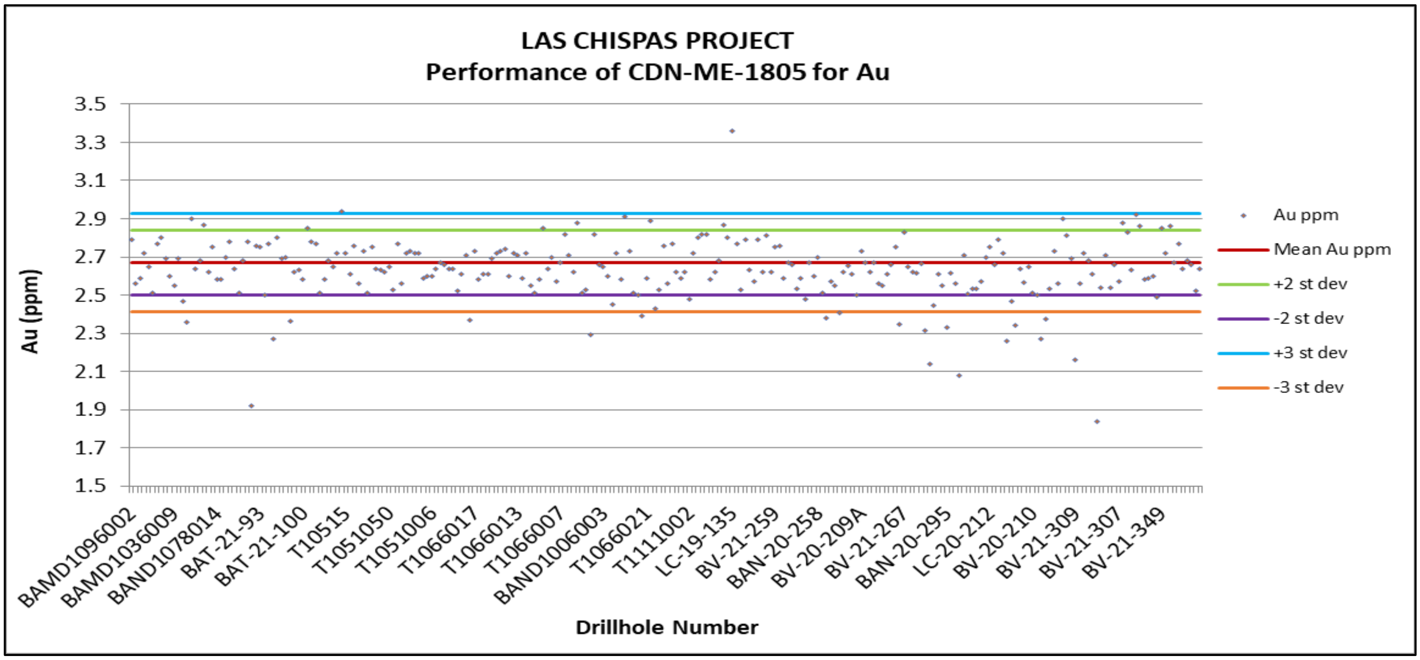
A total of 86,895 drill core samples were analyzed for drilling carried out from January 2020 to June 2022. A total of 2,797 CRMs were inserted into the sample stream during this phase of drilling. Each CRM and corresponding sample number was recorded in a QA/QC sample tracking spreadsheet. Results >2 SD and <3 SD were flagged as cautionary for review.

A CRM failure was defined by receipt of analytical results for a CRM that was >3 SD above or below the expected value in either gold or silver. The protocol for re-assaying the CRM failures was to re-analyse the pulps within a range of 10 samples above and 10 samples below the failed CRM. In cases where the CRM failures occurred in a batch of samples consisting of "non-mineralized" rock (generally in zones returning <0.1 gpt Au or <5 gpt Ag), no action was taken. Table 11-2 shows the CRMs expected values and failure rates. Figure 11-1 to Figure 11-6 chart the results of the CRM performance analysis for sampling conducted from January 2020 to June 2022.

Table 11-2: Standards Expected Au and Ag Values and the Failure Rates for Jan 2020 to Jun 2022 Drilling

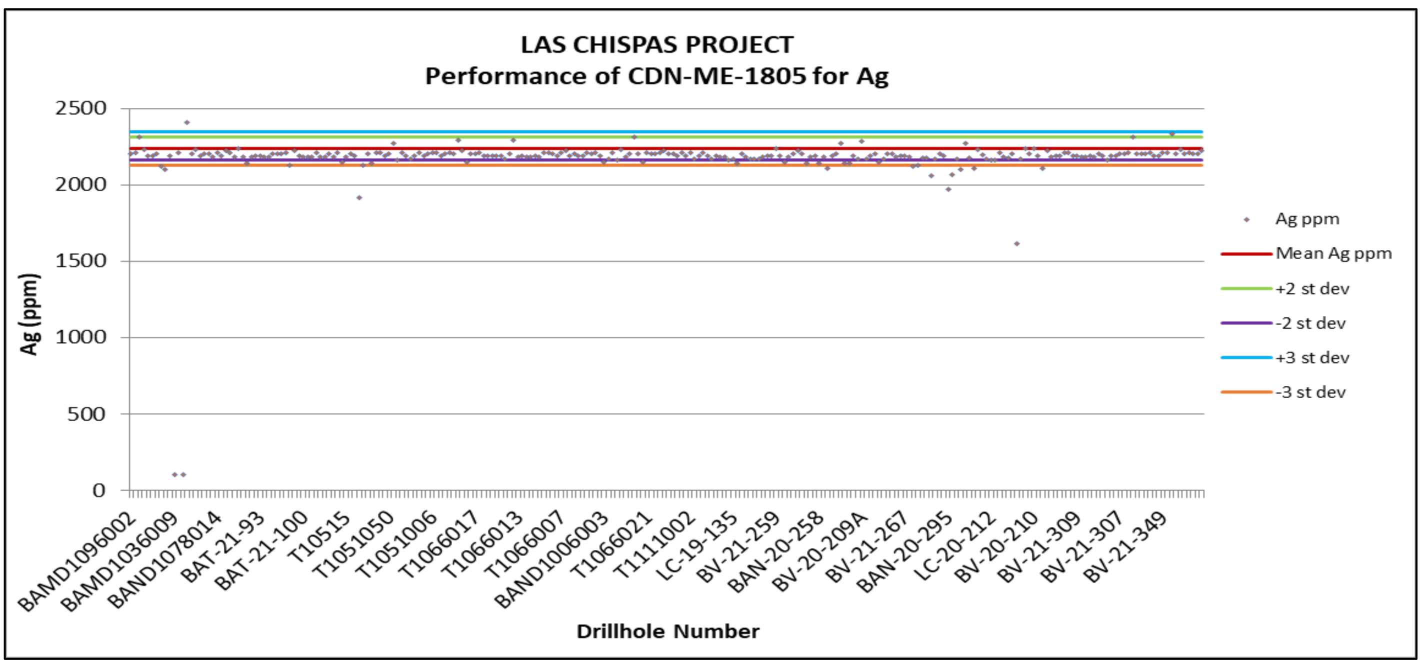
Standards	Expected Au Values, ± 3SD (gpt)	Expected Ag Values, ± 3SD (gpt)	Sent	Au Failures (%)
CDN-ME-1805	2.67, ±0.255	2236, ±111	250	9
CDN-ME-1901	7.74, ±0.975	371, ±27	1749	0.5
CDN-ME-1902	5.38, ±0.63	356, ±28.50	798	3

Figure 11-1: CRM CDN-ME 1805 Analysis, Gold



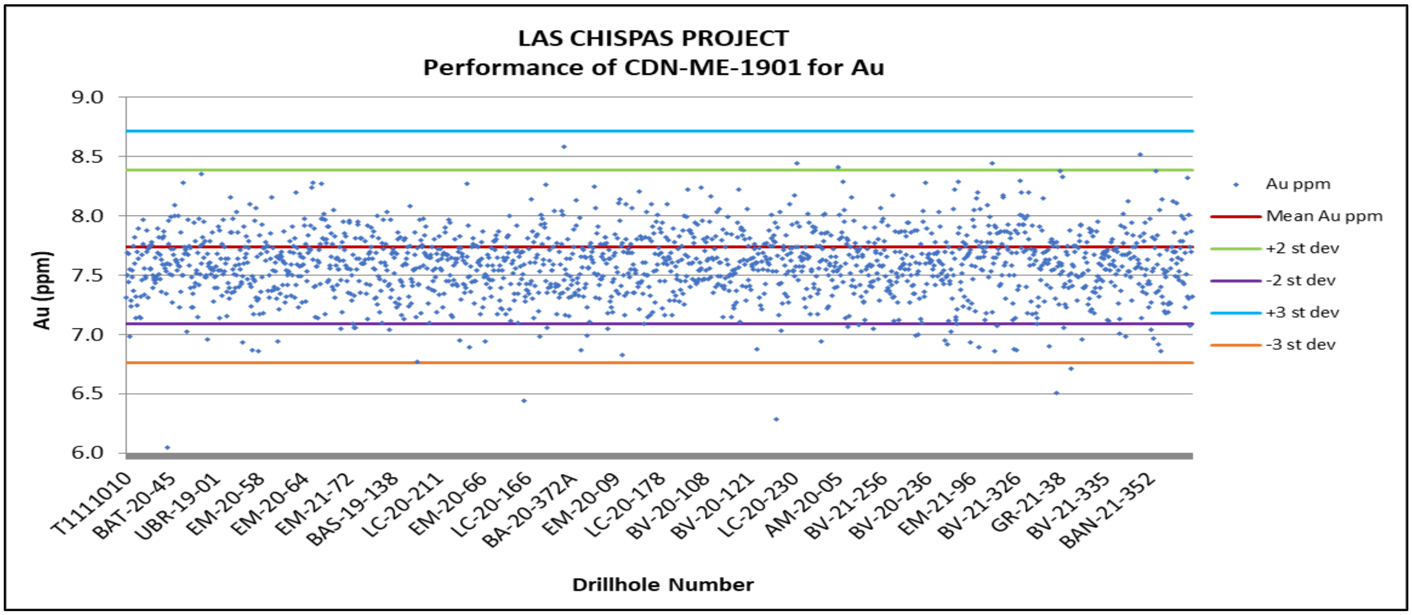
Source: P&E, 2023.

Figure 11-2: CRM CDN-ME-1805 Analysis, Silver



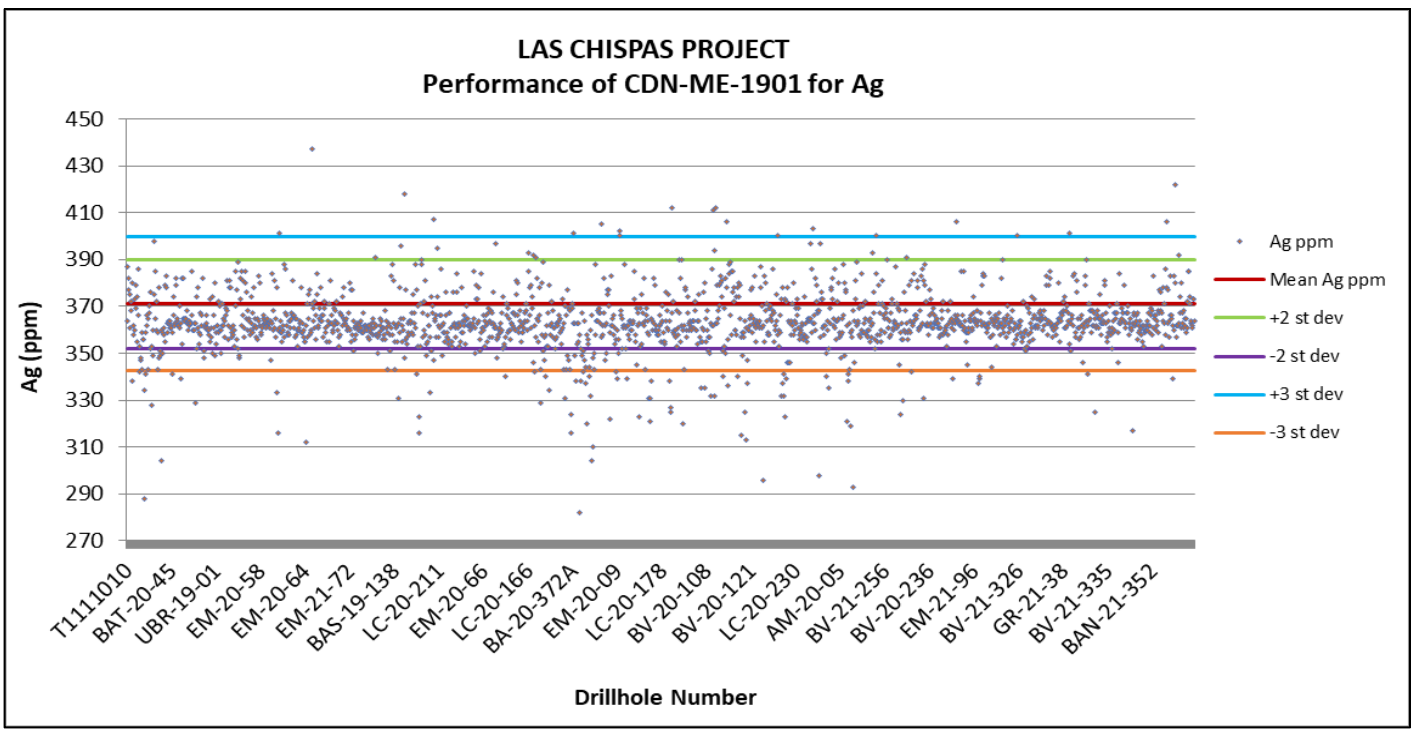
Source: P&E, 2023.

Figure 11-3: CRM CDN-ME 1901 Analysis, Gold



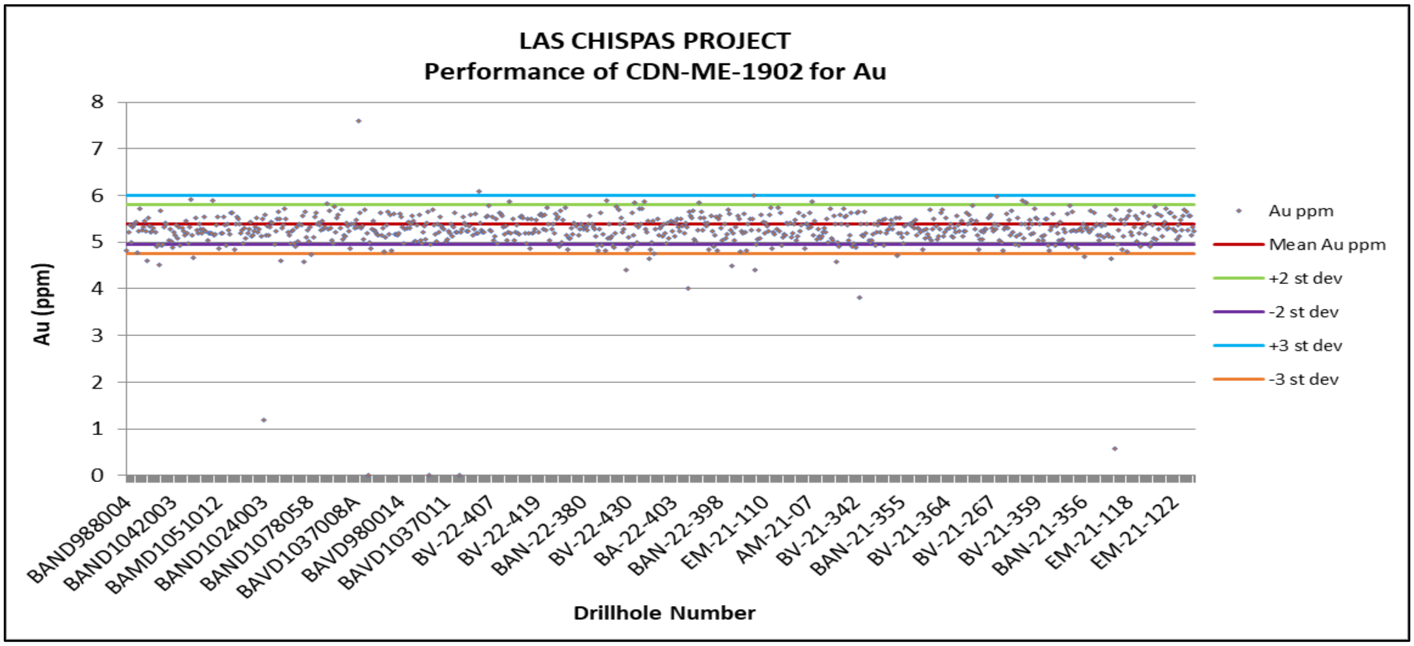
Source: P&E, 2023.

Figure 11-4: CRM CDN-ME-1901 Analysis, Silver



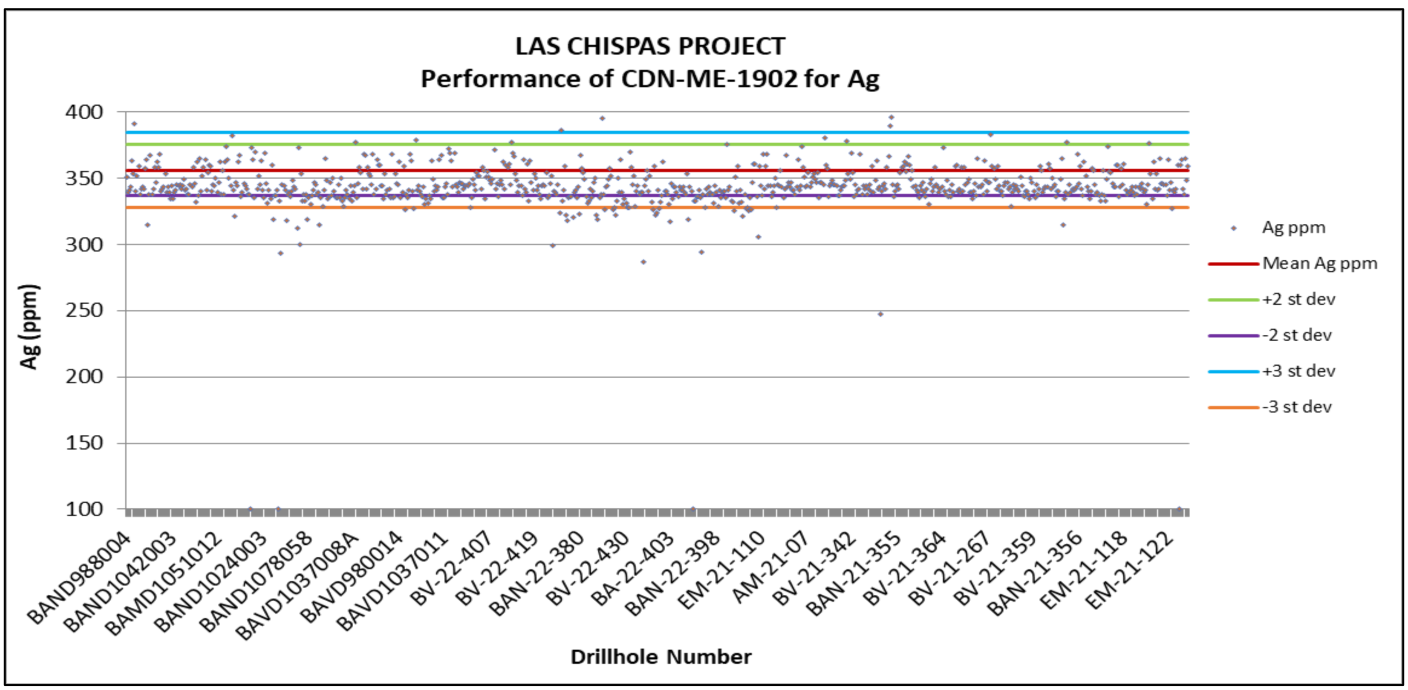
Source: P&E, 2023.

Figure 11-5: CRM STD CDN-ME 1902 Analysis, Gold



Source: P&E, 2023.

Figure 11-6: CRM CDN-ME 1902 Analysis, Silver



Source: P&E, 2023.

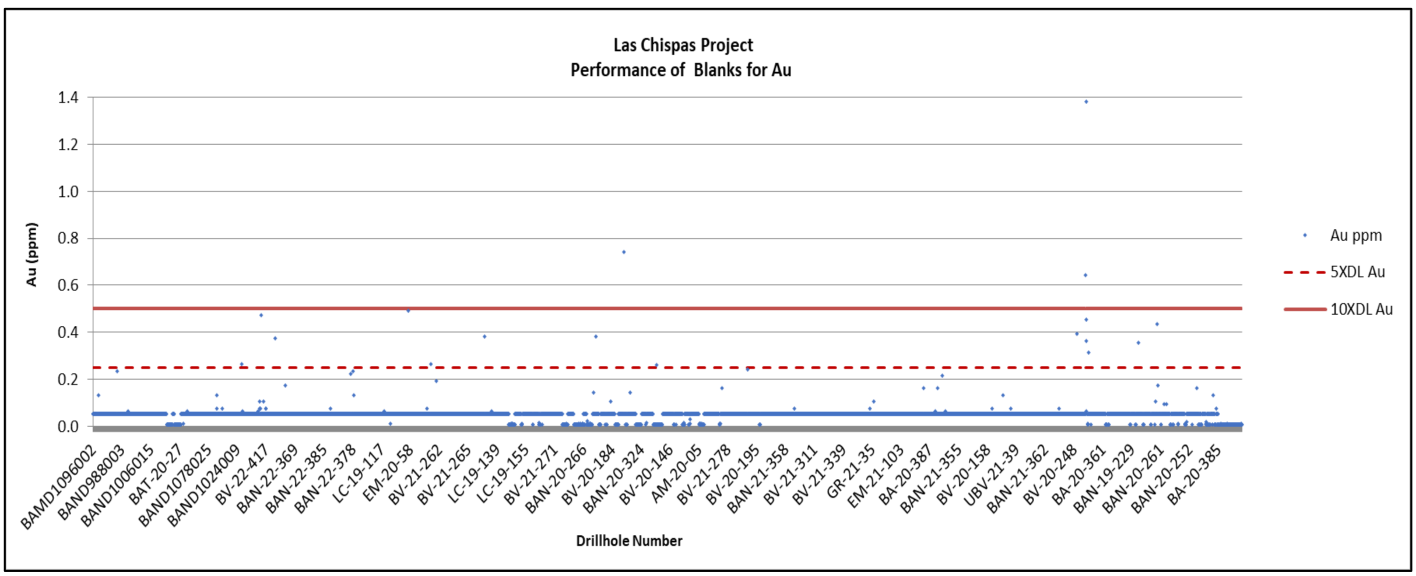
SilverCrest continued to use multiple standards covering a range of gold and silver grades, including overlimit values, allowing for a more robust assessment of the QA/QC database. Assessment of the CRM performance concluded that collectively, all three (3) CRMs performed reasonably, with an overall failure rate of approximately 2% for gold and 6% for silver. The CDN-ME-1805 CRM again recorded the most failures for both gold and silver (refer to Table 11-3); however, this CRM accounts for only 9% of the CRMs inserted during this phase of drilling. The primary CRMs used throughout the most recent phase of drilling, constitute 91% of the total CRM data and returned relatively few failures: a failure rate of 0.5% and 3% for gold and 6% for silver in the CDN-ME-1901 and CDN-ME1902 standards, respectively.

11.6.5.2 Blanks

To monitor for contamination, or contamination of sample crushing, grinding, and sorting equipment, SilverCrest continued to insert a non-mineralized rock sample at an interval of approximately one for every 16 samples (6%). The material used for blanks was collected from a nearby silica cap. Figure 11-7 and Figure 11-8 show the analytical results for the blank samples. A total of 5,654 blank insertions were observed in the database reviewed by the QP.

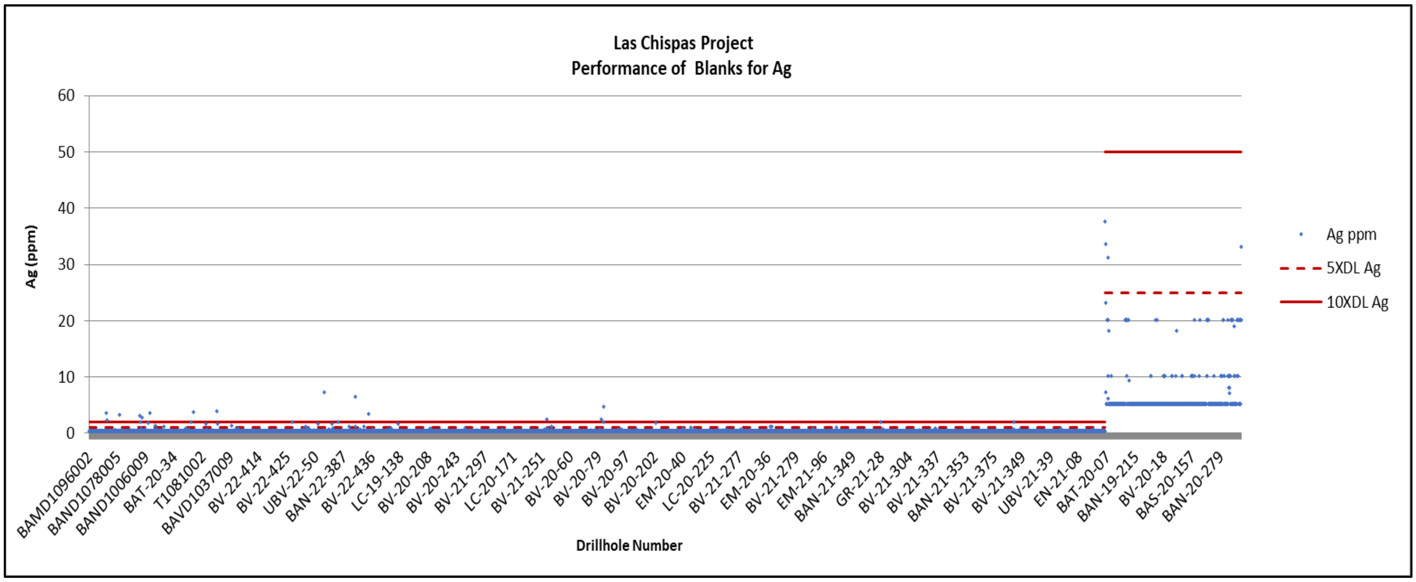
The failure threshold for the blanks is 10 times the detection limits of the analytical equipment. No material contamination was identified in the analytical stream, and the QP does not consider contamination to be a concern for the Mineral Resource Estimate.

Figure 11-7: Analytical Results for Gold Grades from QA/QC Blank Sample Insertions



Source: P&E, 2023.

Figure 11-8: Analytical Results for Gold Grades from QA/QC Blank Sample Insertions



Source: P&E, 2023.

11.6.5.3 Laboratory Duplicates

The QP undertook review of the primary laboratory's internal duplicate pairs for the 2020 and 2021 period. The AU-GRA21 and AG-GRA21 analyses were examined for the available 2020 and 2021 data. There were 3,353 laboratory duplicate pairs for Au and 1,438 for Ag for the 2020 period and 4,009 for Au and 692 for Ag for the 2021 period. Data were scatter graphed and coefficients of determination (R2) and average coefficients of variation (CVAV) were calculated (refer to Table 11-3 for summarized results). Duplicate samples with combined means of <15 times the detection limit of 0.05 ppm Au and 5 ppm Ag were excluded from the CVAV data, where higher grade variations are more likely to occur. Precision was found to be acceptable for all lab data assessed.

Table 11-3: Standards Expected Au and Ag Values and the Failure Rates for Jan 2020 to Jun 2022 Drilling

Year	AU-GRA21		AU-GRA21	
	R^2	CV_{AVE}	R^2	CV_{AVE}
2020	0.9995	6.0	0.9997	3.8
2021	0.9989	6.5	0.9996	2.0

11.6.6 Phase IV QA/QC Program – Underground Channel Samples

While the SGS lab was in process of its ramp up and accreditation processes, SilverCrest implemented a QA/QC program to monitor the quality of the assay results. A summary of this program is described below.

11.6.6.1 CRM

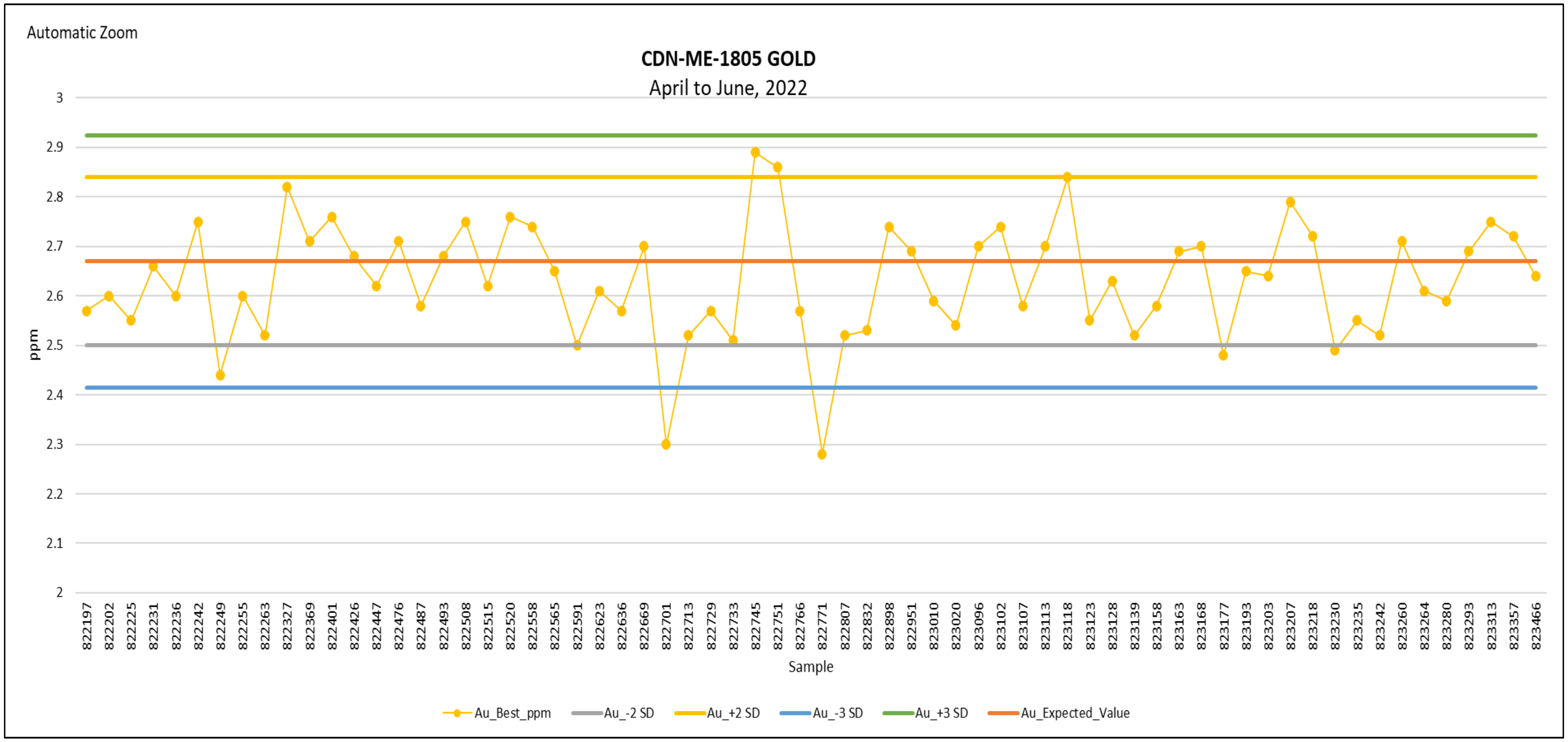
A total of 1,266 samples were sent to the SGS-Arizpe facility between April and June, 2022, including 1,237 face channels and 29 back chip samples. A total of 149 CRMs were inserted into the sample stream at a frequency of approximately 1 CRM per sampled face. Each CRM and corresponding sample number was recorded in a QA/QC sample tracking spreadsheet. Results >2 SD and <3 SD were flagged as cautionary for review.

Table 11-4 shows the CRMs expected values and failure rates. Figure 11-1 through Figure 11-14 chart the results of the CRM performance analysis for sampling conducted from April to June, 2022.

Table 11-4: Standards Expected Au and Ag Values and the Failure Rates for SGS-Arizpe, April to June, 2022

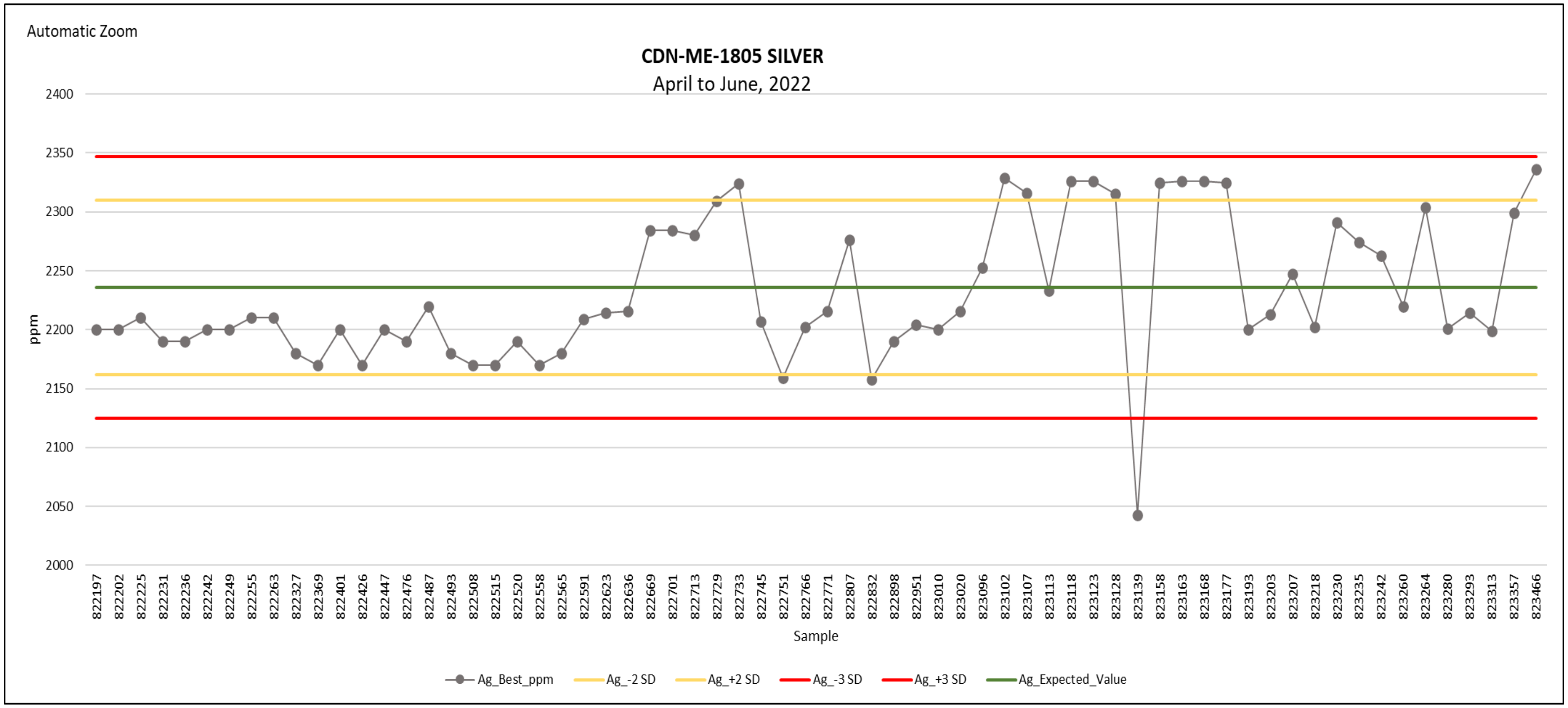
Standards	Expected Au Values, ± 3SD (gpt)	Expected Ag Values, ± 3SD (gpt)	Sent	Au Failures (%)
CDN-ME-1805	2.67, ±0.255	2236, ±111	250	9
CDN-ME-1901	7.74, ±0.975	371, ±27	1749	0.5
CDN-ME-1902	5.38, ±0.63	356, ±28.50	798	3

Figure 11-9: CRM CDN-ME-1805 Analytical Results for Gold



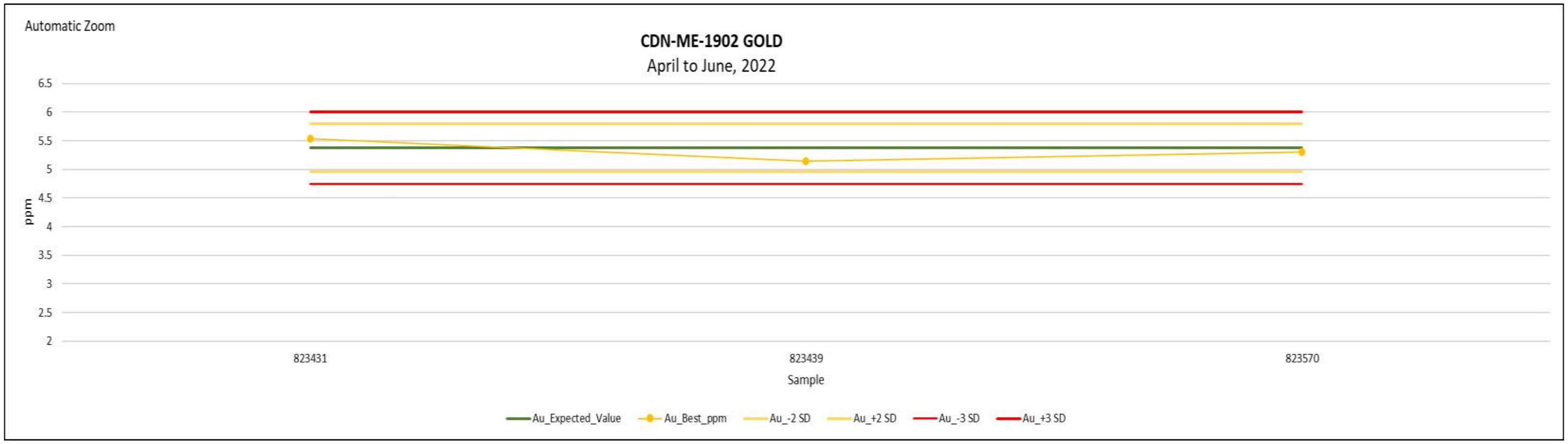
Source: P&E, 2023.

Figure 11-10: CRM CDN-ME-1805 Analytical Results for Silver



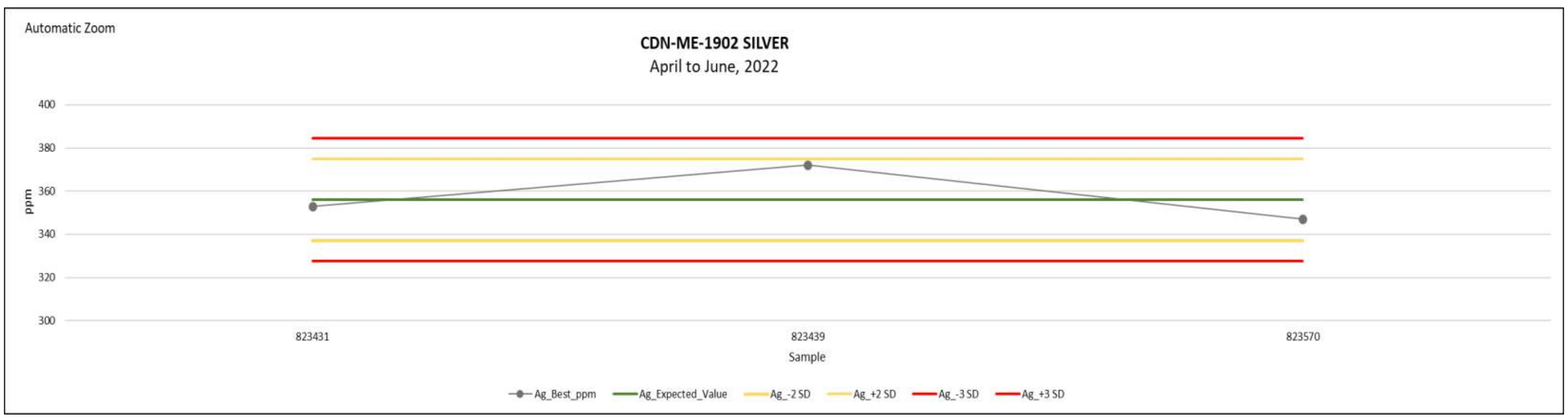
Source: P&E, 2023.

Figure 11-11: CRM CDN-ME-1902 Analytical Results for Gold



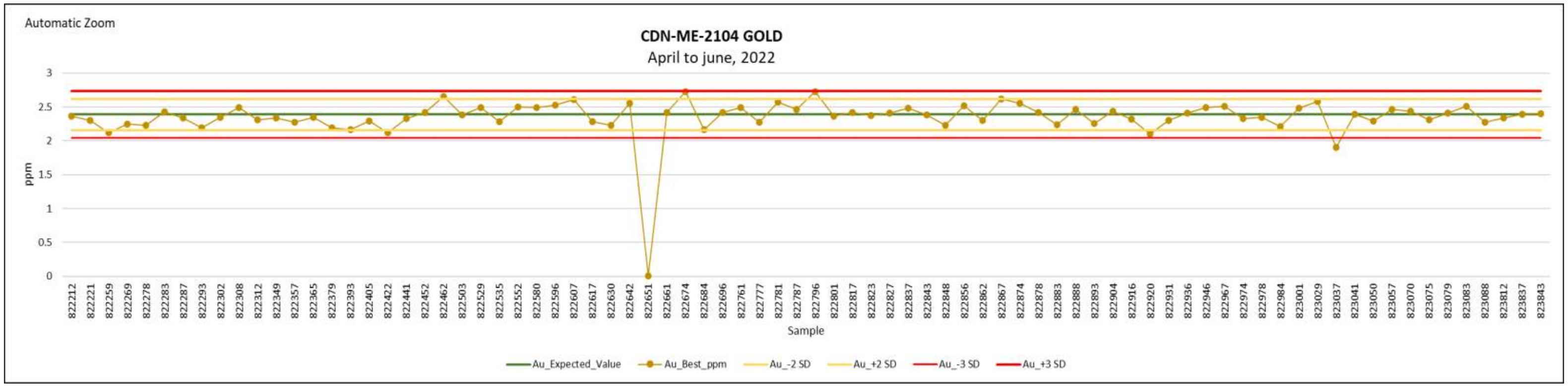
Source: P&E, 2023.

Figure 11-12: CRM CDN-ME-1902 Analytical Results for Silver



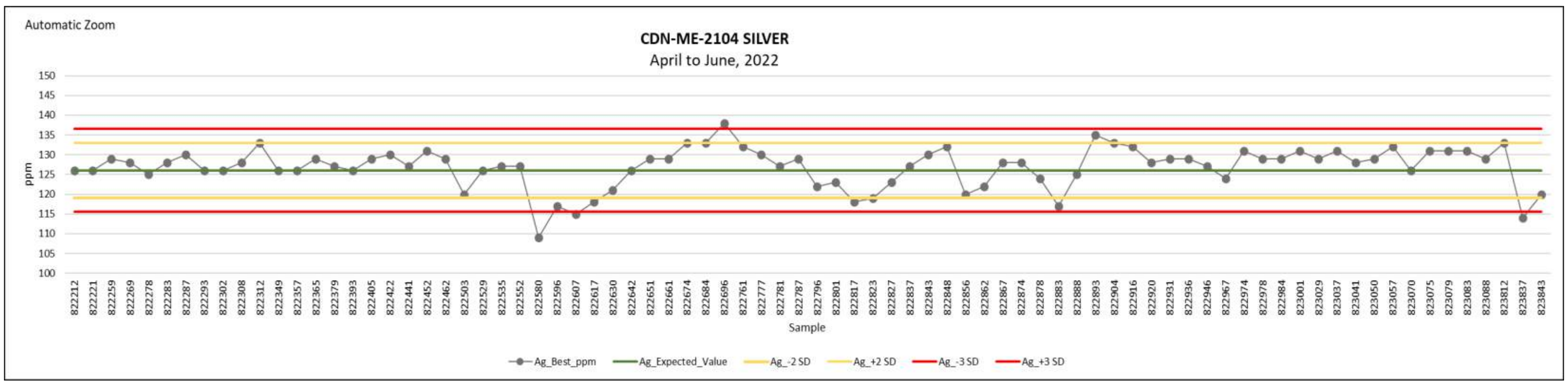
Source: P&E, 2023.

Figure 11-13: CRM CDN-ME-2104 Analytical Results for Gold



Source: P&E, 2023.

Figure 11-14: CRM CDN-ME-2104 Analytical Results for Silver



Source: P&E, 2023.

Three custom CRMs were in process of being prepared using material extracted from the Las Chispas mine. Use of this material will reduce the reliance on other non-matrix matched CRMs and target desired grade ranges.

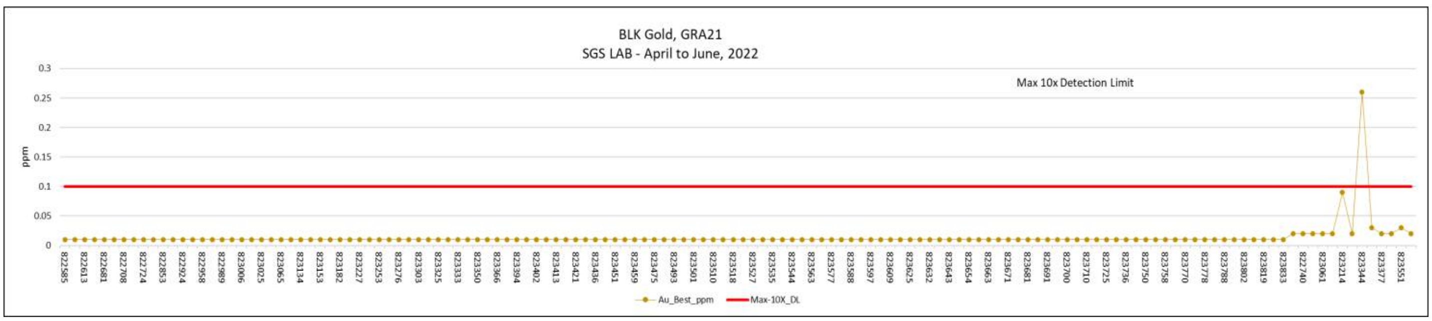
11.6.6.2 Blanks

A total of 166 blanks were sent to SGS as part of the QAQC program at a frequency of approximately 1 blank per sampled face.

Gold

The control showed a 99.9% compliance metric with only 1 of the samples falling outside of the 10x detection limit threshold gold.

Figure 11-15: Blank Analytical Results for Gold

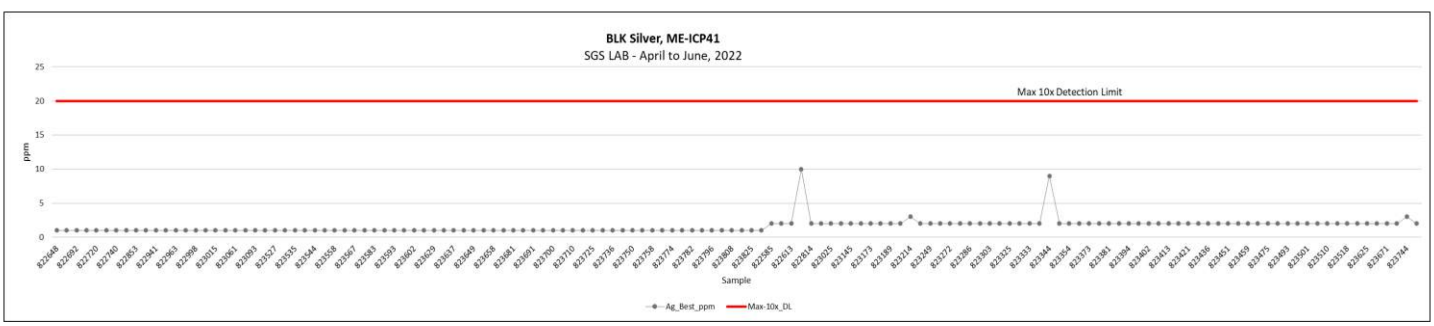


Source: P&E, 2023.

Silver

The control showed a 100% compliance metric with no samples falling outside of the 10x detection limit threshold for silver.

Figure 11-16: Blank Analytical Results for Silver



Source: P&E, 2023.

11.6.6.3 Field Duplicates

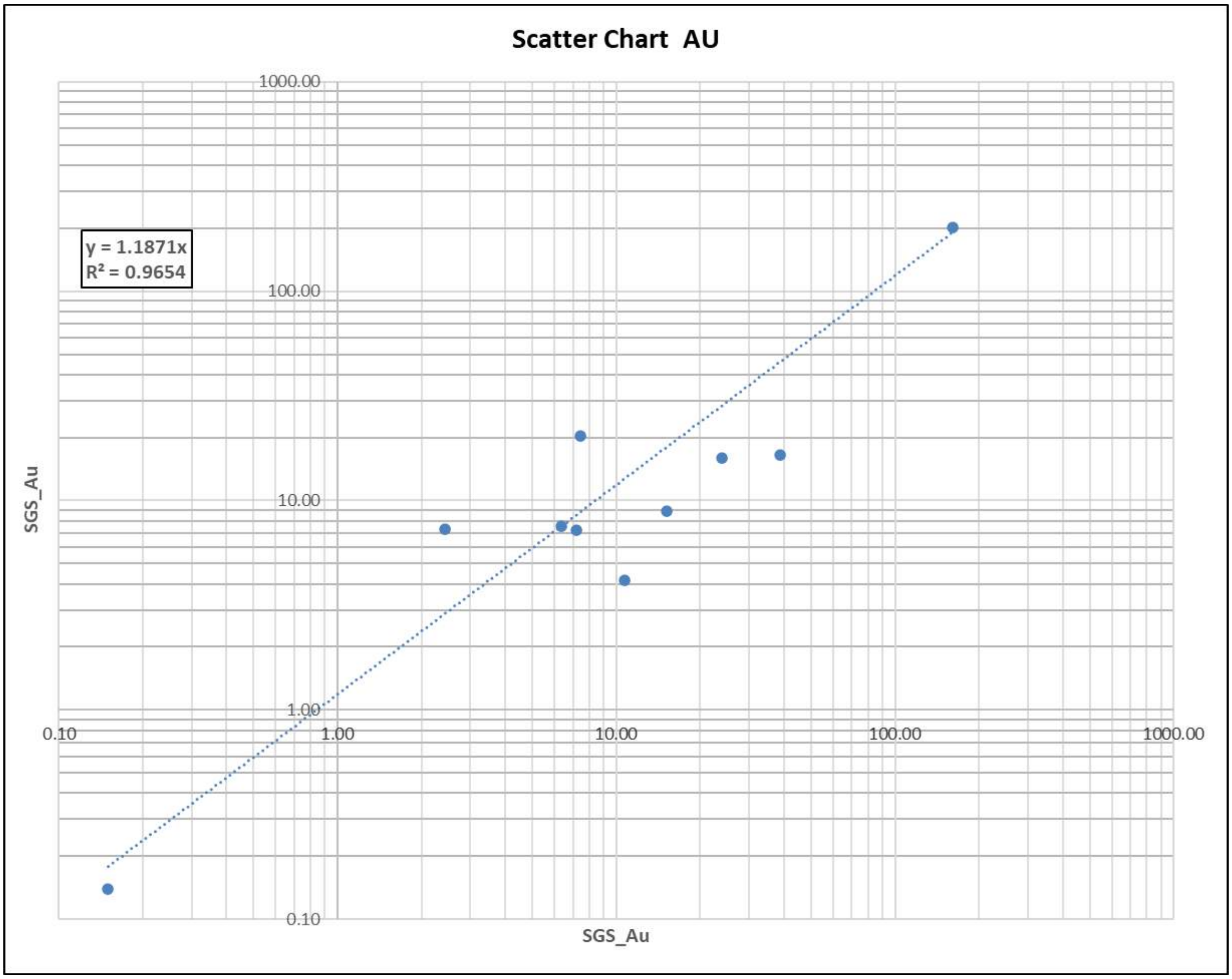
Duplicate samples were collected from ore development headings to test consistency in sampling methodology and to quantify expected error the channel sample assays. A total of 10 field duplicates were collected between April, 2022 and June, 2022, from a secondary channel cut immediately above the high-grade sample in a mapped face.

The assays for duplicate samples were paired with the assay of the primary sample and assessed using half relative difference (HARD) with scatter regression, and half absolute relative difference (HARD) assessment, with target threshold for field duplicates of 90% samples having <60% RPD. The results of the duplicate program are summarized below for gold and silver assays.

Gold

In the graph for the Au assay, 90% of samples have a HARD of 46.7% which is below the target threshold of HARD 60% for field duplicates.

Figure 11-17: Field Duplicate Analytical Results for Gold

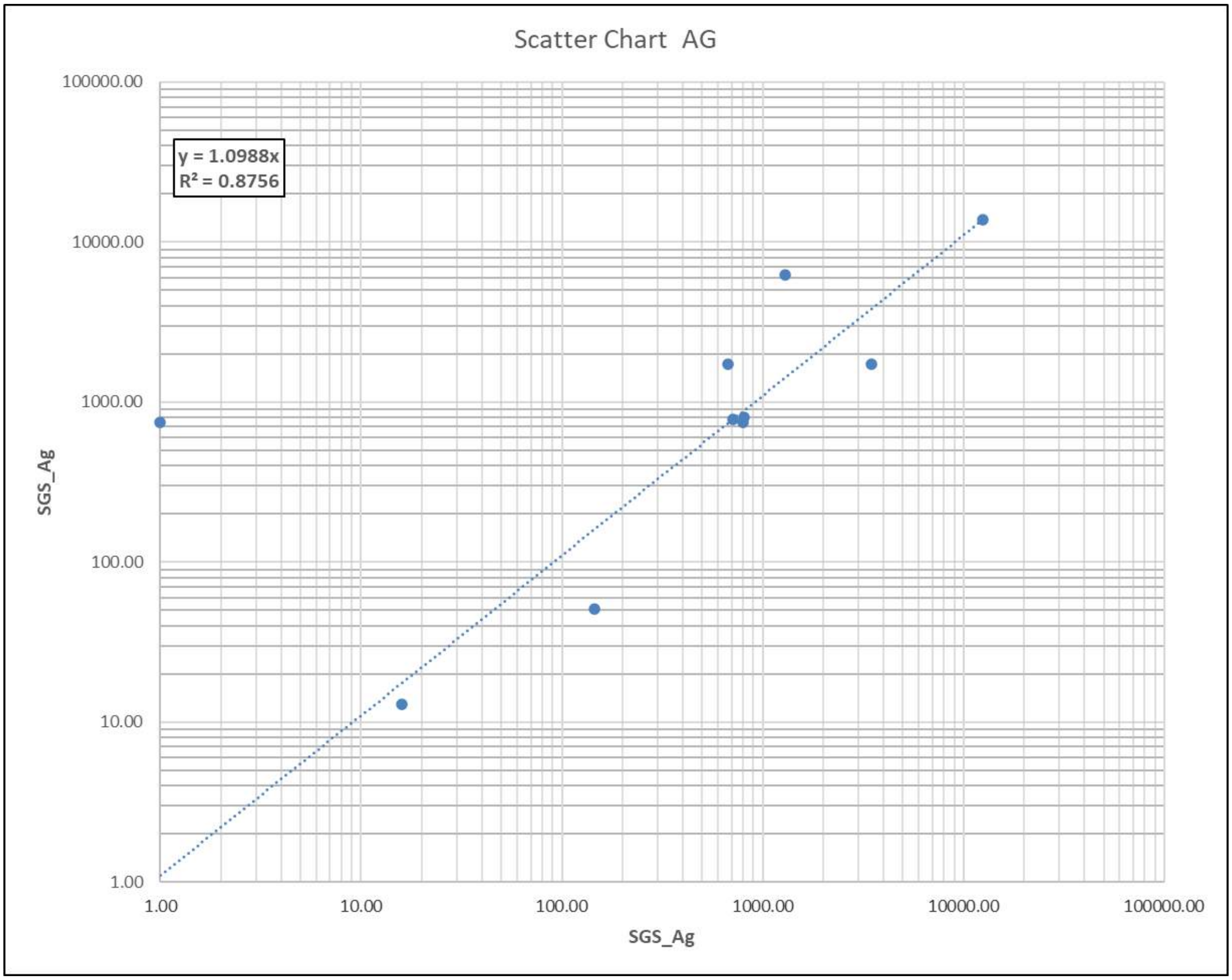


Source: P&E, 2023.

Silver

In the graph for the Ag assay, 90% of samples have a HARD of 65.7% which is above the target threshold of HARD 60% for field duplicates. The paired data have linear regression r-squared correlation value of 0.88.

Figure 11-18: Field Duplicate Analytical Results for Silver



Source: P&E, 2023.

11.6.6.4 Independent Laboratory Duplicates

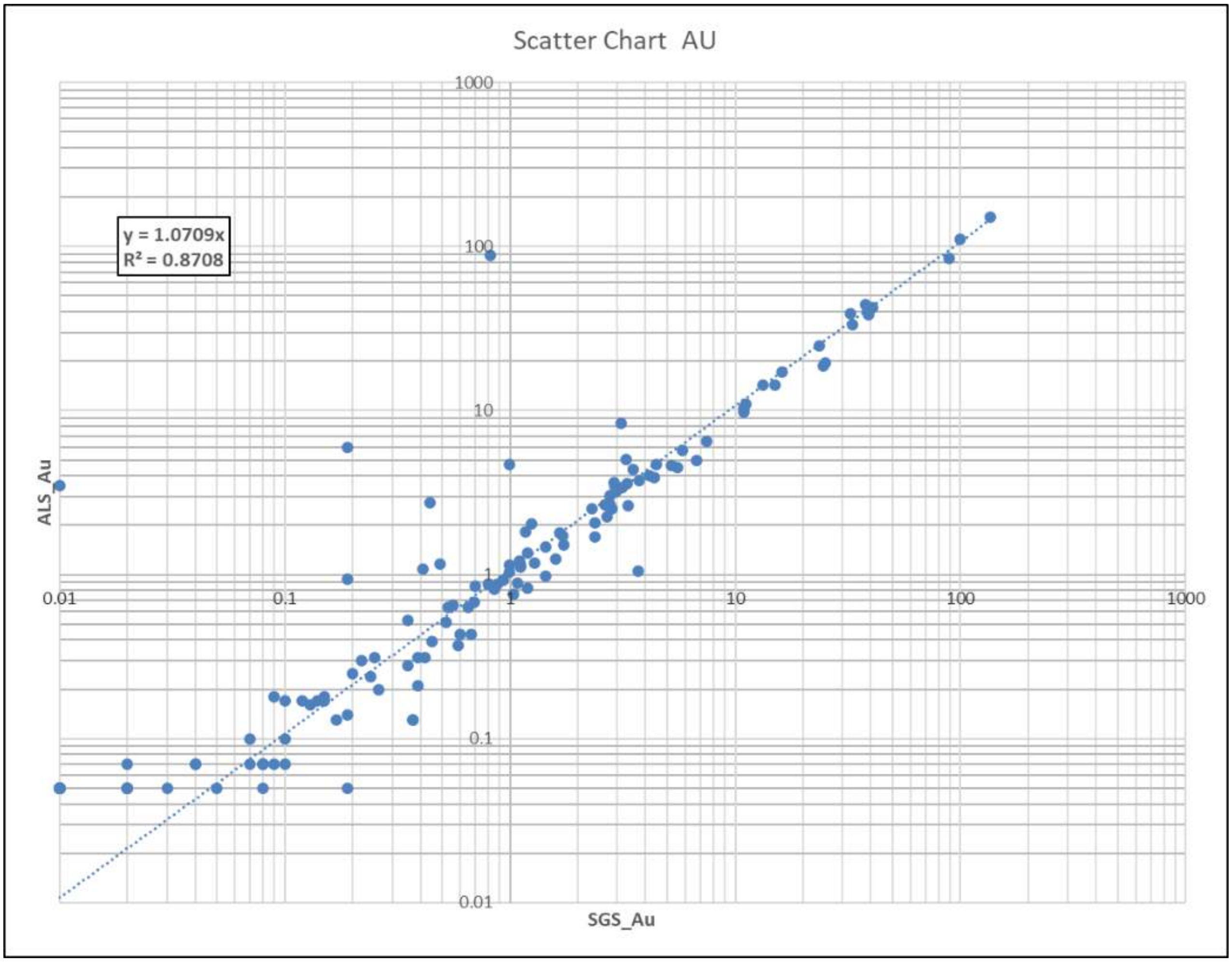
SilverCrest requested that SGS-Arizpe collect 100 g pulverized duplicate splits from coarse rejects at frequency of 1:20 from all samples sent from the Mine Geology team. The duplicate pulps were transported to ALS-Hermosillo by SilverCrest personnel at the end of every month. ALS conducted verification tests on the pulp sample preparation in addition to verification analysis for gold and silver using the analytical methods described in Section 11.6.5.

The assays for duplicate samples were paired with the assay of the primary sample and assessed using half relative difference (HARD) with scatter regression, and half absolute relative difference (HARD) assessment, with target threshold for coarse reject duplicates of 90% samples having <40% RPD. The results of the duplicate program are summarized below for gold and silver assays.

Gold

In the graph for the Au assays >0.05 gpt, 90% of samples have a HARD of 40.6% that meets the target threshold of HARD 40% for field duplicates. The paired date have linear regression r-squared correlation value of 0.87.

Figure 11-19: Independent Laboratory Duplicate Analytical Results for Gold

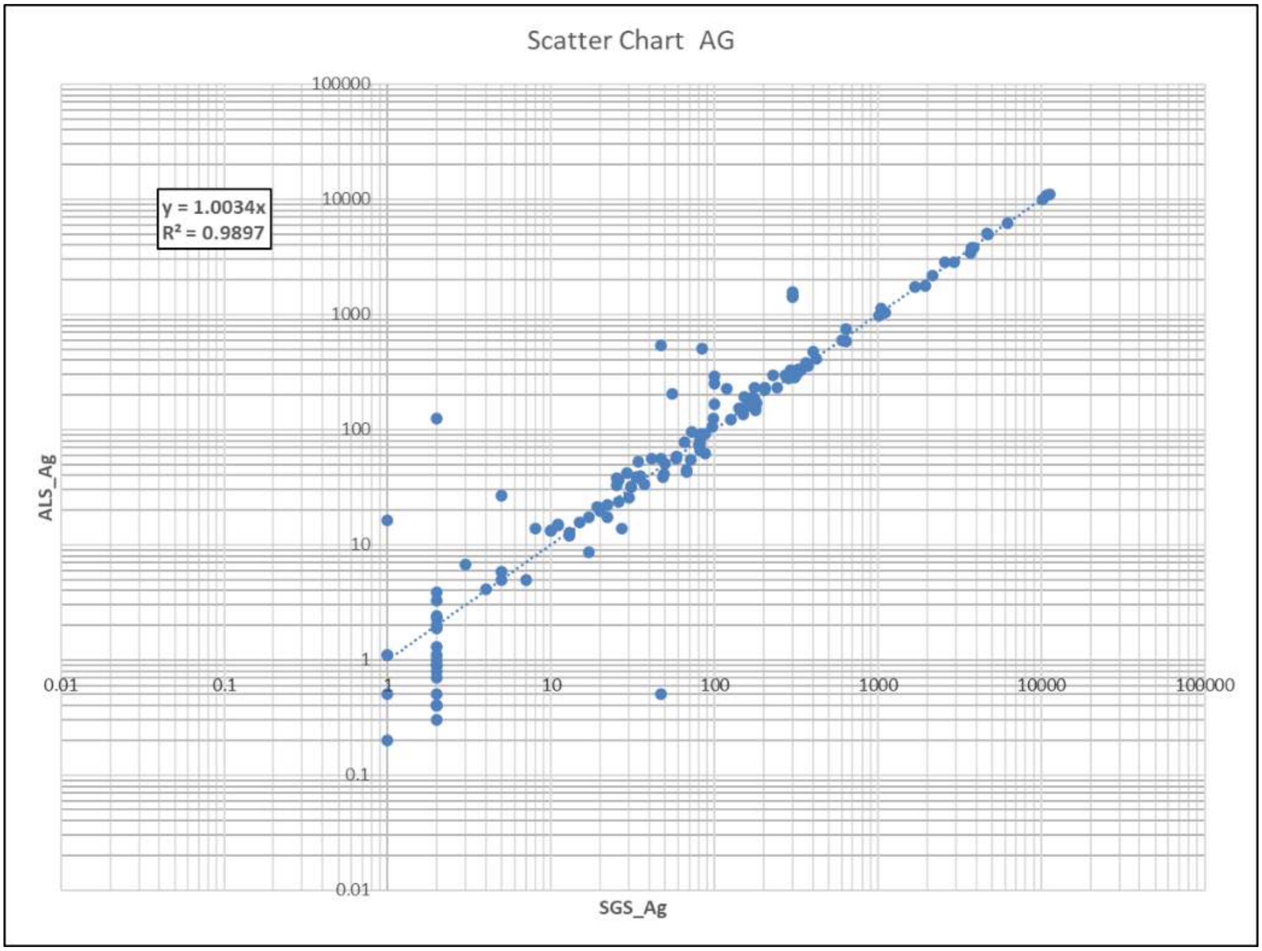


Source: P&E, 2023.

Silver

In the graph for the Ag assays >5 gpt, 90% of samples have a HARD of 32.4% which is below the target threshold of HARD 40% for field duplicates. The paired data have linear regression r-squared correlation value of 0.99.

Figure 11-20: Independent Laboratory Duplicate Results for Silver

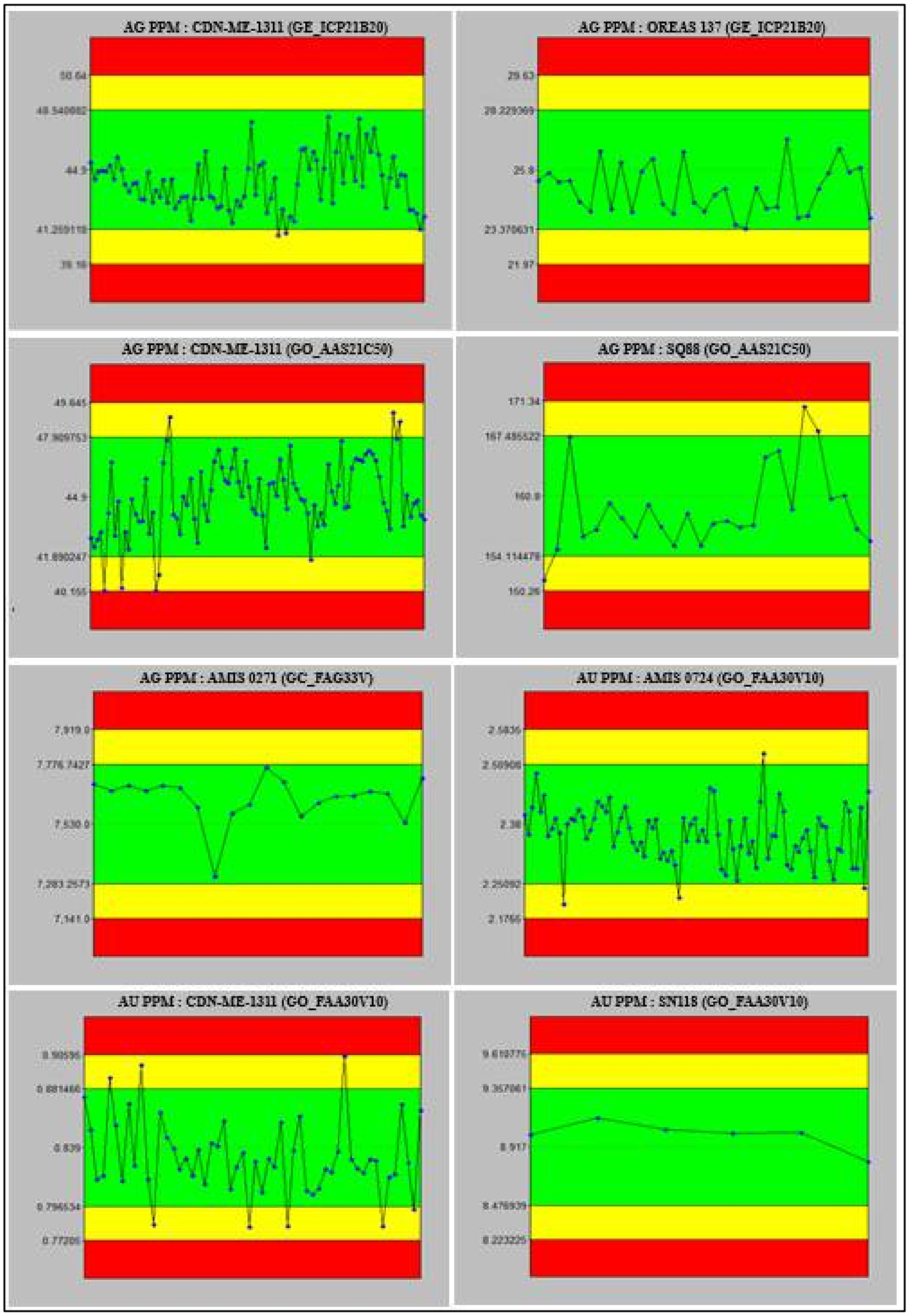


Source: P&E, 2023.

11.6.6.5 Internal Laboratory QA/QC – SGS, Arizpe

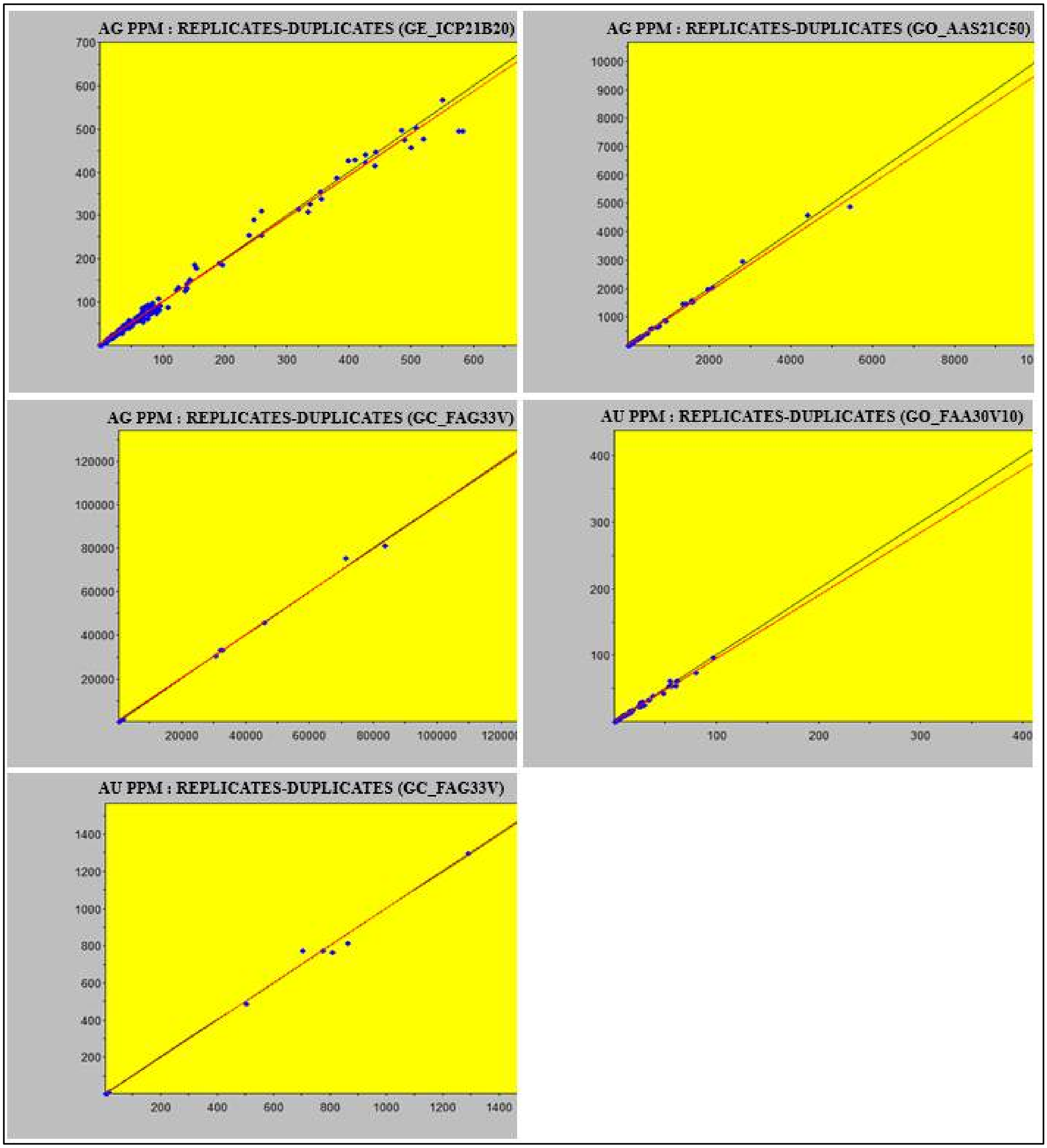
The SGS-Arizpe onsite lab undertakes internal laboratory QAQC procedures, including monitoring data accuracy and precision utilizing CRM and replicate-duplicate samples. The QP assessed the internal laboratory data for all analyses for the April to June 2022 period, which comprised 279 CRM samples for silver and 142 samples for gold, and 657 replicate-duplicate samples for silver and 550 for gold. Performance charts for all data is provided in Figure 11-21 and Figure 11-22. The QP considers the performance of all CRM and replicate-duplicate data to be acceptable.

Figure 11-21: SGS-Arizpe Internal CRM Analyses, Silver and Gold



Source: SilverCrest, 2023.

Figure 11-22: SGS-Arizpe Internal Replicate Duplicate Analyses, Silver and Gold



Source: SilverCrest, 2023.

11.7 Comments on Sample Preparation, Analysis and Security

The sample preparation, analysis, and security program implemented by SilverCrest was designed with the intent to support collection of a large volume of data. Sample collection and handling routines were well documented. The laboratory analytical methods, detection limits, and grade assay limits are suited to the style, grade and distribution of mineralization.

The QA/QC methods implemented by SilverCrest enabled assessment of sample security, assay accuracy, precision, and potential for contamination. There were no other significant concerns related to the integrity of sample collection and analysis.

Quality Assurance procedures are instituted at the Las Chispas Operation and the QP reviewed sample collection and handling procedures, including standard operating procedures, laboratory analytical methods, QA/QC methods, and QA/QC program results and considers these methods are adequate to support the current Mineral Resource Estimate.

12 DATA VERIFICATION

12.1 Database Verification

SilverCrest has developed an extensive dataset for the Las Chispas Operation that is stored and managed using a Geospark™ database. The QP has reviewed the data compilation and has audited the Geospark™ database.

P&E conducted verification of the Las Chispas databases for gold and silver by comparison of the database entries with assay certificates in comma-separated values (csv) file format, obtained directly from ALS Webtrieve™ by P&E.

Assay data were verified for five separate datasets: Las Chispas, Las Chispas Underground, Babicanora Underground, William Tell Underground and Babi Vista.

Assessment of the Las Chispas data was carried out on the constrained data only and involved verification of 95% (4,440 out of 4,662 samples) of the constrained data. A total of four discrepancies were observed.

Assessment of the Las Chispas Underground data was also undertaken on the constrained data only, with verification of 42% (2,821 of 3,884 samples) of the data achieved. No discrepancies were encountered.

Babicanora Underground constrained data involved verification of 13% (132 out of 1,011 samples) of the data and three discrepancies were encountered.

All data for the William Tell Underground dataset were included in the verification data, with a total of 42% (128 out of 305 samples) of the data verified. No errors were encountered during the verification process.

Evaluation of the Babi Vista data was undertaken on the constrained data only and comprised verification of 98% (189 out of 192 samples) of the data, with no errors encountered.

The QP believes the databases provided by SilverCrest to be reliable and does not consider the few minor discrepancies encountered during the verification process to be of material impact to the resource data.

12.2 P&E Site Visit and Independent Sampling 2022

The Las Chispas Operation was visited by Mr. David Burga, P.Geo., of P&E from March 12 to 14, 2022, for the purpose of completing a site visit that included visiting both surface and underground drilling and channel sampling sites, verifying the location of select drill collars, discussions and due diligence sampling.

Mr. Burga arrived on site on the afternoon of March 12, 2022, after which he toured the northeastern side of the property where holes BV-21-343, BV-21-353, BV-21-380, BV21-382 are located. The following day, Mr. Burga met with the SilverCrest geology team and received a presentation of the Mineral Resource, the mineralized structures on the property and the underground layout. Mr. Burga also reviewed the sampling protocols and procedures used at Las Chispas. An underground tour was later conducted by one of SilverCrest's mine geologists. Access to the mine was gained through the Santa Rosa portal and an active sampling face was visited during the tour. The geologist marked the mineralized structure as well as marked the samples that were to be taken. A mat was used to collect the sample afterwards. The site visit QP considers that the sampling was conducted to industry standards.

On March 14, 2022, Mr. Burga conducted independent core sampling, collecting 32 samples from 16 diamond drill holes. A list of various potential samples was sent to SilverCrest in advance of the site visit, however the specific samples selected were not known to SilverCrest prior to the site visit. All samples were selected from holes drilled in 2021 and 2022. A range of high, medium and low-grade samples were selected from the stored NQ-sized drill core. Samples were collected by taking a quarter drill core, with the other quarter core remaining in the drill core box. Particular care was taken to capture the fines during the sampling process. Individual samples were placed in plastic bags with a uniquely numbered tag, after which all samples were collectively placed in a larger bag. Mr. Burga couriered the samples directly to the ALS laboratory in Hermisillo for analysis.

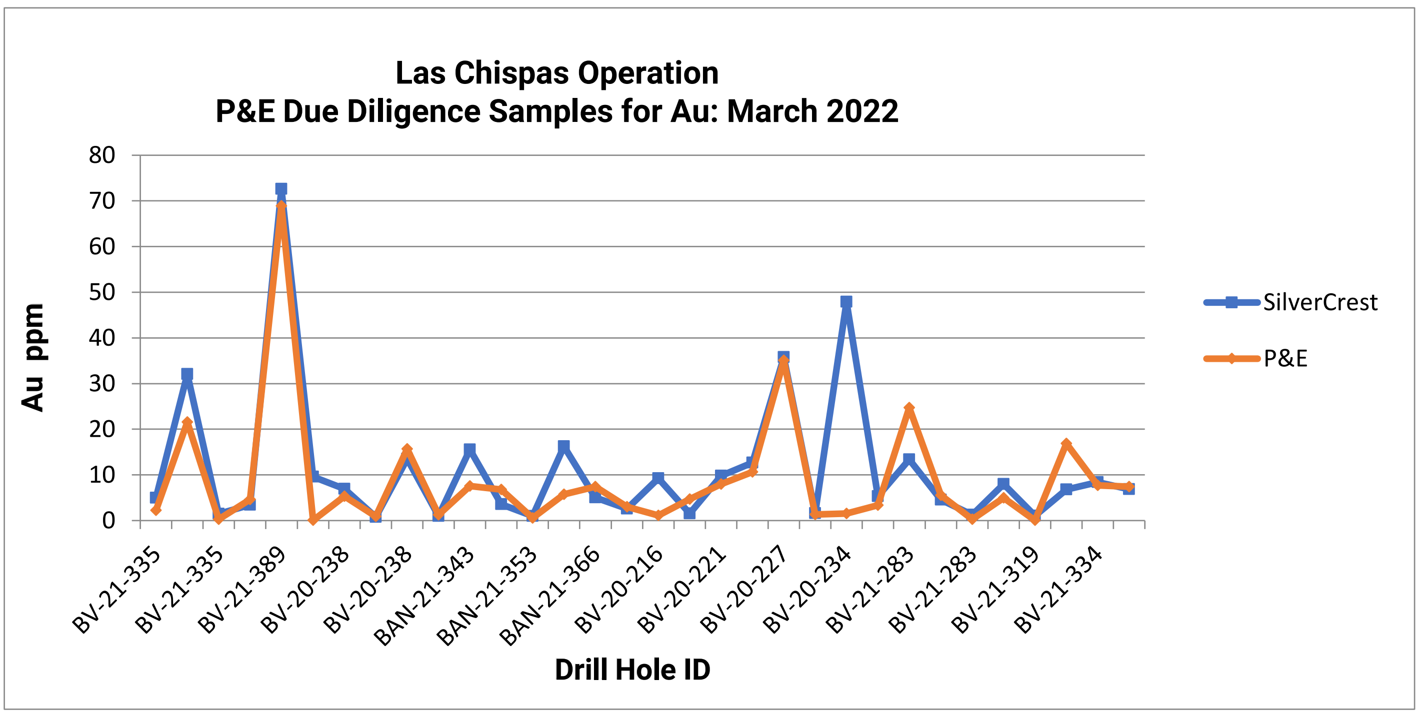
Following independent sample collection, Mr. Burga verified more collar locations by GPS and a portable drill rig set up on hole BV-22-214.

Samples at ALS were analyzed for gold and silver by fire assay with gravimetric finish. Bulk density determinations were also taken on all samples.

ALS has developed and implemented strategically designed processes and a global quality management system at each of its locations. The global quality program includes internal and external inter-laboratory test programs and regularly scheduled internal audits that meet all requirements of ISO/IEC 17025:2017 and ISO 9001:2015. All ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures.

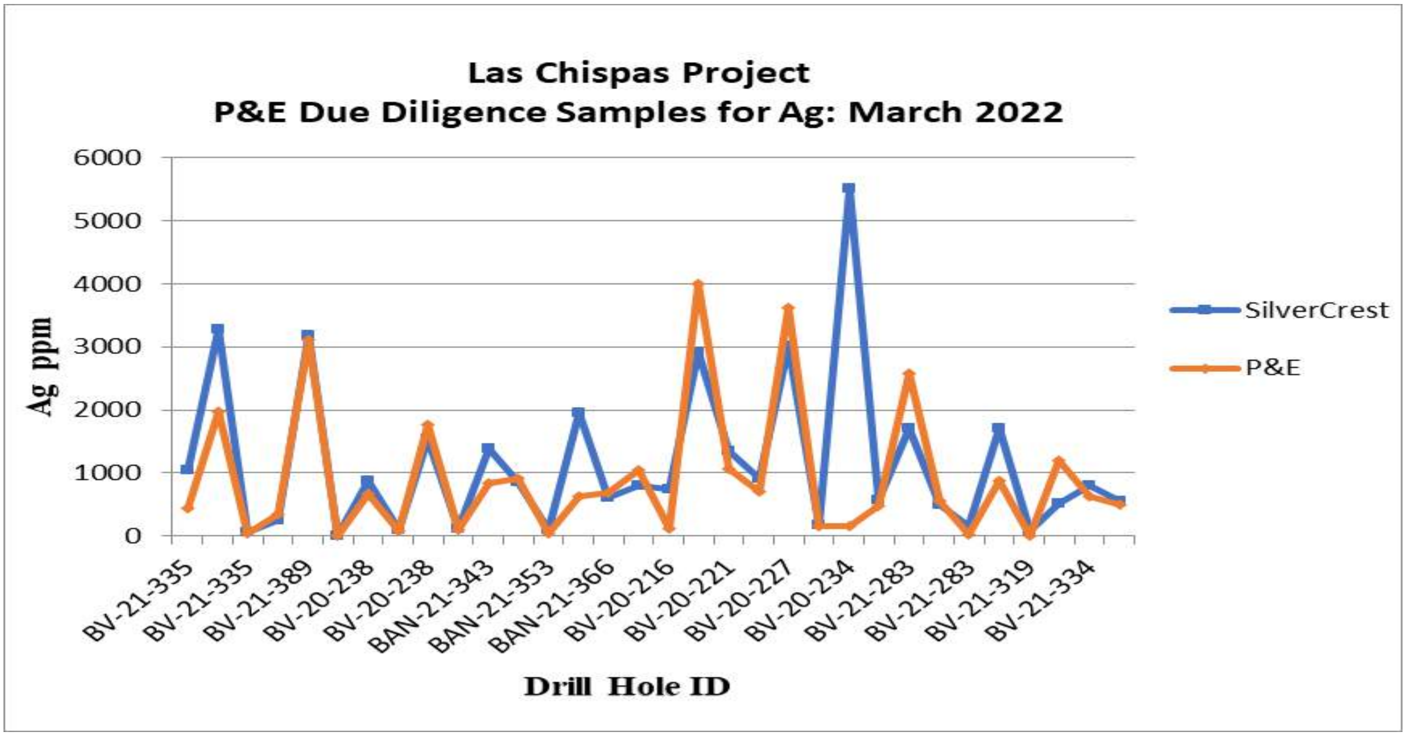
A comparison of the P&E independent sample verification results versus the original assay results are presented in Figure 12-1 to Figure 12-2.

Figure 12-1: March 2022 Site Visit Sample Comparison for Gold



Source: P&E, 2023.

Figure 12-2: March 2022 Site Visit Sample Comparison for Silver



Source: P&E, 2023.

Additional QP site inspections are noted in Section 2.4.

12.3 Comments on Data Verification

The independent site visit samples match closely to the SilverCrest data for both gold and silver and the QP considers the due diligence results to be acceptable.

Based upon the evaluation of the QA/QC program undertaken by SilverCrest, and P&E's due diligence sampling and database verification, it is the QP's opinion that the data are robust and suitable for use in the current Mineral Resource Estimate.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Introduction

Mineral deposits in the Las Chispas district are classified as gold and silver, low to intermediate sulphidation epithermal systems, typical of many deposits in northeastern Sonora and is mined using variations of longhole stoping and cut and fill mining methods via several access drifts and ramps. Ore is processed through a primary jaw crusher, SAG mill in closed circuit with hydrocyclones, cyanide leaching, Merrill-Crowe metal recovery and Tailings filtration.

Four metallurgical testwork programs were undertaken prior to the start of this Report to support previous evaluations of the Las Chispas Operation. The two earliest programs were conducted at SGS Durango facilities in Mexico, while the two most recent program was completed at SGS Lakefield in Canada.

These earlier test programs identified the preferred flowsheet option and supported recovery models that could be used in financial modelling of the Las Chispas Operation (2021 FS Report).

13.2 Actual Process Plant Operating Performance

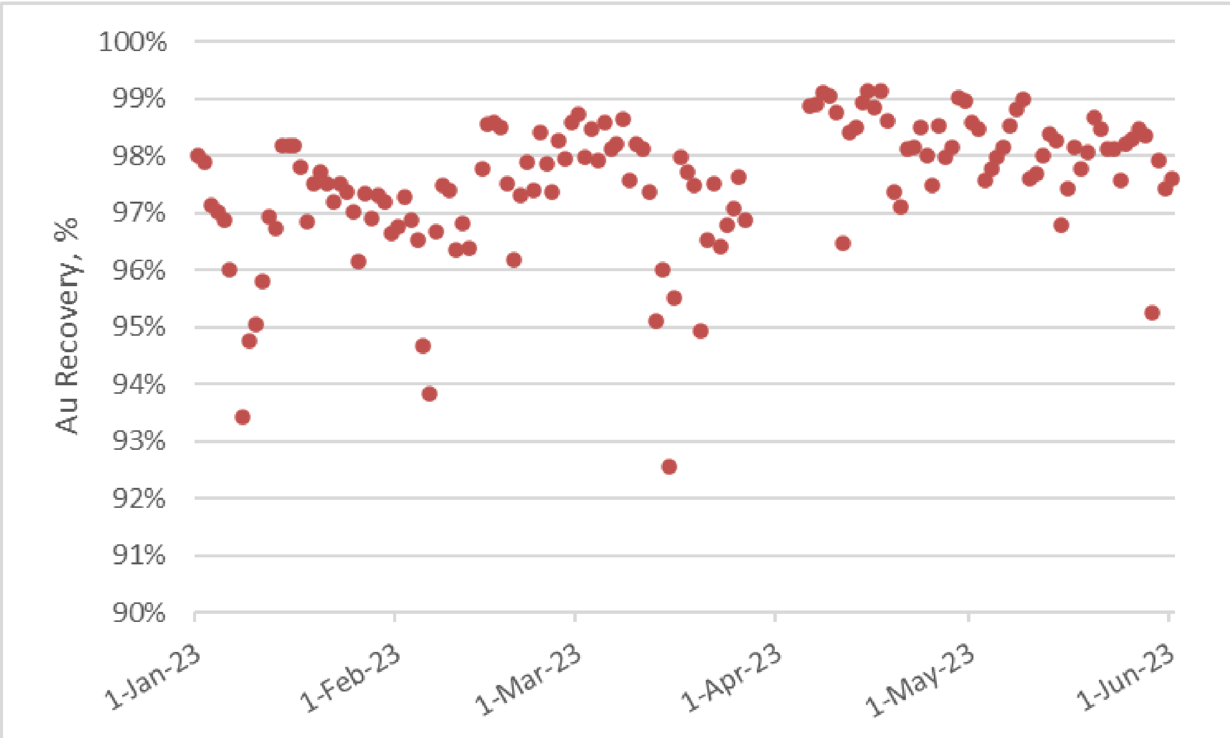
The Las Chispas plant began operations in June 2022, with operating data becoming available shortly afterwards. Gold and silver recoveries from the plant were provided for comparison to the 2021 FS Report's recovery models. Although initial recovery results from the Process Plant were impacted by some downstream limitations and plant optimization challenges, these problems were resolved by the end of Q4 2022; therefore, data from January 2023 was selected for analysis after the operation of the Process Plant was stabilised. During this period, feed material to the Process Plant was primarily made up of ore from the Babicanora Main zone, Babicanora Norte zone, and the historic stockpiles.

Operations have deviated from the 2021 FS Report flowsheet by discontinuing the operation of the flotation and flotation concentrate leaching circuit, and the cyanide destruction circuit. Operating expenses were significantly impacted by a large increase in the unit cost of SMBS (+300%) and cyanide (+50%) when compared to the feasibility study values which warranted the change in operating strategy. The current operating strategy of bypassing the flotation circuit and processing the whole ore stream through the bulk leach circuit at ~1,500 mg/l cyanide is achieving expected gold and silver recoveries. The detox circuit has been modified to operate on solution or on slurry but typically being by-passed. The operating strategy is linked to maintaining solution in the North Pond below the ICMC limits.

13.2.1 Gold Recovery

The operating data for gold recovery is presented in Figure 13-1 as a function of time.

Figure 13-1: 2023 Daily Operating Gold Recoveries at Las Chispas

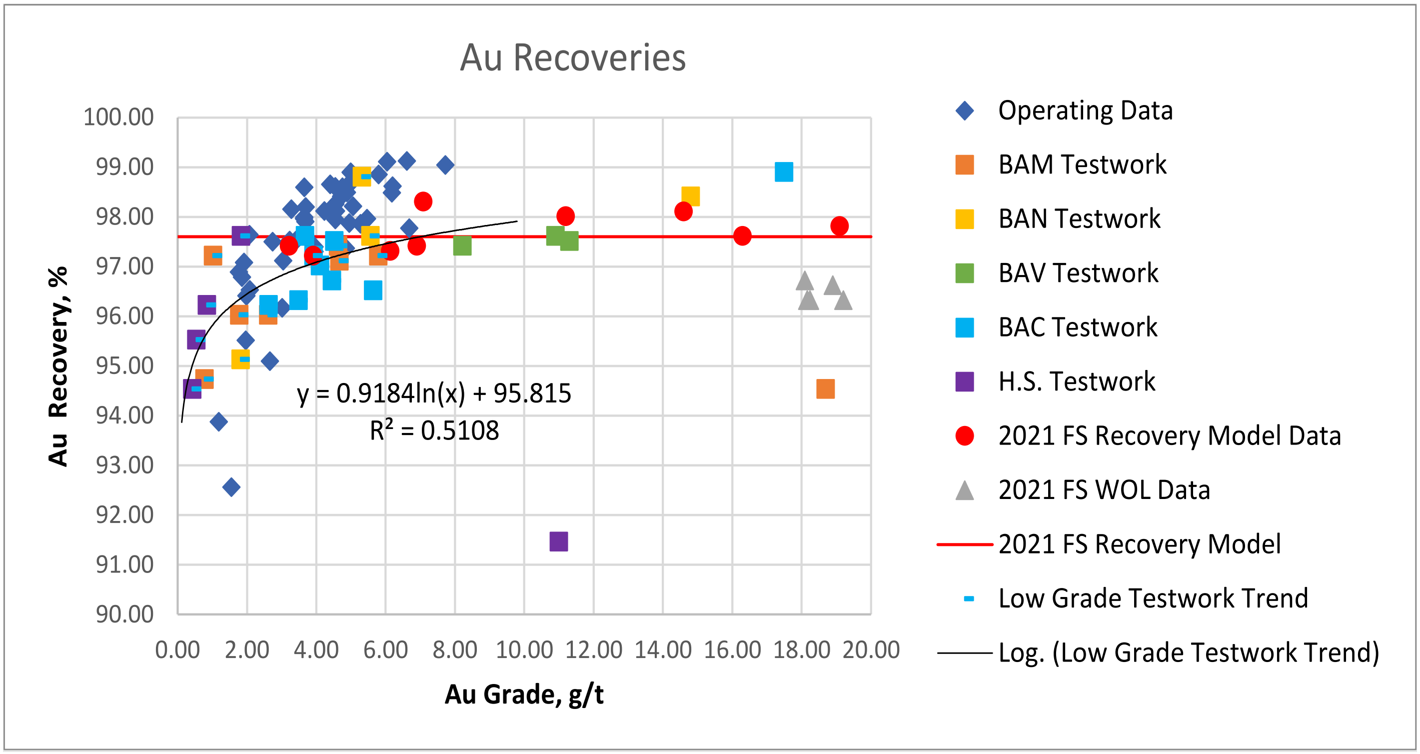


Source: Ausenco, 2023.

A clear step change in the data is seen around mid-February. Operational challenges in maintaining grind size persisted over the course of January and early February, likely leading to many of the low recovery values. Furthermore, liquid losses to tailings declined around the time of the step change, dropping to less than half of what was seen in January. These two observations indicate that operators became more experienced with the process control parameters and achieved more stable operations, resulting in these outcomes. Based on these observations, and the known sensitivity to grind size, only data from February 14 2023 onward that was within 10% of the target grind was reviewed for comparison to the testwork.

The filtered test data is presented in Figure 13-2. Data from the 2021 FS Report is also provided, including the overall recoveries used to generate the previous recovery models and the whole ore leaching results as they are the closest to the new operating philosophy.

Figure 13-2: Gold Recovery as a Function of Head Grade



Source: Ausenco, 2023.

The operating data for gold recovery is positive, reaching a maximum recovery of ~99.1% near 6.6 gpt. At lower head grades, operating recoveries are a good fit for the BAM, BAN, and historic stockpile testwork data, which was expected due to the feed material to the plant being largely made of ore from these zones. Both operating data and testwork results display a logarithmic trend in this range, with recoveries declining quickly as feed grade decreases.

At higher grades the operating data surpasses the expected performance from the testwork; operating data continues to follow the same logarithmic trend over the reported grade range while the testwork appears to become relatively constant around the 97.6% recovery predicted by the model.

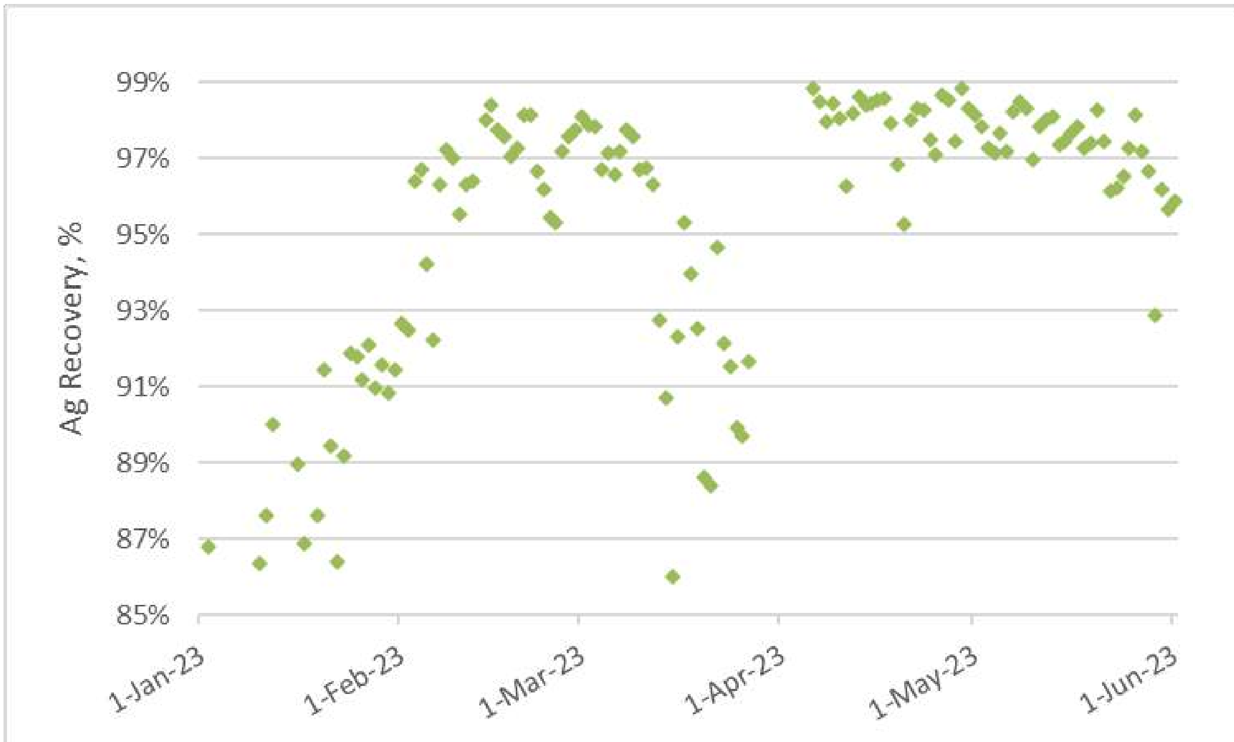
Whole ore leach (WOL) data from the 2021 FS Report showed relatively lower recoveries than both sets of testwork and the operating data. It was discussed in the 2021 FS Report that the ore used in these tests were considered a “worst-case scenario” given the relatively higher grade and higher clay contents of the ore source. This could have led to lower recoveries as a result of cyanide availability within the leaching vessel.

Based on the operating data and the ongoing blending strategy of the operation, it has been decided to use a fixed recovery estimate of 98% for Au for the operation.

13.2.2 Silver Recovery

The operating data for silver recovery is presented in Figure 13-3 as a function of time.

Figure 13-3: 2023 Daily Operating Silver Recoveries as a Function of Time

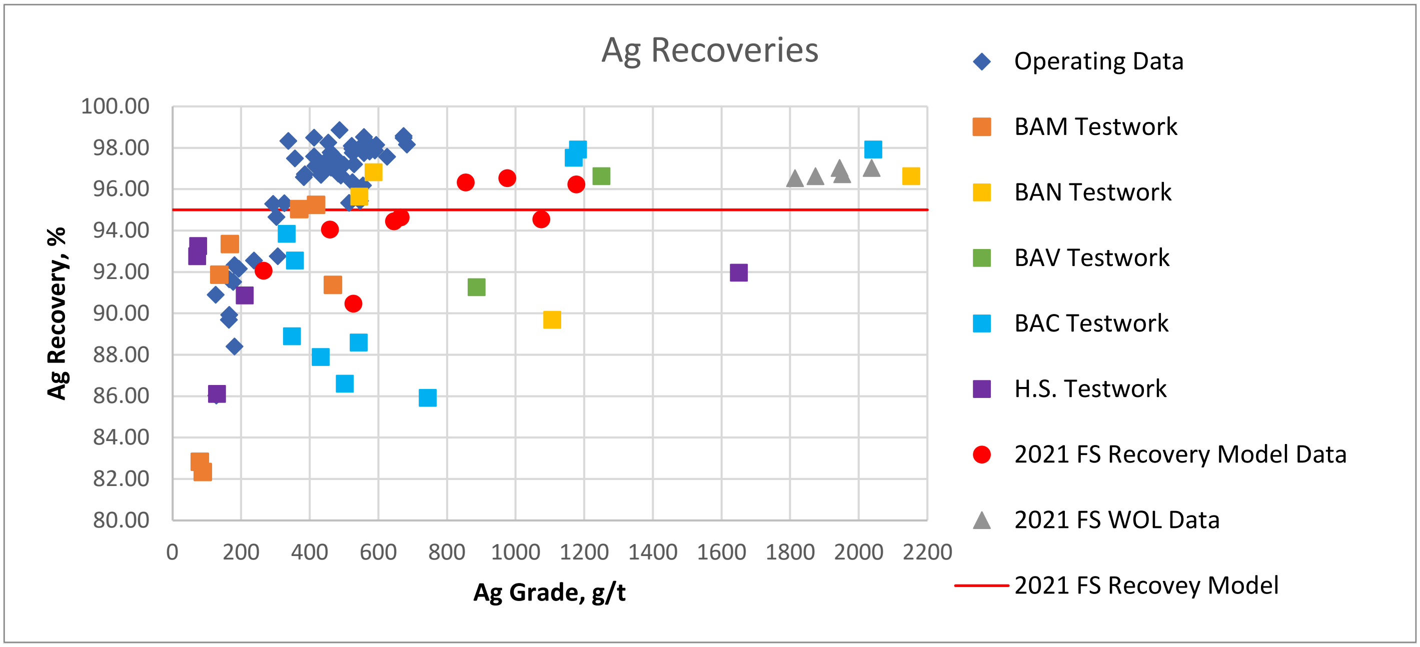


Source: Ausenco 2023.

Improvements in silver recovery were linear through January and early February 2023, unlike the clear step seen in the data for gold. While the shape of the improvement is different, the causes are the same.

Filtered operating data for silver recovery is presented in Figure 13-4. Comparisons to the testwork provided within this illustration are the same as those described previously for gold recovery in Figure 13-3.

Figure 13-4: Silver Recovery as a Function of Head Grade



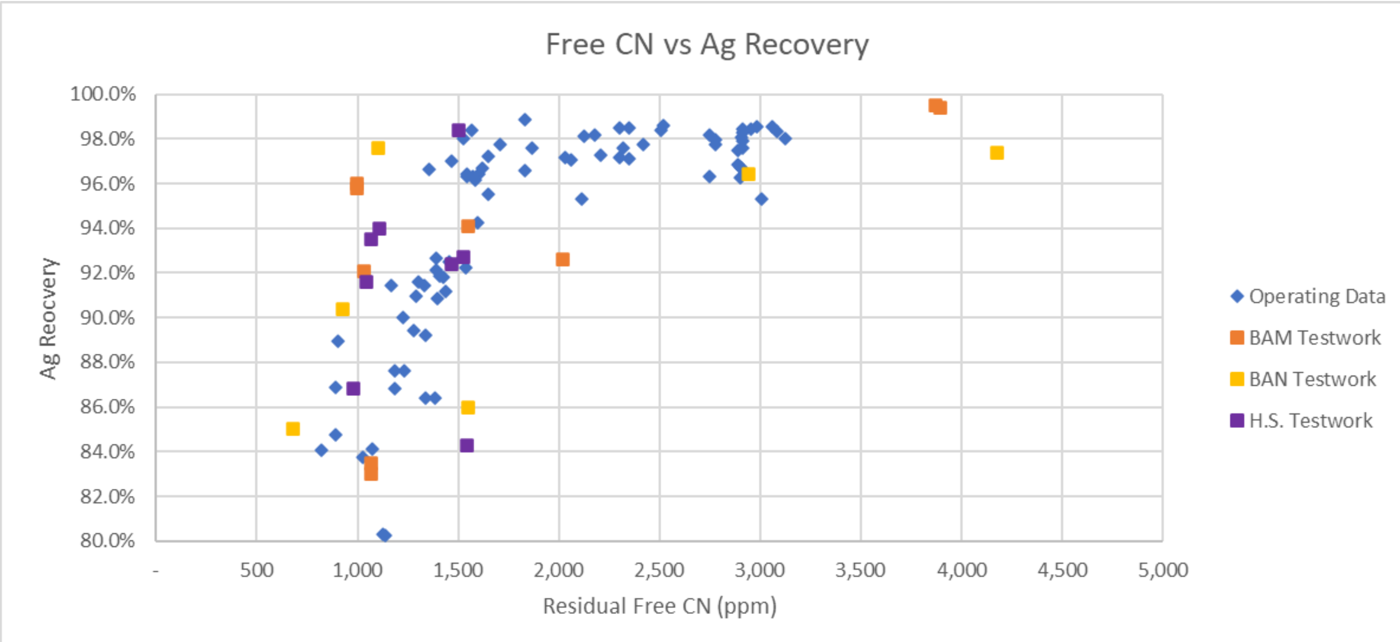
Source: Ausenco 2023.

The operating data for silver recovery is also positive, reaching a maximum of ~98.8% near 480 gpt. The operating data continues its successful correlation with the BAM, BAN, and historic stockpile testwork at relatively lower grades.

At relatively higher grades, the operating recoveries once again outperform the testwork with recovery constantly around 97.0%. This is an improvement over the testwork because the testwork flotation tails were leaching at ~1,000 mg/L residual CN while the plant is operating at ~1,500 mg/L residual CN.

Given the relatively high silver grades within the Las Chispas deposit, limited cyanide availability during leaching was reviewed as a possible explanation for the observed anomalies. Residual free cyanide was plotted against silver recovery for the operational data alongside the BAM, BAN, and historic stockpile testwork. The analysis is illustrated in Figure 13-5.

Figure 13-5: Silver Recovery as a Function of Residual Free Cyanide

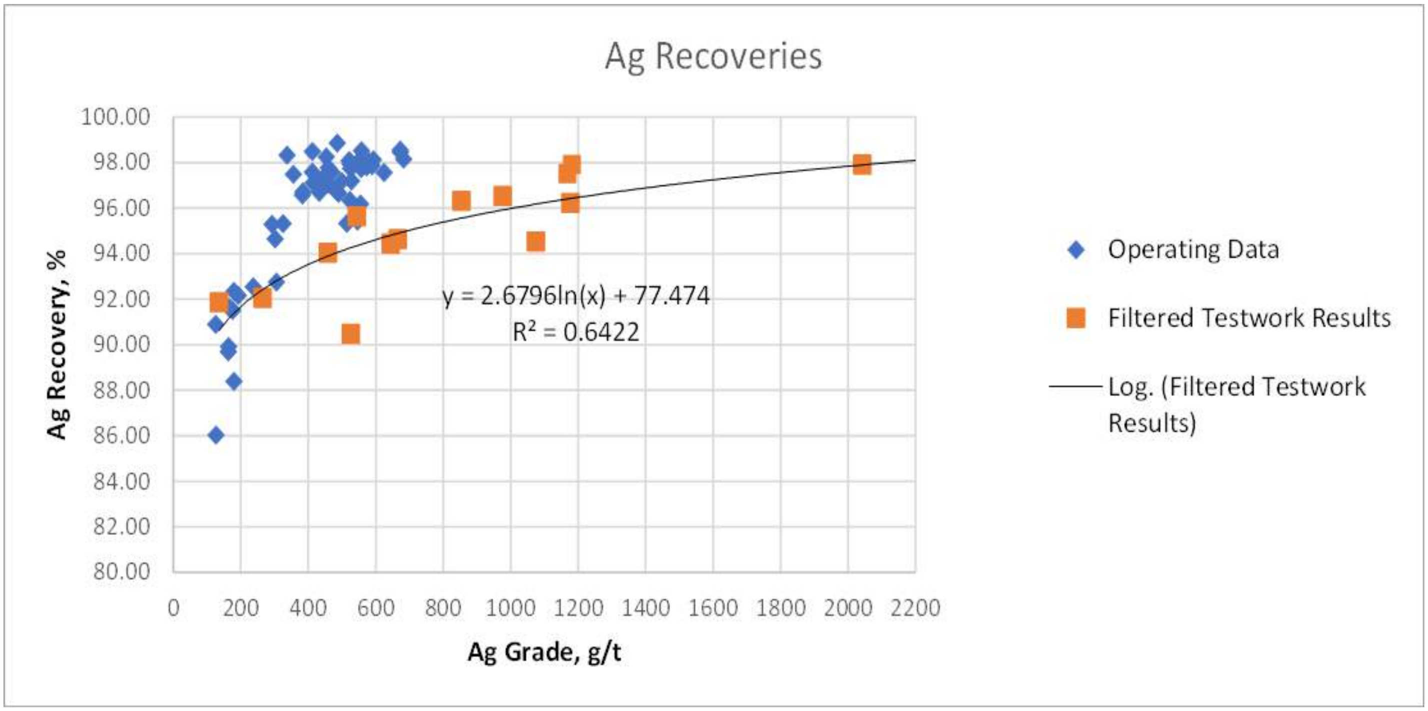


Source: Ausenco 2023.

A relationship presents itself in Figure 13-6 for the operational data, clearly identifying that higher cyanide concentration is required for the operational leach. At residual cyanide levels greater than ~1,700 ppm, operations outperform the testwork for the same material, supporting the current operating strategy.

When the testwork results in Figure 13-5 are filtered to only include the 2021 recovery model data and tests with free cyanide values above 1,700 ppm, a significant portion of the data is removed; the remaining data is aligned with the "upper" trend of the entire dataset. This filtered approach is provided in Figure 13-6, which illustrates an effective logarithmic trend, however based on the operating data and the ongoing blending strategy of the operation, it has been decided to use a fixed recovery estimate of 97% for Ag for the operation.

Figure 13-6: Silver Recovery as a Function of Head Grade Tests with Free Cyanide Values Above 1,700 ppm



Source: Ausenco 2023.

13.3 Recovery Projections

Table 13-1 presents the average gold and silver recovery forecasts calculated from the analysis of all testwork results, operating data and blending strategy with operations of the Las Chispas (whole ore leach) flowsheet. Expected recoveries from the counter current decantation (CCD) and Merrill Crowe processes were carried over from the 2021 FS Report.

Table 13-1: Forecast Life of Mine Average Au and Ag Recovery

Product	Cyanide Extraction (%)		CCD	MC	Combined Recovery (%)	
	Au	Ag	%	%	Au	Ag
WOL	98.7	97.7	99.7	99.5	98.0	97.0

Operating recoveries are from 92.6 to 99.1% for gold and 86 to 98.9% for silver respectively, when operations are within target grind size and specified cyanide concentrations.

As discussed in Section 13.2 the plant site currently operates as a whole ore leach by bypassing the flotation circuit and leaching the whole ore in the bulk leach tanks. The combined recoveries of gold and silver after CCD and MC are considered are 98.0% and 97.0% respectively.

13.4 Comments on Mineral Processing and Metallurgical Testing

The QP had full access to the Process Plant, operations personnel and data. The Las Chispas Process Plant was operating well and there was nothing indicating that the Process Plant was not going to be able to continue achieving the gold and silver recoveries observed during the visit.

Operating data from the first four months of 2023 was reviewed and compared to the generated testwork models. Both gold and silver recoveries of the currently operating strategy of WOL with >1,500 mg/L free cyanide presented better results when compared to the testwork models.

Based on the analysis and comparison of laboratory testwork and current plant operations of grade blending and whole ore cyanide leach, it is reasonable to use fixed LOM recoveries of 98.0% for Au and 97.0% for Ag for blended mill feed materials of >3 gpt Au and >350 gpt Ag.

14 MINERAL RESOURCE ESTIMATE

14.1 Introduction

The purpose of this Technical Report section is to update the 2020 Mineral Resource Estimate with the October 2020 to March 2023 drilling and underground sampling programs, and surface stockpile inventories. This Mineral Resource Estimate includes in-situ narrow vein gold and silver mineralization at the Babicanora and Las Chispas Areas, and gold and silver mineralization contained within run-of-mine (ROM) stockpiles and historic surface stockpiles that resulted from historic operations. The data cut-off dates supporting this Mineral Resource Estimate in the Babicanora Area are June 30, 2022, for the definition drilling and underground channel sample databases, July 31, 2022, for the exploration drilling database which were used for the Indicated Mineral Resource Estimate, and March 21, 2023, for the exploration drilling database used for the Inferred Mineral Resource Estimate; while the cut-off date in the Las Chispas Area is October 16, 2020, since the database remained unchanged since the October 2020 Mineral Resource Estimate. The stockpile estimates have a cut-off date of June 30, 2022. All current Mineral Resources are stated with an Ag:Au ratio of 79.51:1 gpt compared to 86.9:1 gpt in the 2021 FS Report.

The Mineral Resources Estimate presented herein is reported in accordance with the Canadian Securities Administrators' National Instrument 43-101 and were estimated in conformity with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) "Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines" (November 2019) and reported using the definitions set out in the 2014 CIM Definition Standards on Mineral Resources and Mineral Reserves. Mineral Resources that are not converted to Mineral Reserves do not have demonstrated economic viability. Confidence in the estimate of an Inferred Mineral Resource is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Mineral Resources may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent Mineral Resource Estimate. Mineral Resources in this estimate are inclusive of the Mineral Reserves stated in Section 15.

This Mineral Resource Estimate of the Babicanora Area was undertaken with Leapfrog™ software by SilverCrest, and was reviewed and accepted by Yungang Wu, P.Geo. and Eugene Puritch, P.Eng., FEC, CET of P&E Mining Consultants Inc. (P&E) of Brampton, Ontario. The Mineral Resource Estimate of the Las Chispas Area was performed in 2020 by Messrs. Wu and Puritch, who are independent of SilverCrest as defined in NI 43-101.

The effective date of this Mineral Resource Estimate is June 30, 2022, for Measured and Indicated Mineral Resources of the vein mineralization and surface stockpiles, and March 21, 2023, for Inferred Mineral Resources.

14.2 Previous Mineral Resource Estimate

The most recent previous public Mineral Resource Estimate for the Las Chispas Deposit was prepared by P&E Mining Consultants Inc. with an effective date of October 16, 2020. The Mineral Resource Estimate at a cut-off value of 150 gpt AgEq is presented in Table 14-1. This previous Mineral Resource Estimate is superseded by the Mineral Resource Estimate reported herein.

The reasons for the difference between the current and previous Mineral Resource Estimate are described in table notes for Table 14-1.

Table 14-1: Previous Las Chispas Mineral Resource Estimate by P&E Mining Consultants Inc. Effective Date October 16, 2020

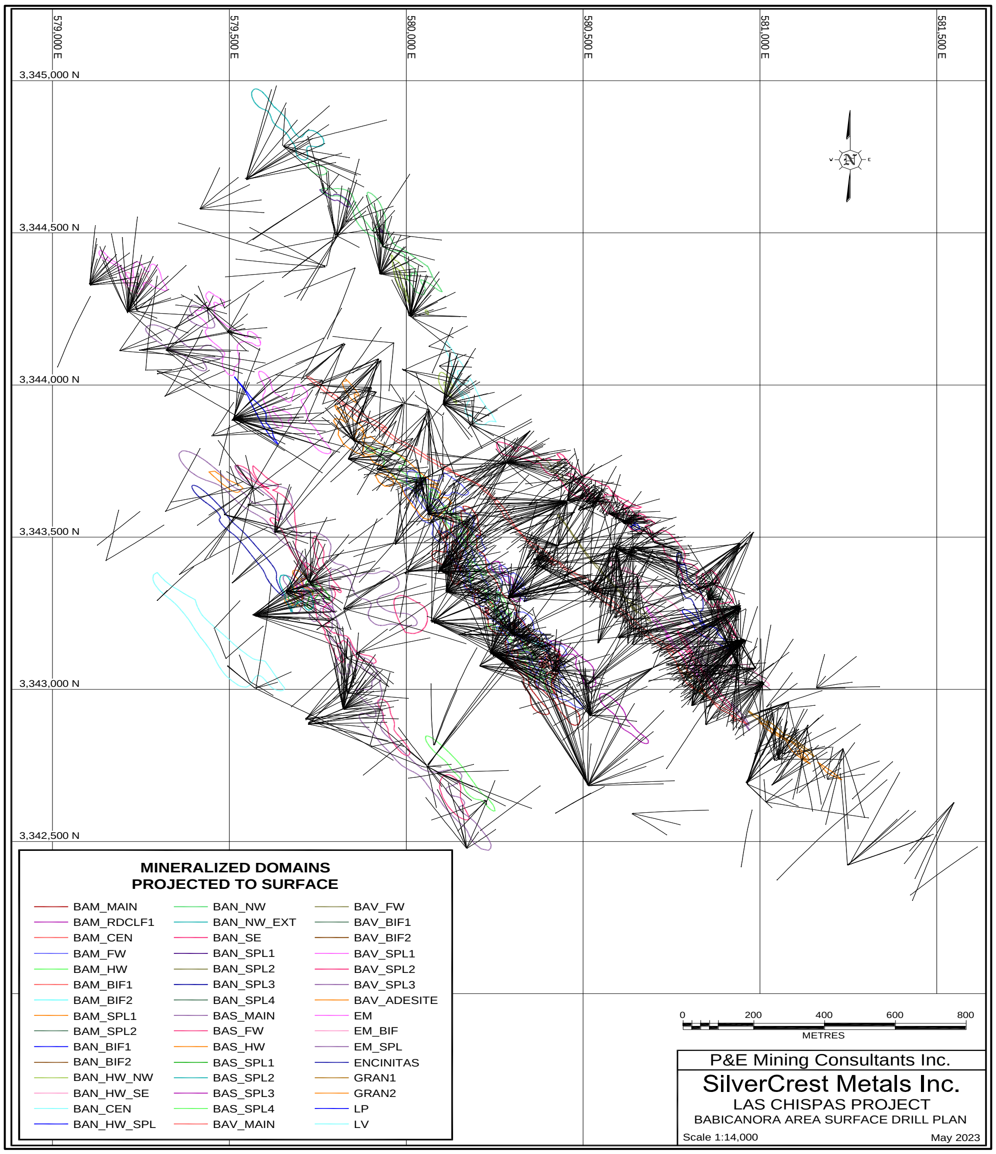
Vein	Classification	Tonnes (k)	Au (gpt)	Ag (gpt)	AgEq (gpt)	Contained Au (koz)	Contained Ag (koz)	Contained AgEq (koz)
Babicanora Area Total	Measured + Indicated	2,214.5	7.35	681	1,319	523.2	48,471	93,939
Las Chispas Area Total	Indicated	445.1	4.20	548	913	60.1	7,844	13,064
Total Undiluted Veins	**Measured + Indicated**	**2,659.6**	**6.82**	**659**	**1,251**	**583.3**	**56,315**	**107,004**
Historic Stockpiles	Indicated	164.2	1.23	108	215	6.5	572	1,134
Total (Veins + Stockpiles)	**Measured + Indicated**	**2,823.8**	**6.50**	**627**	**1,191**	**589.8**	**56,888**	**108,139**
Babicanora Area Total	Inferred	861.6	5.47	409	884	151.6	11,325	24,496
Las Chispas Area Total	Inferred	378.4	1.80	272	428	21.9	3,308	5,209
Total (Undiluted Veins)	**Inferred**	**1,240.0**	**4.35**	**367**	**745**	**173.4**	**14,634**	**29,705**

Notes:
1. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
2. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
3. 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 can be reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
4. The Mineral Resources in the Report were estimated using the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standards for Mineral Resources & Mineral Reserves.
5. Historic mined areas were removed from the wireframes and block model.
6. AgEq is based on Ag:Au ratio of 86.9:1 calculated using $1,410/oz Au and $16.60/oz Ag, with average metallurgical recoveries of 96% Au and 94% Ag.
7. Mineral Resources are inclusive of the Mineral Reserves stated in Section 15.
8. All numbers are rounded.

14.3 Database

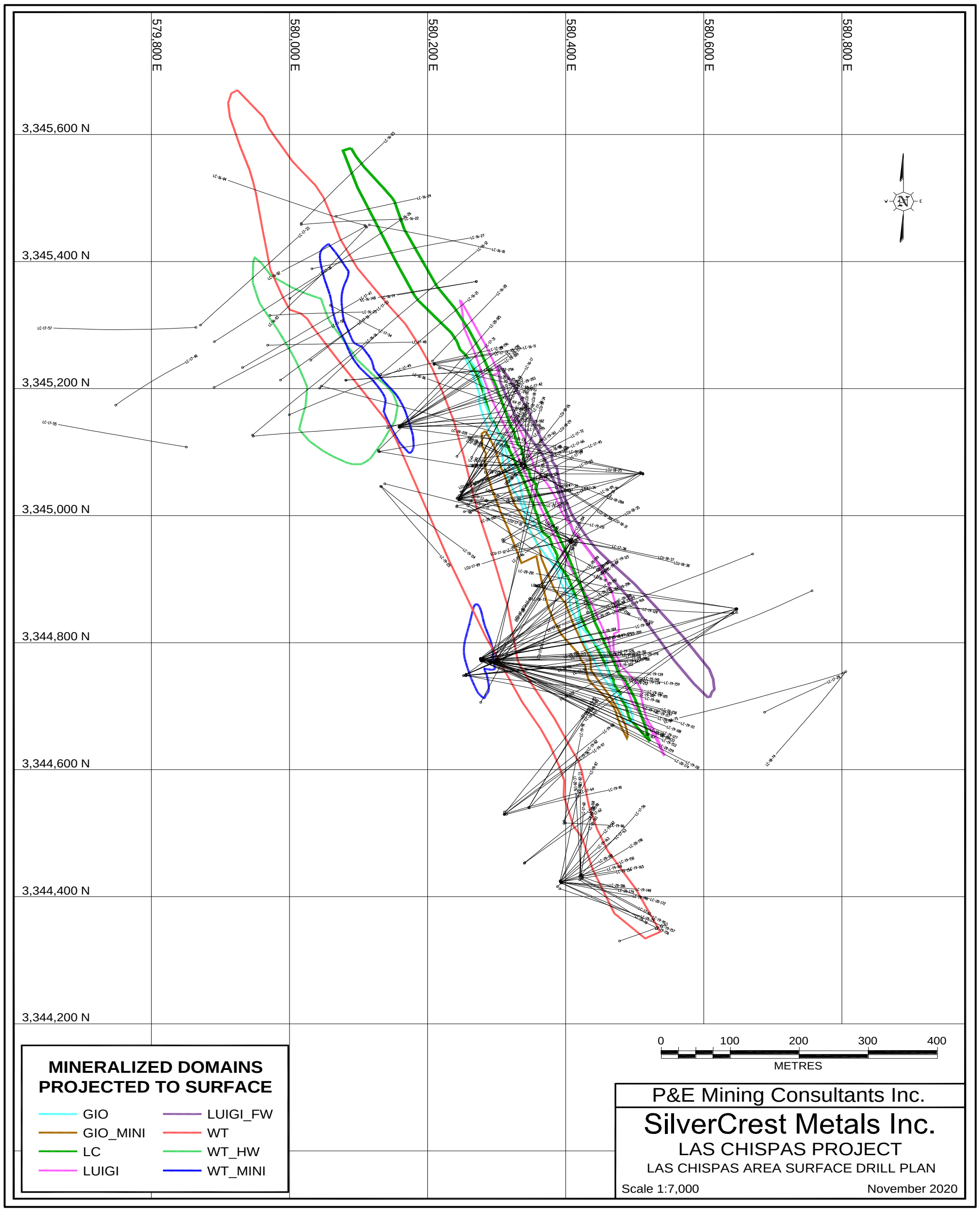
The database supporting this Mineral Resource Estimate consisted of surface drill holes, underground drill holes, and underground channel and chip samples for the in-situ narrow veins in both Babicanora and Las Chispas Areas, and surface channel and RC samples for the historic stockpiles (Table 14-2). The database used for the Babicanora Area included the definition drilling and underground channel sample data as of June 30, 2022, and the exploration drilling data as of July 31, 2022, for the Indicated Mineral Resource Estimate and March 21, 2023, for the Inferred Mineral Resource Estimate. Babicanora and Las Chispas drill hole plans are shown in Figure 14-1 and Figure 14-2 and Appendix A.

Figure 14-1: Babicanora Drill Hole Plan



Source: P&E 2023.

Figure 14-2: Las Chispas Drill Hole Plan



Source: P&E 2023.

Table 14-2: Drillhole Database Summary

Area	Data Type	Database Cut-off Date	Number	Total Metres
Babicanora	Exploration Drill Holes for Indicated MRE	July 31, 2022	1774	523,039
	Exploration Drill Holes for Inferred MRE	March 21, 2023	196	53,234
	Delineation Drill Holes	June 30, 2022	538	20,166
	Total Drill Holes	-	2,508	596,439
	Channel Samples	June 30, 2022	1,601	5,894
Las Chispas	Surface Drill Holes	Oct 16, 2020	242	70,609
	Underground Drill Holes	Oct 16, 2020	40	4,157
	Total drill holes	Oct 16, 2020	282	74,766
	Underground Channel/Chip Samples	Oct 16, 2020	6,739	N/A
Other Area*	Surface Drill Holes	March 21, 2023	84	22,215
Total	Drill holes	-	2,874	693,420
Historic Stockpiles	Sample Points	Oct 16, 2020	2,185	N/A

Note: * drill holes named with LCE, LOC, RA, POZO, ES, VNT, VAR and GTP. Assay pending holes at the cut-off dates are not included in the Mineral Resource Estimate.

The database contains assays for gold and silver and other elements of non-economic importance. The basic gold and silver raw assay statistics and sample lengths are presented in Table 14-3.

Table 14-3: Las Chispas Operation Assay Database Summary

Dataset	Variable	Au	Ag	Length
Babicanora Drill Holes	Number of Samples	196,923	196,923	196,923
	Minimum Value *	0.001	0.20	0.04
	Maximum Value *	3,366.00	114,814.00	9.00
	Mean *	0.25	19.80	0.99
	Median *	0.05	0.80	0.93
	Variance	89.96	240,168.39	0.18
	Standard Deviation	9.48	490.07	0.43
	Coefficient of Variation	38.56	24.76	0.43
	Skewness	259.30	121.94	1.26
	Kurtosis	85,078.47	21,991.80	7.85
Babicanora UG Channel/Chip Samples	Number of Samples	8,630	8,630	8,630
	Minimum Value *	0.005	0.20	0.14
	Maximum Value *	1,380.00	135,290.00	2.32
	Mean *	5.58	535.83	0.66
	Median *	0.07	19.85	0.62
	Variance	1,109.61	9,518,200.48	0.06
	Standard Deviation	33.31	3,085.16	0.25

Dataset	Variable	Au	Ag	Length
	Coefficient of Variation	5.97	5.76	0.37
	Skewness	18.94	18.67	1.01
	Kurtosis	558.01	566.91	4.42
Las Chispas Drill Holes	Number of samples	35,304	35,304	35,304
	Minimum Value *	0.01	0.20	0.25
	Maximum Value *	513.00	42,322	5.80
	Mean *	0.13	13.3	1.03
	Median *	0.05	1.8	1.00
	Variance	11.00	103,185	0.23
	Standard Deviation	3.32	321.22	0.48
	Coefficient of Variation	25.90	24.19	0.47
	Skewness	120.73	98.54	1.01
	Kurtosis	17,192.20	11,485.45	3.78
Las Chispas UG Channel/Chip Samples	Number of Samples	6,739	6,739	N/A
	Minimum Value *	0.001	0.20	N/A
	Maximum Value *	136.00	10,000.00	N/A
	Mean *	0.81	120	N/A
	Median *	0.05	10.0	N/A
	Variance	11.14	167,041	N/A
	Standard Deviation	3.34	408.74	N/A
	Coefficient of Variation	4.13	3.40	N/A
	Skewness	16.44	10.22	N/A
	Kurtosis	484.11	170.25	N/A

Note: UG = underground. N/A = not applicable. *Au and Ag units are gpt and length units are metres.

All drill hole survey and assay values are expressed in metric units, with grid coordinates reported using the WGS84, zone 12N UTM system.

14.4 Data Verification

The QPs verified the Mineral Resource database in GEMS™ by checking for inconsistencies in 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, survey and missing interval and coordinate fields. A few errors were identified and SilverCrest made the corrections to the database. A total of 20 drill holes were excluded from the Mineral Resource Estimate in the Babicanora Area, due to various reasons as listed in Table 14-4. The QPs are of the opinion that the supplied database is suitable for Mineral Resource estimation.

Table 14-4: Drill Holes Excluded from Babicanora Mineral Resource Estimate

Drill Hole ID	Reasons for Being Excluded
BA-17-07	High angle drill hole near underground channel samples and newly completed exploration drill holes UB-22-28 is <5 m from mineralized zone.
BA-17-59	Drill hole was re-entered and used in Mineral Resource as BA-17-59A.
BA-18-75	Drill hole was re-entered and used in the Mineral Resource as BA17-75B.
BA-18-124	Drill hole lost before reaching the vein. Twinned the drill hole as BA18-124A.
BA-18-127	No recovery through mineralized intervals.
BA-18-135	No recovery through mineralized intervals.
BA-19-151	No recovery through mineralized intervals.
BA-19-154	Had a bad angle with survey issues, to the underground sampling <5m away.
BA-19-189	No recovery through mineralized intervals.
BA-19-204	Drill hole lost in faulting and re-drilled as BA-19-204A, which was also lost in faulting and re-drilled again as BA-19-204B.
BA-19-204A	Drill hole lost in faulting and re-drilled as BA-19-204A, which was also lost in the faulting and re-drilled as BA-19-204B.
BA-19-240	Geo needs to relog 60-100 m in 240 & 240A.
BAMD1111001	High-angle drill hole near underground channel samples.
BAMD1111002	High-angle drill hole near underground channel samples.
BAMD1111003	High-angle drill hole near underground channel samples.
BAT-21-99	High-angle drill hole near underground channel samples.
BAT-21-100	High-angle drill hole near underground channel samples.
BAT-21-101	High-angle drill hole near underground channel samples.
T1096011	High-angle drill hole near underground channel samples.
T109607	High-angle drill hole near underground channel samples.

14.5 Domain Interpretation

The mineralized vein wireframes were interpreted and constructed by SilverCrest using Seequent Limited Leapfrog® and the QPs reviewed the vein models. Some adjustments to the wireframes were made as a result of the reviews, and the QPs consider the wireframes to reasonably represent the assay data and are suitable for Mineral Resource estimation.

Vein models were developed for each vein by manually tagging drilling and channel sample intercepts using the drill core field logs, maps, and assays. The vein models represent the continuous zones of structurally hosted gold and silver mineralization and the structural extensions of the veins, which were named as “unclipped” solids.

In the Babicanora Area, a total of 45 unclipped wireframes were developed to represent the mineralized veins and splays. The “unclipped” solids were clipped to include mineralization areas with ≥150 gpt AgEq (where AgEq = Ag gpt + (Au gpt * 86.9)). The clipping boundary was placed at the midpoint of the drill hole intercepts ≥150 gpt AgEq and the drill hole intersects <150 gpt AgEq; the clipped solid was extended a maximum distance of 80 m from drill intercepts into untested areas along strike and down dip. In some cases, samples <150 gpt AgEq were included within the clipped domain to maintain the mineralization continuity. Minimum mining width was not applied, and the mineralized vein wireframe is considered to be undiluted.

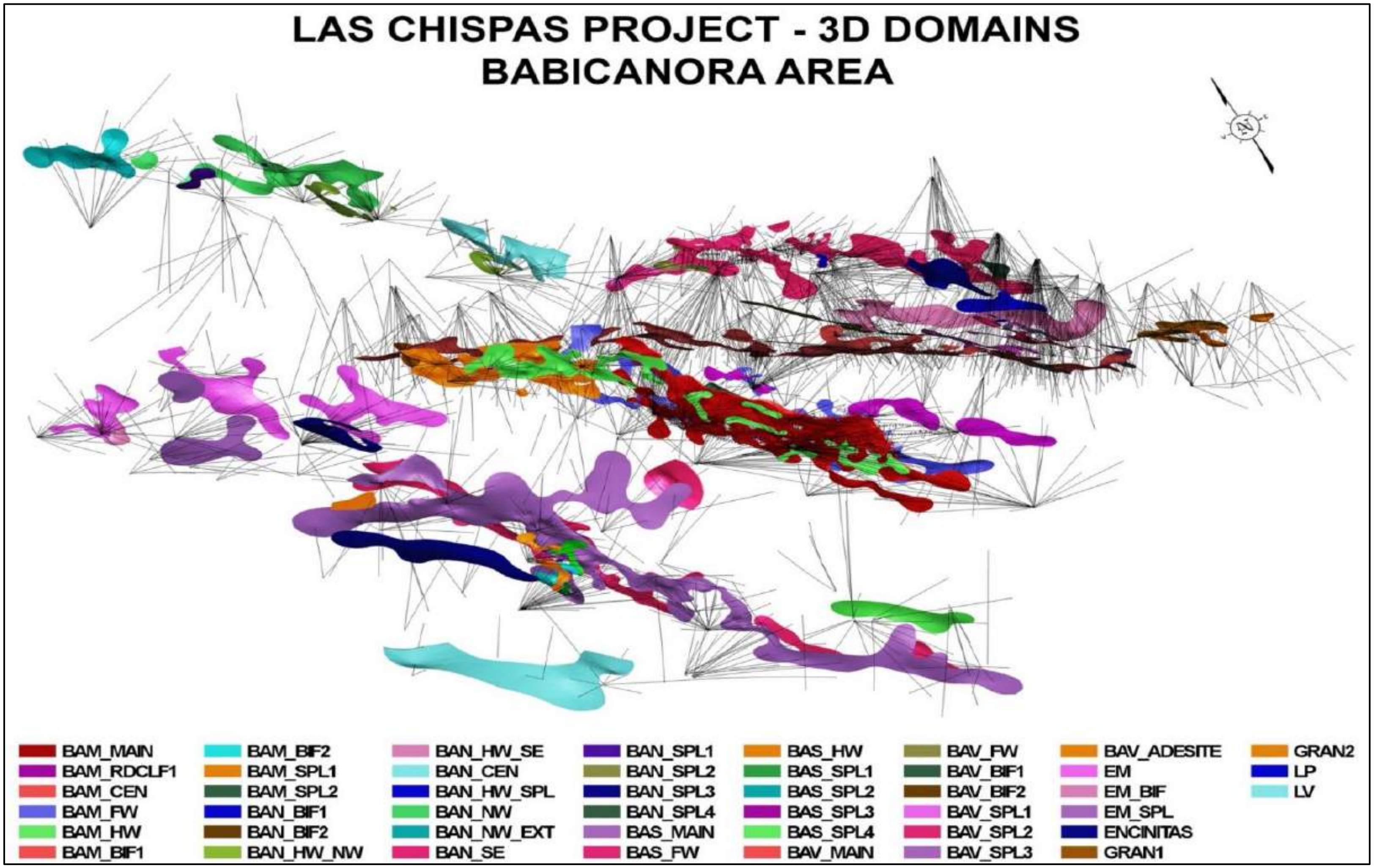
In the Las Chispas Area, a total of eight mineralized vein wireframes were created which were constrained to a minimum thickness of 0.5 m true width. The “unclip” solids were manually clipped to include mineralization areas with ≥150 gpt AgEq (where AgEq = Ag gpt + Au gpt * 75) and renamed as “clip” solids. The clipping boundary was placed at the midpoint between drill hole intercepts and was extended a maximum distance of 80 m from drill intercepts into untested areas along strike and down dip. In some cases, samples <150 gpt AgEq were included to maintain the mineralization continuity and minimum width. Zones of internal waste were delineated within the mineralization veins where a minimum true thickness of 1.5 m of <150 gpt AgEq across two or more adjacent drill holes, and where the remaining vein model maintained a 0.5 m minimum true thickness. These zones were triangulated, and volumes clipped from the vein wireframe model.

A depletion wireframe model was developed to represent areas with excavations from historic mining in the Las Chispas Area. Block model volumes captured within the depletion wireframe model were excluded from the Mineral Resource Estimate.

A topographical surface was provided by SilverCrest. All mineralization veins were clipped and removed above that surface. The historically mined areas and internal waste zones created by SilverCrest were clipped and removed from the related vein wireframes.

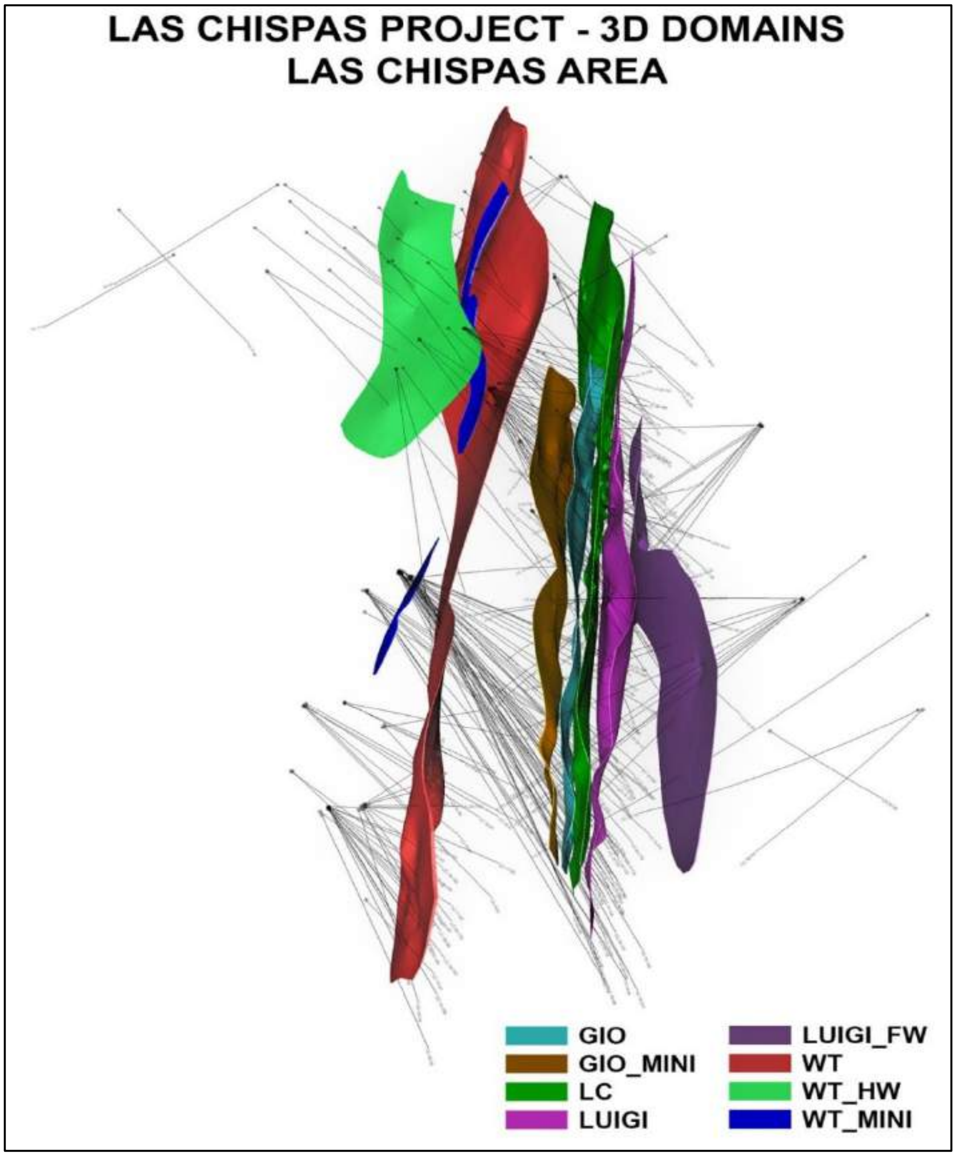
Both “clip” and “unclip” wireframes were used in the Las Chispas Area, while only clipped wireframes were used in the Babicanora Area and were utilized as constraining boundaries during Mineral Resource estimation, for rock coding, statistical analysis, and compositing limits. The Babicanora and Las Chispas clipped 3-D domains are presented in Figure 14-3 and Figure 14-4 and Appendix B.

Figure 14-3: Babicanora 3D Domains



Source: P&E, 2023.

Figure 14-4: Las Chispas 3D Domains



Source: P&E, 2023.

14.6 Rock Code Determination

A unique rock code was assigned to model blocks contained within each rock type unclipped vein in the Mineral Resource model as presented in (Table 14-5). Material outside the “clipped” veins was treated as external waste and not accounted for in the Mineral Resource Estimate.

Table 14-5: Rock Codes Used for the Mineral Resource Estimate

Area	Vein Group	Vein Name	Vein Code	Rock Code	Average True Width (m)
Babicanora	Babi (BAM)	Babi Main	BAM Main	1000	1.64*
		Babi Main RDCLF1	BAM RDCLF1	1001	
		Babi Main Central	BAM CEN	1002	
		Babi Main Bifurcation 1	BAM BIF 1	1003	0.69
		Babi Main Bifurcation 2	BAM BIF 2	1004	1.13
		Babi FW	BAM FW	1005	0.74
		Babi HW	BAM HW	1010	0.66
		Babi Splay 1	BAM Splay 1	1015	0.71
		Babi Splay 2	BAM Splay 2	1020	0.71
	El Muerto (EM)	El Muerto	EM	1050	1.05
		El Muerto Bifurcation	EM BIF	1055	0.58
		El Muerto Splay	EM Splay	1060	0.96
	Babi Norte (BAN)	Babi Norte SE	BAN SE	1102	0.71
		Babi Norte NW	BAN NW	1103	0.62
		Babi Norte CEN	BAN CEN	1104	0.51
		Babi Norte HW SE	BAN HW SE	1105	0.57
		Babi Norte HW NW	BAN HW NW	1106	0.41
		Babi Norte NW Extension	BAN NW EXT	1107	0.74
		Babi Norte HW Splay	BAN HW Splay	1110	0.44
		Babi Norte Bifurcation 1	BAN BIF 1	1115	0.33
		Babi Norte Bifurcation 2	BAN BIF 2	1116	0.50
		Babi Norte Splay 1	BAN Splay 1	1130	0.46
		Babi Norte Splay 2	BAN Splay 2	1135	0.42
		Babi Norte Splay 3	BAN Splay 3	1140	0.40
		Babi Norte Splay 4	BAN Splay 4	1145	0.45
	Babi Sur (BAS)	Babi Sur Main	BAS Main	1200	1.15
		Babi Sur FW	BAS FW	1205	0.55
		Babi Sur HW	BAS HW	1210	1.01
		Babi Sur Splay 1	BAS Splay 1	1220	0.65
		Babi Sur Splay 2	BAS Splay 2	1221	0.54
		Babi Sur Splay 3	BAS Splay 3	1222	0.48
		Babi Sur Splay 4	BAS Splay 4	1223	0.42
		Granaditas 1	GRAN 1	1300	0.60

Area	Vein Group	Vein Name	Vein Code	Rock Code	Average True Width (m)
	Granaditas (GRAN)	Granaditas 2	GRAN 2	1305	0.53
	Babi Vista (BAV)	Babi Vista Main	BAV Main	1400	0.65
		Babi Vista BIF 1	BAV BIF 1	1401	0.51
		Babi Vista BIF 2	BAV BIF 2	1402	0.57
		Babi Vista Splay 1	BAV Splay 1	1410	0.47
		Babi Vista Splay 2	BAV Splay 2	1415	0.42
		Babi Vista Splay 3	BAV Splay 3	1420	0.39
		Babi Vista FW	BAV FW	1450	0.57
		Babi Vista Andesite	BAV AND	1455	0.31
	Los Parientes	Los Parientes	LP	1500	0.34
	Encinitas	Encinitas	Encinitas	1600	0.66
	La Victoria	La Victoria	LV	1700	0.66
Las Chispas	Giovanni	Giovanni	GIO	2001	0.75
		Giovanni Mini	GIO_MINI	2002	0.71
	Las Chispas	Las Chispas Main	LC Main	2003	1.24
	William Tell	William Tell	WT	3001	1.60
		William Tell HW	WT_HW	3002	1.00
		William Tell Mini	WT_MINI	3003	0.78
	Luigi	Luigi	Luigi	4001	0.68
		Luigi_FW	Luigi_FW	4002	0.84

Note: * average true width of combined BAM Main.

14.7 Wireframe Constrained Assays

Wireframe constrained assays were back coded in the assay database with rock codes that were derived from intersections of the clipped mineralization solids and drill holes. The basic statistics of clipped mineralization wireframe constrained assays are presented in Table 14-6.

Table 14-6: Basic Statistics of All Assays Constrained Within Vein Wireframes

Veins/Data type	Variable	Au	Ag	Length
BAM Drill Holes	Number of Samples	1,372	1,372	1,372
	Minimum Value *	0.01	0.50	0.30
	Maximum Value *	539.00	33,380.00	6.20
	Mean *	9.14	854.77	0.81
	Median *	1.60	242.00	0.68
	Geometric Mean *	1.26	251.92	0.74
	Variance	914.39	4,344,437.01	0.16
	Standard Deviation	30.24	2,084.33	0.40
	Coefficient of Variation	3.31	2.44	0.50
BAM UG Channel Samples	Number of Samples	2,284	2,284	2,284
	Minimum Value *	0.01	0.80	0.19
	Maximum Value *	778.00	66,738.00	2.30
	Mean *	13.93	1,200.37	0.62
	Median *	2.32	316.00	0.57
	Geometric Mean *	2.18	343.22	0.58
	Variance	1,540.55	10,160,153.96	0.05
	Standard Deviation	39.25	3,187.50	0.23
	Coefficient of Variation	2.82	2.66	0.37
BAN Drill Holes	Number of Samples	493	493	493
	Minimum Value *	0.05	0.40	0.47
	Maximum Value *	517.00	54,965.00	2.38
	Mean *	12.38	1,529.70	0.64
	Median *	2.30	353.00	0.57
	Geometric Mean *	2.42	354.87	0.62
	Variance	1,368.65	15,267,726.22	0.04
	Standard Deviation	37.00	3,907.39	0.20
	Coefficient of Variation	2.99	2.55	0.32
BAN Channel Samples	Number of Samples	247	247	247
	Minimum Value *	0.05	0.60	0.20
	Maximum Value *	427.00	40,957.00	2.32
	Mean *	17.21	2,140.96	0.62
	Median *	2.80	362.00	0.55
	Geometric Mean *	2.87	369.42	0.57
	Variance	2,136.53	28,621,709.72	0.08
	Standard Deviation	46.22	5,349.93	0.27
	Coefficient of Variation	2.69	2.50	0.44
BAS	Number of Samples	332	332	332

Veins/Data type	Variable	Au	Ag	Length
Drill Holes	Minimum Value *	0.05	0.20	0.50
	Maximum Value *	152.50	4,890.00	2.11
	Mean *	6.08	310.93	0.75
	Median *	1.90	130.00	0.65
	Geometric Mean *	1.85	111.34	0.70
	Variance	231.30	363,245.88	0.08
	Standard Deviation	15.21	602.70	0.29
	Coefficient of Variation	2.50	1.94	0.39
BAV Drill Holes	Number of Samples	536	536	536
	Minimum Value *	0.01	0.20	0.45
	Maximum Value *	3,366.00	114,814.00	2.44
	Mean *	24.99	1,567.17	0.65
	Median *	2.92	315.50	0.57
	Geometric Mean *	2.98	271.62	0.63
	Variance	28,110.20	43,011,376.28	0.04
	Standard Deviation	167.66	6,558.31	0.21
	Coefficient of Variation	6.71	4.18	0.32
BAV Channel Samples	Number of Samples	195	195	195
	Minimum Value *	0.01	1.00	0.18
	Maximum Value *	1,060.00	53,465.00	1.52
	Mean *	46.60	4,881.66	0.59
	Median *	5.57	692.00	0.52
	Geometric Mean *	6.59	792.22	0.54
	Variance	14,860.81	104,341,660.42	0.07
	Standard Deviation	121.90	10,214.78	0.26
	Coefficient of Variation	2.62	2.09	0.43
GRAN Drill Holes	Number of Samples	63	63	63
	Minimum Value *	0.05	1.50	0.49
	Maximum Value *	114.00	78,872.00	1.62
	Mean *	8.84	2,151.35	0.71
	Median *	2.10	254.00	0.60
	Geometric Mean *	2.27	262.42	0.67
	Variance	400.79	98,781,985.33	0.07
	Standard Deviation	20.02	9,938.91	0.27
	Coefficient of Variation	2.27	4.62	0.38
EM Drill Holes	Number of Samples	93	93	93
	Minimum Value *	0.05	0.90	0.50
	Maximum Value *	21.80	2,178.00	2.06

Veins/Data type	Variable	Au	Ag	Length
	Mean *	3.83	288.92	0.87
	Median *	2.75	200.00	0.75
	Geometric Mean *	2.17	151.63	0.81
	Variance	14.52	112,615.28	0.14
	Standard Deviation	3.81	335.58	0.37
	Coefficient of Variation	1.00	1.16	0.43
Los Partientes Drill Holes	Number of Samples	11	11	11
	Minimum Value *	1.32	70.30	0.50
	Maximum Value *	19.95	1,800.00	0.74
	Mean *	5.29	498.21	0.58
	Median *	2.47	232.00	0.57
	Geometric Mean *	3.54	336.10	0.57
	Variance	29.27	232,283.89	0.00
	Standard Deviation	5.41	481.96	0.07
	Coefficient of Variation	1.02	0.97	0.11
Encinitas Drill Holes	Number of Samples	8	8	8
	Minimum Value *	1.98	0.20	0.50
	Maximum Value *	190.50	2,760.00	1.57
	Mean *	27.60	389.94	0.90
	Median *	3.40	11.55	0.83
	Geometric Mean *	5.89	20.10	0.83
	Variance	3,798.85	809,683.19	0.13
	Standard Deviation	61.63	899.82	0.36
	Coefficient of Variation	2.23	2.31	0.40
La Victoria Drill Holes	Number of Samples	6	6	6
	Minimum Value *	0.42	0.60	0.50
	Maximum Value *	3.65	207.00	1.90
	Mean *	1.87	108.78	0.94
	Median *	1.93	118.00	0.83
	Geometric Mean *	1.53	39.93	0.86
	Variance	1.04	6,516.65	0.20
	Standard Deviation	1.02	80.73	0.45
	Coefficient of Variation	0.55	0.74	0.48
Giovanni Drill Holes	Number of Samples	160	160	160
	Minimum Value *	0.01	0.20	0.35
	Maximum Value *	92.60	7,240	3.12
	Mean *	3.39	425	0.71
	Median *	0.64	115	0.57

Veins/Data type	Variable	Au	Ag	Length
	Geometric Mean *	0.50	52.7	0.66
	Variance	81.51	697,291	0.11
	Standard Deviation	9.03	835.04	0.34
	Coefficient of Variation	2.67	1.96	0.48
Las Chispas Drill Holes	Number of Samples	229	229	229
	Minimum Value *	0.01	0.20	0.35
	Maximum Value *	513.00	42,322	2.97
	Mean *	7.10	847	0.76
	Median *	0.72	138	0.60
	Geometric Mean *	0.53	78.6	0.69
	Variance	1,553.77	14,091,266	0.16
	Standard Deviation	39.42	3,753.83	0.40
	Coefficient of Variation	5.55	4.43	0.52
Las Chispas UG Channel/Chip Samples	Number of Samples	1,864	1,864	N/A
	Minimum Value *	0.01	0.30	N/A
	Maximum Value *	70.30	10,000	N/A
	Mean *	1.83	298	N/A
	Median *	0.43	82.0	N/A
	Geometric Mean *	0.42	72.6	N/A
	Variance	19.25	413,653	N/A
	Standard Deviation	4.39	643.16	N/A
	Coefficient of Variation	2.39	2.16	N/A
William Tell Drill Holes	Number of Samples	75	75	75
	Minimum Value *	0.01	0.20	0.35
	Maximum Value *	13.10	1,445.00	2.00
	Mean *	1.64	190	0.84
	Median *	0.43	63.6	0.87
	Geometric Mean *	0.37	21.6	0.78
	Variance	6.52	85,365	0.11
	Standard Deviation	2.55	292.17	0.33
	Coefficient of Variation	1.56	1.54	0.39
William Tell UG Channel/Chip Samples	Number of Samples	111	111	N/A
	Minimum Value *	0.01	0.60	N/A
	Maximum Value *	52.20	2,730	N/A
	Mean *	2.66	240	N/A
	Median *	0.35	75.6	N/A
	Geometric Mean *	0.39	65.3	N/A
	Variance	48.07	195,098	N/A

Veins/Data type	Variable	Au	Ag	Length
	Standard Deviation	6.93	441.70	N/A
	Coefficient of Variation	2.61	1.84	N/A
Luigi Drill Holes	Number of Samples	121	121	121
	Minimum Value *	0.01	0.30	0.40
	Maximum Value *	26.30	3,720	2.35
	Mean *	2.27	291	0.70
	Median *	0.79	114	0.58
	Geometric Mean *	0.48	59.1	0.66
	Variance	21.97	346,039	0.10
	Standard Deviation	4.69	588.25	0.31
	Coefficient of Variation	2.06	2.02	0.44

Note: N/A = not applicable.
* Au & Ag units are gpt and length units are metres. Values are not weighted to sample length.

14.8 Compositing

Due to the nature of the narrow veins and in order to regularize the assay sampling intervals for grade interpolation, a 0.5 m compositing length was selected for the drill hole intervals that fell within the constraints of the above-mentioned vein wireframes. The composites were calculated for gold and silver over 0.5 m lengths starting at the first point of intersection between assay data hole and hangingwall of the 3-D zonal constraint. The compositing process was halted upon exit from the footwall of the 3-D wireframe constraint. Un-assayed intervals and below detection limit assays were set to 0.001 gpt. If the last composite interval was less than 0.25 m, the composite length was adjusted to make all composite intervals of the vein intercept equal. This process would not introduce any short sample bias in the grade interpolation process. The constrained composite data were extracted to a point area file for grade capping analysis. The composite statistics of the clipped wireframes are summarized in Table 14-7.

Table 14-7: Basic Statistics of Composites Constrained Within Clipped Vein Wireframes

Vein Group (Data Type)	Variable	Au Composite	Au Cap	Ag Composite	Ag Cap	Length
BAM Drill Holes	Number of Samples	2,213	2,213	2,213	2,213	2,213
	Minimum Value *	0.00	0.00	0.00	0.00	0.25
	Maximum Value *	477.09	247.90	26,969.00	15,598.00	0.74
	Mean *	8.32	8.02	776.23	757.31	0.50
	Median *	1.87	1.87	242.00	242.00	0.50
	Variance	617.23	459.77	3,280,612	2,755,447	0.00
	Standard Deviation	24.84	21.44	1,811.25	1,659.95	0.06
	Coefficient of Variation	2.98	2.67	2.33	2.19	0.12
BAM Channel Samples	Number of Samples	2,654	2,654	2,654	2,654	2,654
	Minimum Value *	0.01	0.01	0.80	0.80	0.25
	Maximum Value *	778.00	303.80	66,738.00	18,240.00	0.74

Vein Group (Data Type)	Variable	Au Composite	Au Cap	Ag Composite	Ag Cap	Length
	Mean *	13.49	12.86	1,150.57	1,083.13	0.50
	Median *	2.83	2.83	346.26	346.26	0.50
	Variance	1,393.05	882.34	9,289,991	4,913,593	0.00
	Standard Deviation	37.32	29.70	3,047.95	2,216.66	0.07
	Coefficient of Variation	2.77	2.31	2.65	2.05	0.13
BAN Drill Holes	Number of Samples	598	598	598	598	598
	Minimum Value*	0.00	0.00	0.00	0.00	0.25
	Maximum Value *	455.04	214.80	48,402.70	24,119.00	0.74
	Mean *	12.68	11.55	1,584.02	1,492.08	0.52
	Median *	2.52	2.51	388.50	384.00	0.50
	Variance	1,238.56	723.40	13,913,858	9,503,046	0.01
	Standard Deviation	35.19	26.90	3,730.13	3,082.70	0.08
	Coefficient of Variation	2.78	2.33	2.35	2.07	0.14
BAN Channel Samples	Number of Samples	291	291	291	291	291
	Minimum Value*	0.01	0.01	0.60	0.60	0.25
	Maximum Value *	341.83	286.00	40,957.00	31,127.00	0.73
	Mean *	17.13	16.66	2,191.20	2,110.72	0.48
	Median *	2.57	2.57	354.00	354.00	0.50
	Variance	2,102.80	1,923.87	30,062,297	25,483,214	0.01
	Standard Deviation	45.86	43.86	5,482.91	5,048.09	0.09
	Coefficient of Variation	2.68	2.63	2.50	2.39	0.18
BAS Drill Holes	Number of Samples	490	490	490	490	490
	Minimum Value *	0.00	0.00	0.00	0.00	0.25
	Maximum Value *	152.50	110.50	4,297.79	3,280.00	0.74
	Mean *	6.76	6.06	295.97	289.61	0.51
	Median *	2.01	2.01	131.63	131.00	0.50
	Variance	293.91	192.01	314,793.81	282,149.37	0.00
	Standard Deviation	17.14	13.86	561.06	531.18	0.06
	Coefficient of Variation	2.53	2.29	1.90	1.83	0.13
BAV Drill Holes	Number of Samples	682	682	682	682	682
	Minimum Value *	0.00	0.00	0.00	0.00	0.25
	Maximum Value *	2,775.90	366.00	94,867.10	32,741.00	0.74
	Mean *	22.75	16.18	1,457.38	1,292.86	0.51
	Median *	3.07	3.07	325.00	325.00	0.50
	Variance	17,341.57	1,915.88	28,672,519	11,644,843	0.01
	Standard Deviation	131.69	43.77	5,354.67	3,412.45	0.08
	Coefficient of Variation	5.79	2.71	3.67	2.64	0.15
BAV	Number of Samples	244	244	244	244	244

Vein Group (Data Type)	Variable	Au Composite	Au Cap	Ag Composite	Ag Cap	Length
Channel Samples	Minimum Value *	0.01	0.01	1.00	1.00	0.23
	Maximum Value *	730.14	378.00	49,193.20	35,267.00	0.73
	Mean *	34.56	31.97	4,023.52	3,902.41	0.49
	Median *	6.97	6.97	764.64	764.64	0.50
	Variance	6,720.18	4,333.00	64,447,560	57,218,520	0.01
	Standard Deviation	81.98	65.83	8,027.92	7,564.29	0.09
	Coefficient of Variation	2.37	2.06	2.00	1.94	0.19
GRAN Drill Holes	Number of Samples	88	88	88	88	88
	Minimum Value *	0.05	0.05	1.50	1.50	0.25
	Maximum Value *	114.00	80.00	78,871.30	11,685.00	0.74
	Mean *	9.59	9.16	2,001.76	1,236.06	0.51
	Median *	2.31	2.31	240.50	240.50	0.50
	Variance	392.14	324.45	73,603,085.	6,941,711	0.01
	Standard Deviation	19.80	18.01	8,579.22	2,634.71	0.09
	Coefficient of Variation	2.06	1.97	4.29	2.13	0.17
EM Drill Holes	Number of Samples	160	160	160	160	160
	Minimum Value *	0.05	0.05	1.00	1.00	0.25
	Maximum Value *	21.80	15.17	2,177.95	2,059.00	0.71
	Mean *	3.74	3.62	274.50	271.82	0.51
	Median *	2.75	2.75	195.00	195.00	0.50
	Variance	11.96	9.31	102,835.51	97,933.51	0.01
	Standard Deviation	3.46	3.05	320.68	312.94	0.07
	Coefficient of Variation	0.92	0.84	1.17	1.15	0.14
Los Partientes Drill Holes	Number of Samples	11	11	11	11	11
	Minimum Value *	1.33	1.33	70.30	70.30	0.51
	Maximum Value *	19.95	11.07	1,799.99	954.70	0.74
	Mean *	5.29	4.48	500.24	423.01	0.58
	Median *	2.47	2.47	254.41	254.41	0.57
	Variance	29.25	12.07	231,238.37	90,115.44	0.00
	Standard Deviation	5.41	3.47	480.87	300.19	0.06
	Coefficient of Variation	1.02	0.77	0.96	0.71	0.11
Encinitas Drill Holes	Number of Samples	13	13	13	13	13
	Minimum Value *	1.98	1.98	0.20	0.20	0.45
	Maximum Value *	190.50	74.93	2,759.99	1,027.00	0.70
	Mean *	18.62	9.73	249.32	116.02	0.55
	Median *	2.66	2.66	8.40	8.40	0.52
	Variance	2,471.52	363.85	530,140.71	74,010.73	0.00
	Standard Deviation	49.71	19.07	728.11	272.05	0.06

Vein Group (Data Type)	Variable	Au Composite	Au Cap	Ag Composite	Ag Cap	Length
	Coefficient of Variation	2.67	1.96	2.92	2.34	0.11
La Victoria	Number of Samples	12	12	12	12	12
	Minimum Value *	0.42	0.42	0.60	0.60	0.29
	Maximum Value *	3.65	3.65	207.00	207.00	0.72
	Mean *	1.79	1.79	108.92	108.92	0.47
	Median *	1.63	1.63	103.00	103.00	0.50
	Variance	1.01	1.01	5,115.94	5,115.94	0.01
	Standard Deviation	1.00	1.00	71.53	71.53	0.11
	Coefficient of Variation	0.56	0.56	0.66	0.66	0.23
Giovanni Drill Holes	Number of Samples	222	222	222	222	222
	Minimum Value *	0.01	0.01	0.20	0.20	0.38
	Maximum Value *	92.60	73.00	7,240	2,890.00	0.73
	Mean *	3.47	3.25	419	398.35	0.50
	Median *	1.23	1.23	181	181.24	0.50
	Variance	82.33	60.33	564,175	375,794	0.00
	Standard Deviation	9.07	7.77	751.12	613.02	0.06
	Coefficient of Variation	2.62	2.39	1.79	1.54	0.12
Las Chispas Drill Holes	Number of Samples	310	310	310	310	310
	Minimum Value *	0.00	0.00	0.00	0.00	0.37
	Maximum Value *	417.69	241.00	35,654	13,515.00	0.74
	Mean *	6.20	5.63	757	628.42	0.50
	Median *	0.85	0.85	154	153.51	0.50
	Variance	921.33	552.64	8,954,831	3,077,991	0.00
	Standard Deviation	30.35	23.51	2,992.46	1,754.42	0.05
	Coefficient of Variation	4.90	4.18	3.95	2.79	0.09
Las Chispas UG Channel/ Chip Samples	Number of Samples	1,864	1,864	1,864	1,864	N/A
	Minimum Value *	0.01	0.01	0.30	0.30	N/A
	Maximum Value *	70.30	65.00	10,000	8,340.00	N/A
	Mean *	1.83	1.83	298	296.89	N/A
	Median *	0.43	0.43	82.0	82.00	N/A
	Variance	19.25	18.87	413,653	397,850	N/A
	Standard Deviation	4.39	4.34	643.16	630.75	N/A
	Coefficient of Variation	2.39	2.37	2.16	2.12	N/A
William Tell Drill Holes	Number of Samples	151	151	151	151	151
	Minimum Value *	0.00	0.00	0.00	0.00	0.27
	Maximum Value *	13.08	13.08	1,436	1,370.00	0.75
	Mean *	1.21	1.21	150	149.41	0.50
	Median *	0.15	0.15	21.0	20.98	0.50

Vein Group (Data Type)	Variable	Au Composite	Au Cap	Ag Composite	Ag Cap	Length
	Variance	4.44	4.44	66,906	65,805	0.01
	Standard Deviation	2.11	2.11	258.66	256.53	0.07
	Coefficient of Variation	1.75	1.75	1.73	1.72	0.14
William Tell UG Channel/ Chip Samples	Number of samples	111	111	111	111	N/A
	Minimum Value *	0.01	0.01	0.60	0.60	N/A
	Maximum Value *	52.20	33.00	2,730	1,910.00	N/A
	Mean *	2.66	2.49	240	232.78	N/A
	Median *	0.35	0.35	75.6	75.60	N/A
	Variance	48.07	34.22	195,098	164,315	N/A
	Standard Deviation	6.93	5.85	441.70	405.36	N/A
	Coefficient of Variation	2.61	2.35	1.84	1.74	N/A
Luigi Drill Holes	Number of Samples	178	178	178	178	178
	Minimum Value *	0.00	0.00	0.00	0.00	0.38
	Maximum Value *	26.30	26.30	3,720	3,280.00	0.72
	Mean *	2.10	2.10	274	271.02	0.49
	Median *	0.81	0.81	122	121.71	0.50
	Variance	18.74	18.74	302,217	286,260	0.00
	Standard Deviation	4.33	4.33	549.74	535.03	0.06
	Coefficient of Variation	2.06	2.06	2.01	1.97	0.12

Note: N/A = not applicable. * Au & Ag units are gpt and length units are metres.

14.9 Grade Capping

Grade capping and high-grade transition analyses were undertaken on the 0.5 m composite values in the database within the constraining wireframes to control possible bias resulting from erratic high-grade composites in the database, and to maintain the high-grade local variation. The high-grade transition consists of a restrictive search ellipse and a maximum limiting composite value.

In the Babicanora Area, log-probability plots for gold and silver composites were generated by SilverCrest for each mineralization vein (Appendix C). The drill hole and channel sample composites were analysed separately for each vein. The QPs of this Technical Report section reviewed and agreed with the capping and high-grade transition methods and selected values. In the Las Chispas Area, log-normal histograms and log-probability plots for gold and silver composites were generated for each mineralization vein by the QPs.

The capped composite statistics are summarized in Table 14-7.The grade capping and high-grade transition values for gold and silver are detailed in Table 14-8 and Table 14-9, respectively. The capped composites were utilized to develop variograms and for block model grade interpolation and classification.

Table 14-8: Gold Grade Capping Values

Vein _ Data Type	Maximum Uncapped Value (Au gpt)	Cap (Au gpt)	Number Samples Capped	Cap Percentile (%)	High Grade Transition Value (Au gpt)	Number Samples for High Grade Transition	High Grade Transition Percentile (%)
BAM_Main_DH	431.2	247.9	4	99.7	181.6	6	99.5
BAM_Main_CH	778	303.8	7	99.7	NA	0	100.0
BAM RDCLF1_DH	24.4	20.21	2	97.1	NA	0	100.0
BAM RDCLF1_CH	25.1	No Cap	0	100.0	NA	0	100.0
BAM_Central_DH	27.8	23.21	3	99.2	16.81	6	98.3
BAM_FW_DH	477.1	179.7	5	98.5	NA	0	100.0
BAM_FW_CH	395.5	124.9	3	98.9	NA	0	100.0
BAM_HW_DH	91.5	16.25	5	96.8	NA	0	100.0
BAM_HW_CH	43.2	23.35	2	94.3	NA	0	100.0
BAM_BIF 1_DH	68.3	35.04	2	93.8	NA	0	100.0
BAM_BIF 1_CH	7	No Cap	0	100.0	NA	0	100.0
BAM_BIF 2_DH	41.8	40	2	92.0	NA	0	100.0
BAM_Splay 1_DH	4.02	No Cap	0	100.0	NA	0	100.0
BAM_Splay 2_DH	4.66	4.24	2	89.5	NA	0	100.0
EM_DH	18.1	9.58	4	96.7	8.49	6	95.0
EM_BIF_DH	3.63	3.39	2	80.0	NA	0	100.0
EM_SPLAY_DH	21.8	15.17	1	96.6	12.22	2	93.1
BAN Main SE_CH	341.8	286	2	99.3	125.3	9	96.7
BAN Main SE_DH	455	214.8	3	99.2	114.5	8	98.0
BAN Main CEN_DH	305	71.8	1	96.4	24.85	3	89.3
BAN Main NW_DH	66.9	31.9	1	98.4	17.59	7	88.5
BAN_HW_NW_DH	4.84	4.25	1	95.8	NA	0	100.0
BAN_HW_SE_DH	20	16.25	1	97.6	12	4	90.2
BAN_HW_SE_CH	53.1	3.72	1	91.7	NA	0	100.0

Vein _ Data Type	Maximum Uncapped Value (Au gpt)	Cap (Au gpt)	Number Samples Capped	Cap Percentile (%)	High Grade Transition Value (Au gpt)	Number Samples for High Grade Transition	High Grade Transition Percentile (%)
BAN_BIF 1_DH	7.46	6.84	1	50.0	6.22	1	50.0
BAN_BIF 2_CH	16.8	No Cap	0	100.0	NA	0	100.0
BAN_HW Splay_DH	11.7	10.1	1	85.7	8.51	1	85.7
BAN_Splay 1_DH	9.22	8.04	1	75.0	6.86	1	75.0
BAN_Splay 2_DH	4.68	2.19	1	80.0	1.48	2	60.0
BAN_Splay 3_DH	105	87.03	1	91.7	70.4	1	91.7
BAN_Splay 4_DH	8.83	5.95	1	90.9	5.4	2	81.8
BAN_Splay 4_CH	2.59	No Cap	0	100.0	NA	0	100.0
BAN NW EXT DH	27.4	24.14	1	91.7	NA	0	100.0
BAS_Main DH	152.5	110.5	3	99.2	48.9	9	97.5
BAS_HW DH	61.8	18.9	3	88.5	NA	0	100.0
BAS_FW DH	119	18.7	1	98.3	NA	0	100.0
BAS_Splay 1 DH	5.69	4.1	1	90.0	3.81	1	90.0
BAS_Splay 2 DH	6.25	5.9	1	92.9	5.72	1	92.9
BAS_Splay 3 DH	3.44	3.39	2	75.0	3.1	3	62.5
BAS Splay 4 DH	4.29	4.26	1	80.0	NA	0	100.0
BAV_Main_DH	2,776	366	5	99.1	164.3	10	98.1
BAV_Main_CH	730.1	378	2	99.1	250	6	97.2
BAV_FW_DH	146.5	67.5	1	97.4	57.99	3	92.1
BAV_FW_CH	118.6	68.1	1	96.4	NA	0	100.0
BAV_Andesite DH	124.5	118.6	2	60.0	38.61	2	60.0
BAV_BIF 1 DH	5.43	4.87	1	90.9	4.3	2	81.8
BAV_BIF 2 DH	8.85	6.9	1	93.3	4.92	1	93.3
BAV_Splay 1 DH	8.41	7.13	1	95.8	6.95	1	95.8
BAV_Splay 2 DH	124	34.47	1	97.4	19.85	3	92.3
BAV_Splay 3 DH	12.6	8.24	1	95.5	5.15	3	86.4

Vein _ Data Type	Maximum Uncapped Value (Au gpt)	Cap (Au gpt)	Number Samples Capped	Cap Percentile (%)	High Grade Transition Value (Au gpt)	Number Samples for High Grade Transition	High Grade Transition Percentile (%)
GRAN_1 DH	114	80	1	98.6	53.56	5	92.8
GRAN_2 DH	10.05	8.2	4	78.9	NA	0	100.0
Encinitas DH	190.5	74.93	1	92.3	12.11	1	92.3
Los_Parientes_DH	20.0	11.07	2	81.8	NA	0	100.0
La Victoria DH	3.65	No Cap	0	100.0	NA	0	100.0
GIO_DH	48.6	20	1	99.3	NA	0	100.0
Gio Mini_DH	92.6	73	1	98.7	15.0	4	94.7
LC Main_DH	418	241	1	99.7	65.0	5	98.4
LC Main_CH	70.3	65	1	99.9	NA	0	100.0
WT_DH	7.9	No Cap	0	100.0	NA	0	100.0
WT_CH	52.2	33	1	99.7	NA	0	100.0
WT HW_DH	5.7	No Cap	0	100.0	NA	0	100.0
WT Mini_DH	13.1	No Cap	0	100.0	NA	0	100.0
Luigi_DH	26.3	No Cap	0	100.0	NA	0	100.0
Luigi FW_DH	15.3	No Cap	0	100.0	NA	0	100.0

Note: CH=Channel, DH=Drill Hole, NA=Not Applicable.

Table 14-9: Silver Grade Capping Values

Vein _ Data Type	Maximum Uncapped Value (Ag gpt)	Cap (Ag gpt)	Number Samples Capped	Cap Percentile (%)	High Grade Transition Value (Ag gpt)	Number Samples for High Grade Transition	High Grade Transition Percentile (%)
BAM_Main_DH	26,969	15,598	4	99.7	12,996	7	99.4
BAM_Main_CH	66,738	18,240	13	99.4	NA	0	100.0
BAM RDCLF1_DH	2,683	2,202	2	97.1	NA	0	100.0
BAM RDCLF1_CH	2,800	No Cap	0	100.0	NA	0	100.0
BAM_Central_DH	2,560	2,149	3	99.2	1,764	6	98.3
BAM_FW_DH	21,858	14,139	5	98.5	NA	0	100.0
BAM_FW_CH	16,532	12,668	3	98.9	NA	0	100.0
BAM_HW_DH	3,160	1,034	4	97.4	NA	0	100.0
BAM_HW_CH	4,340	2,238	2	94.3	NA	0	100.0
BAM_BIF 1_DH	8,047	4,122	2	93.8	NA	0	100.0
BAM_BIF 1_CH	749	No Cap	0	100.0	NA	0	100.0
BAM_BIF 2_DH	6,765	3,713	1	96.0	NA	0	100.0
BAM_Splay 1_DH	527	475	2	84.6	NA	0	100.0
BAM_Splay 2_DH	559	433.2	2	89.5	NA	0	100.0
EM_DH	952	769.8	4	96.7	607	5	95.9
EM_BIF_DH	311	279.4	1	90.0	NA	0	100.0
EM_SPLAY_DH	2,178	2,059	2	93.1	1,882	2	93.1
BAN Main SE_CH	40,957	31,127	2	99.3	15,053	10	96.4
BAN Main SE_DH	48,403	24,119	3	99.2	12,845	9	97.7
BAN Main CEN_DH	13,890	6,330	1	96.4	2,790	2	92.9
BAN Main NW_DH	6,950	2,840	1	98.4	2,491	4	93.4
BAN_HW_NW_DH	938.4	800	1	95.8	NA	0	100.0
BAN_HW_SE_DH	5,039	4,532	1	97.6	1,626	4	90.2
BAN_HW_SE_CH	4,020	260	1	91.7	NA	0	100.0

Vein _ Data Type	Maximum Uncapped Value (Ag gpt)	Cap (Ag gpt)	Number Samples Capped	Cap Percentile (%)	High Grade Transition Value (Ag gpt)	Number Samples for High Grade Transition	High Grade Transition Percentile (%)
BAN_BIF 1_DH	704	651.2	1	50.0	598.4	1	50.0
BAN_BIF 2_CH	1,700	No Cap	0	100.0	NA	0	100.0
BAN_HW Splay_DH	2,230	1,902	1	85.7	1,574	1	85.7
BAN_Splay 1_DH	1,040	896.7	1	75.0	738	1	75.0
BAN_Splay 2_DH	724	238.9	2	60.0	204.1	2	60.0
BAN_Splay 3_DH	9,630	8,053	1	91.7	6,476	1	91.7
BAN_Splay 4_DH	2,468	1,261	1	90.9	1,051	2	81.8
BAN_Splay 4_CH	219	No Cap	0	100.0	NA	0	100.0
BAN NW EXT DH	3300	3031	1	91.7	NA	0	100.0
BAS_Main DH	4,298	3,280	3	99.2	2,843	11	97.0
BAS_HW DH	138	80.9	2	92.3	NA	0	100.0
BAS_FW DH	1,115	898	1	98.3	598.6	5	91.7
BAS_Splay 1 DH	609	300.9	1	90.0	211	2	80.0
BAS_Splay 2 DH	843	574.9	1	92.9	321.9	1	92.9
BAS_Splay 3 DH	145	No Cap	0	100.0	141.8	3	62.5
BAS Splay 4 DH	233	No Cap	0	100.0	NA	0	100.0
BAV_Main_DH	94,867	32,741	4	99.2	14,542	8	98.5
BAV_Main_CH	49,193	35,267	2	99.1	27,600	9	95.8
BAV_FW_DH	8,933	6,631	2	94.7	3,545	3	92.1
BAV_FW_CH	11,361	4,730	1	96.4	NA	0	100.0
BAV_Andesite DH	86	84.92	2	60.0	45.16	2	60.0
BAV_BIF 1 DH	449.3	427.4	1	90.9	415	1	90.9
BAV_BIF 2 DH	795	664.3	1	93.3	533.6	1	93.3
BAV_Splay 1 DH	906	903.3	3	87.5	900.8	3	87.5
BAV_Splay 2 DH	6,930	4,292	1	97.4	3,301	3	92.3
BAV_Splay 3 DH	1,798	1,749	1	95.5	705.4	3	86.4

Vein _ Data Type	Maximum Uncapped Value (Ag gpt)	Cap (Ag gpt)	Number Samples Capped	Cap Percentile (%)	High Grade Transition Value (Ag gpt)	Number Samples for High Grade Transition	High Grade Transition Percentile (%)
GRAN_1 DH	78,871	11,685	1	98.6	6,910	5	92.8
GRAN_2 DH	677	520	2	89.5	NA	0	100.0
Encinitas DH	2,760	1,027	1	92.3	273.1	1	92.3
Los_Parientes_DH	1,800	954.7	2	81.8	NA	0	100.0
La Victoria DH	207	No Cap	0	100.0	NA	0	100.0
GIO_DH	7,240	2,800	1	99.3	815.0	12	91.8
GIO Mini_DH	3,060	2,890	1	98.7	1,824.0	6	92.1
LC Main_DH	35,654	13,515	2	99.4	10,265.0	5	98.4
LC Main_CH	10,000	8,340	1	100.0	NA	0	100.0
WT_DH	1,436	1,370	1	98.6	610.0	7	90.3
WT_CH	2,730	1,910	1	99.7	NA	0	100.0
WT HW_DH	352	No Cap	0	100.0	NA	0	100.0
WT Mini_DH	392	No Cap	0	100.0	NA	0	100.0
Luigi_DH	3,720	3,280	1	99.3	1,253.0	6	95.6
Luigi FW_DH	1,397	No Cap	0	100.0	NA	0	100.0

Notes: CH=Channel, DH=Drill Hole, NA=Not Applicable.

14.10 Variography

A variography analysis was performed by the SilverCrest using the gold and silver composites within each individual vein wireframe as a guide to determining a grade interpolation search distance and ellipse orientation strategy (Appendix D). The QPs reviewed the variograms and concluded that they were developed reasonably

Continuity ellipses based on the observed ranges were subsequently generated and utilized as the basis for grade estimation search ranges, distance weighting calculations and Mineral Resource classification criteria.

14.11 In-situ Rock Bulk Density

A total of 641 bulk density measurements were collected on site from drill core by SilverCrest using the water immersion method. Drill core fragments greater than 5 cm in length were dried and weighed prior to being suspended and submerged from a scale in a bucket of water using a wire basket. The measurements tested various mineralized and non-mineralized material types at approximately 20 m down-hole intervals. Where rock material was highly fragmented or strongly clay altered, samples were not collected. The bulk density ranged from 1.53 to 4.02 t/m^3 with a mean value of 2.52 t/m^3.

Seventy-two samples were tested by ALS Chemex in Hermosillo, Mexico, for wax coated bulk density to validate the on-site measurements. The samples were collected from non-mineralization HW and FW materials, and mineralized material free of clay alteration. The overall average bulk density was 2.50 t/m^3, with 2.50 t/m^3 and 2.49 t/m^3 for Las Chispas and Babicanora Areas, respectively.

In November 2018, two samples were collected and sent by SilverCrest to Geotecnia del Noroeste S.A. de C.V. based in Hermosillo, Sonora, for wax coated dry bulk density testing. Each sample was split into two subsamples. The measured values ranged from 2.48 t/m^3 to 2.60 t/m^3, with an average dry bulk density of 2.56 t/m^3.

A uniform mean bulk density of 2.55 t/m^3 was applied to all in-situ rock types in the Mineral Resource Estimate based on the results of the bulk density test work completed above by SilverCrest and the two laboratories mentioned above.

14.12 Block Modelling

The block models for the Babicanora Area were constructed by SilverCrest using Leapfrog™ software. The QPs reviewed and verified the Leapfrog™ block models by comparing to the block models interpolated with GEOVIA GEMS™ software for each vein. All models have been reviewed and discussed between SilverCrest and the QPs during the course of this Mineral Resource Estimate. A few minor changes were made due to the review of the models.

The block models for the Las Chispas Area were independently created by the QPs using GEOVIA GEMS™ V6.8.2 modelling software during the October 2020 Mineral Resource Estimate.

The block model origins and block sizes are presented in Table 14-10. Each block model consists of separate model attributes for estimated gold and silver grades, rock type (mineralization domains), bulk density, AgEq value, and classification.

Table 14-10: Block Model Definition

Vein Group	Direction	Minimum Corner Coordinates	No. of Parent Blocks	Parent Block Size (m)	Sub-block ratio
BAM	X	579,563.574	265	6	16
	Y	3,343,807.956	210	2	32
	Z	749.458	100	6	8
	Rotation	Rotated clockwise 51.05° around the Z axis			
BAN	X	579,090.140	533	5	16
	Y	3,344,733.485	114	5	32
	Z	716.975	92	6	8
	Rotation	Rotated clockwise 44° around the Z axis			
BAS	X	578,956.638	395	5	16
	Y	3,343,713.622	133	5	32
	Z	464.000	156	6	8
	Rotation	Rotated clockwise 53.76° around the Z axis			
BAV & Gran	X	579,503.777	471	5	16
	Y	3,344,147.551	52	5	32
	Z	648.171	105	6	8
	Rotation	Rotated clockwise 44° around the Z axis			
EM	X	578,897.644	235	5	16
	Y	3,344,400.945	160	2.5	8
	Z	374.458	195	5	8
	Rotation	Rotated clockwise 51.05° around the Z axis			
Las Chispas*	X	580,398.801	240	2.5	NA
	Y	3,343,924.556	388	5	NA
	Z	770	94	5	NA
	Rotation	Rotated counterclockwise 25°			

Note: *the block model of Las Chispas Area was created with GEOVIA GEMS™ software, whereas all other block models were generated using Leapfrog™ software.

In the Babicanora Area, the gold and silver grade values were interpolated into the grade blocks using inverse distance weighting to the third power (ID^3). Multiple passes were executed for the grade interpolation to progressively capture the sample points, to avoid over-smoothing and preserve local grade variability. Pass 0 was executed for the vein when underground channel samples are available; Pass 1 to 3 were interpolated for each vein with all its capped composites. The search ellipse direction and range are variable for each vein based on its variogram performance. A variable orientation search was utilized for all the main veins. The high-grade transition was utilized for the grade interpolation in order to mitigate the high-grade influence.

The high-grade transition value was determined during the grade capping analysis, whereas the range was defined with a percentage of each pass range. The major range of high-grade transition was fixed at 15 m, except 30 m used for BAM_Main, whereas the semi-major and minor ranges varied upon the pass ranges.

With thorough review and verification of the block grades and adjacent composites, the QPs consider that the grade interpolation methods and parameters were undertaken with common industry best practices and are a reasonable representation of the in-situ Ag and Au grades, tonnages, and resultant metal content.

Grade blocks in the Babicanora Area were interpolated using the parameters in Table 14-11.

In the Las Chispas Area, the gold and silver grade values were interpolated into the blocks using inverse distance weighting to the third power (ID^3). Multiple passes were executed for the grade interpolation to progressively capture the sample points, to avoid over-smoothing and preserve local grade variability. Pass 0 was interpolated with underground samples, when available; Passes 1 and 2 were interpolated with capped composites derived from clipped wireframes for blocks coded with clip solid; whereas Pass 3 was interpolated with composites derived from unclipped solid for blocks coded with unclipped solids. Grade blocks of the Las Chispas Area were interpolated using the parameters in Table 14-12.

Table 14-11: Block Model Grade Interpolation Parameters of the Babiconara Area

Vein	Pass	No. of Composites			Search Range (m)			Ellipsoid Direction (0)			High-Grade Transition Range Percent
		Min	Max	Max per Hole	Major	Semi-Major	Minor	Dip	Dip Azimuth	Pitch	
BAM Main	0	2	12	4	20	15	10	Variable Orientation			NA
BAM Main	1	2	12	4	40	30	20	Variable Orientation			75
BAM Main	2	2	12	4	60	40	20	Variable Orientation			50
BAM Main	3	1	12	4	80	60	20	Variable Orientation			50
BAM Main RDCLF1	0	2	12	4	20	15	10	Variable Orientation			NA
BAM Main RDCLF1	1	2	12	4	40	30	20	Variable Orientation			NA
BAM Main RDCLF1	2	2	12	4	60	40	30	Variable Orientation			NA
BAM Central	1	2	12	4	40	30	20	Variable Orientation			75
BAM Central	2	2	12	4	60	40	20	Variable Orientation			50
BAM BIF 1	0	3	10	3	20	15	10	53	232	67	NA
BAM BIF 1	1	2	10	3	40	30	20	53	232	67	NA
BAM BIF 1	2	2	10	3	60	40	20	53	232	67	NA
BAM BIF 2	1	2	10	3	40	30	20	62	228	65	NA
BAM BIF 2	2	2	10	3	60	40	20	62	228	65	NA
BAM FW	0	2	12	4	20	15	10	Variable Orientation			NA
BAM FW	1	2	12	4	40	30	20	Variable Orientation			NA
BAM FW	2	1	12	4	60	40	20	Variable Orientation			NA
BAM HW	0	2	12	4	20	15	10	Variable Orientation			NA
BAM HW	1	2	12	4	40	30	20	Variable Orientation			NA
BAM HW	2	2	12	4	60	40	20	Variable Orientation			NA
BAM Splay 1	1	2	10	3	40	30	20	62	229	61	NA
BAM Splay 1	2	2	10	3	60	40	20	62	229	61	NA
BAM Splay 2	1	2	10	3	40	30	20	60	235	71	NA
BAM Splay 2	2	2	10	3	60	40	20	60	235	71	NA

Vein	Pass	No. of Composites			Search Range (m)			Ellipsoid Direction (0)			High-Grade Transition Range Percent
		Min	Max	Max per Hole	Major	Semi-Major	Minor	Dip	Dip Azimuth	Pitch	
BAM Splay 2	3	1	10	3	60	40	20	60	235	71	NA
EM	1	2	12	3	50	45	30	Variable Orientation			25
EM	2	2	12	3	60	55	30	Variable Orientation			18.75
EM BIF	1	2	12	3	40	30	20	73	233	83	NA
EM BIF	2	2	12	3	60	40	30	73	233	83	NA
EM Splay	1	2	12	3	40	30	20	64	217	67	37.5
EM Splay	2	1	12	3	60	40	30	64	217	67	18.75
Los Parientes	1	2	12	2	40	30	20	87	241	72	NA
Los Parientes	2	2	12	2	60	40	30	87	241	72	NA
Los Parientes	3	1	12	2	80	60	30	87	241	72	NA
BAN SE	0	4	12	3	20	15	15	Variable Orientation			75
BAN SE	1	3	12	3	40	30	20	Variable Orientation			37.5
BAN SE	2	1	12	3	60	40	20	Variable Orientation			25
BAN NW	1	2	12	3	40	30	30	Variable Orientation			37.5
BAN NW	2	1	12	3	60	40	30	Variable Orientation			25
BAN CEN	1	3	12	3	25	20	20	Variable Orientation			60
BAN CEN	2	2	12	3	50	40	20	Variable Orientation			30
BAN CEN	3	1	12	3	80	60	20	Variable Orientation			30
BAN HW SE	0	3	8	2	20	10	10	72	223	61	NA
BAN HW SE	1	2	10	2	40	30	20	72	223	61	37.5
BAN HW SE	2	2	10	2	60	40	20	72	223	61	25
BAN HW SE	3	1	10	2	80	60	20	72	223	61	25
BAN HW NW	1	2	10	3	40	30	20	78	249	30	NA
BAN HW NW	2	2	12	3	60	40	20	78	249	30	NA
BAN HW Splay	1	2	10	3	40	30	20	75	220	57	30

Vein	Pass	No. of Composites			Search Range (m)			Ellipsoid Direction (0)			High-Grade Transition Range Percent
		Min	Max	Max per Hole	Major	Semi-Major	Minor	Dip	Dip Azimuth	Pitch	
BAN HW Splay	2	2	12	3	60	40	20	75	220	57	25
BAN HW Splay	3	1	12	3	80	60	20	75	220	57	25
BAN BIF 1	1	2	8	2	30	20	15	71	234	67	50
BAN BIF 1	2	2	10	2	60	40	20	71	234	67	25
BAN BIF 2	1	2	12	2	30	20	15	68	222	66	50
BAN BIF 2	2	2	12	2	60	40	20	68	222	66	25
BAN NW EXT	1	2	12	3	40	30	30	Variable Orientation			NA
BAN NW EXT	2	2	12	3	60	40	30	Variable Orientation			NA
BAN NW EXT	3	1	12	3	80	60	30	Variable Orientation			NA
BAN Splay 1	1	2	8	2	30	20	20	72	224	135	50
BAN Splay 1	2	2	10	2	60	40	20	72	224	135	25
BAN Splay 1	3	1	10	2	60	40	20	72	224	135	25
BAN Splay 2	1	2	8	2	30	20	15	66	219	69	50
BAN Splay 2	2	2	10	2	60	40	15	66	219	69	25
BAN Splay 3	1	2	8	2	30	20	20	69	262	45	50
BAN Splay 3	2	2	10	2	60	40	20	69	262	45	25
BAN Splay 3	3	1	10	2	80	60	20	69	262	45	25
BAN Splay 4	1	2	8	2	30	20	20	77	235	66	50
BAN Splay 4	2	2	10	2	60	40	20	77	235	66	25
BAN Splay 4	3	1	10	2	70	50	20	77	235	66	25
BAS Main	1	4	12	3	40	30	20	Variable Orientation			37.5
BAS Main	2	2	12	3	60	40	20	Variable Orientation			25
BAS Main	3	1	12	3	120	80	20	Variable Orientation			12.5
BAS FW	1	4	12	3	40	30	20	Variable Orientation			37.5
BAS FW	2	2	12	3	60	40	20	Variable Orientation			25

Vein	Pass	No. of Composites			Search Range (m)			Ellipsoid Direction (0)			High-Grade Transition Range Percent
		Min	Max	Max per Hole	Major	Semi-Major	Minor	Dip	Dip Azimuth	Pitch	
BAS FW	3	1	12	3	130	90	20	Variable Orientation			11.53
BAS HW	1	3	8	3	40	30	15	64	220	32	NA
BAS HW	2	2	12	3	60	40	20	64	220	32	NA
BAS Splay 1	1	3	8	3	45	30	15	57	236	60	33.3
BAS Splay 1	2	2	12	3	80	60	30	57	236	60	18.75
BAS Splay 2	1	2	8	3	60	40	20	62	253	60	25
BAS Splay 2	2	2	12	3	80	60	30	62	253	60	18.75
BAS Splay 3	1	2	8	3	60	40	20	65	238	60	25
BAS Splay 3	2	2	12	3	80	60	20	65	238	60	18.75
BAS Splay 4	1	2	8	3	60	40	20	72	235	60	NA
BAS Splay 4	2	2	12	3	80	60	20	72	235	60	NA
BAS Splay 4	3	1	12	3	80	60	20	72	235	60	NA
Encinitas	1	2	8	3	70	50	30	76	232	52	21.4
Encinitas	2	2	12	3	120	80	30	76	232	52	12.5
BAV Main	0	4	12	3	20	15	15	Variable Orientation			75
BAV Main	1	2	12	3	40	30	20	Variable Orientation			37.5
BAV Main	2	2	12	3	60	45	20	Variable Orientation			25
BAV Main	3	1	12	3	80	60	20	Variable Orientation			25
BAV BIF 1	1	3	12	2	20	15	15	82	57	67	75
BAV BIF 1	2	2	12	2	40	20	15	82	57	67	37.5
BAV BIF 2	1	3	12	2	40	25	20	84	55	66	37.5
BAV BIF 2	2	2	12	2	60	30	20	84	55	66	25
BAV Splay 1	1	3	12	2	40	30	20	89	236	67	37.5
BAV Splay 1	2	2	12	3	60	40	20	89	236	67	25
BAV Splay 1	3	1	12	3	80	60	20	89	236	67	25

Vein	Pass	No. of Composites			Search Range (m)			Ellipsoid Direction (0)			High-Grade Transition Range Percent
		Min	Max	Max per Hole	Major	Semi-Major	Minor	Dip	Dip Azimuth	Pitch	
BAV Splay 2	1	3	12	2	40	30	20	85	238	65	37.5
BAV Splay 2	2	2	12	2	60	40	20	85	238	65	25
BAV Splay 3	1	3	12	2	30	20	15	86	62	114	50
BAV Splay 3	2	2	12	2	60	40	15	86	62	114	25
BAV FW	0	4	12	3	20	15	15	Variable Orientation			NA
BAV FW	1	2	12	3	40	25	20	Variable Orientation			37.5
BAV FW	2	2	12	3	60	50	20	Variable Orientation			25
BAV FW	3	1	12	3	80	60	20	Variable Orientation			25
BAV Andesite	1	2	12	2	40	30	20	81	237	61	37.5
BAV Andesite	2	2	12	2	60	40	20	81	237	61	25
Gran 1	1	3	10	3	30	25	20	Variable Orientation			50
Gran 1	2	2	10	3	60	40	20	Variable Orientation			25
Gran 2	1	3	8	3	30	25	15	86	219	67	NA
Gran 2	2	2	10	3	60	30	15	86	219	67	NA
La Victoria	1	2	8	3	70	50	30	66	228	52	NA
La Victoria	2	2	12	3	120	80	30	66	228	52	NA
La Victoria	3	1	12	3	120	100	30	66	228	52	NA

Table 14-12: Block Model Grade Interpolation Parameters of the Las Chispas Area

Rock Code	Pass	No. of Composites			Search Range (m)			High-Grade Transition Range (m)		
		Min	Max	Max per Hole	Major	Semi-Major	Minor	Major	Semi-Major	Minor
GIOVANNI	1	5	10	2	45	30	15	45	30	15
GIOVANNI	2	3	10	2	60	40	20	45	30	15
GIOVANNI	3	2	10	2	80	80	30	25	15	10
GIO Mini	1	6	10	2	45	30	15	45	30	15
GIO Mini	2	4	10	2	60	40	20	45	30	15
GIO Mini	3	2	10	2	80	80	30	25	15	10
Luigi	1	6	10	2	45	30	15	45	30	15
Luigi	2	4	10	2	60	40	20	45	30	15
Luigi	3	2	10	2	80	80	30	25	15	10
Luigi FW	1	6	10	2	45	30	15	45	30	15
Luigi FW	2	4	10	2	60	40	20	45	30	15
Luigi FW	3	2	10	2	80	80	30	25	15	10
WT	0	4	8	2	35	25	15	NA	NA	NA
WT	1	6	10	2	45	30	15	45	30	15
WT	2	4	10	2	60	40	20	45	30	15
WT	3	2	10	2	80	80	30	25	15	10
WT HW	1	6	10	2	45	30	15	NA	NA	NA
WT HW	2	4	10	2	60	40	20	NA	NA	NA
WT HW	3	2	10	2	80	80	30	NA	NA	NA
WT Mini	1	6	8	2	45	30	15	NA	NA	NA
WT Mini	2	4	8	2	60	40	20	NA	NA	NA
WT Mini	3	2	8	2	80	60	30	NA	NA	NA
LC Main	0	4	12	3	10	10	5	NA	NA	NA
LC Main	1	7	12	3	45	30	15	45	30	15
LC Main	2	5	12	3	60	40	20	45	30	15
LC Main	3	3	12	3	80	60	30	25	15	10

Note: NA = not applicable.

Selected longitudinal projections of gold, silver, and AgEq blocks are presented in Appendix E to Appendix G.

14.13 Mineral Resource Classification

In the QP's opinion, the Mineral Resource Estimate is supported by the drilling, assaying and exploration work completed up to the Effective Dates and is based on spatial continuity of the mineralization within a potentially mineable shape. These factors are sufficient to indicate that the estimate is a reasonable potential for economic extraction, thus qualifying it as a Mineral Resource under the 2014 CIM Definition Standards. The Mineral Resource was classified as Measured, Indicated, and Inferred based on the geological interpretation, variogram performance and drill hole spacing.

A Measured Mineral Resource was classified for the Babicanora underground sampled area only with a 10 m range extended up and down dip from areas with underground in-vein development samples and interpolated with both underground channel and chip samples and drill holes within this area.

Indicated Mineral Resources were classified for the blocks interpolated with the Pass 1 in Table 14-11 for Babicanora Area, and with the Pass 1 and 2 in Table 14-12 for the Las Chispas Area, which used at least two drill holes within a 50 m mean distance.

Inferred Mineral Resources were classified for all remaining grade blocks within the mineralization veins.

The classifications were manually adjusted on a longitudinal projection to reasonably reflect the distribution of each classification.

Selected classification block longitudinal projections are attached in Appendix H.

ROM stockpiles, which were derived from the underground vein mining, were classified as Measured Mineral Resources, and the Historic Stockpiles were categorized as Indicated Mineral Resources.

14.14 AgEq Cut-off Value Calculation

The Mineral Resource Estimate was derived from applying AgEq cut-off values to the block models and reporting the resulting tonnes and grades for potentially mineable areas. The following parameters were used to calculate the AgEq cut-off values that determine the underground mining potentially economic portions of the constrained mineralization:

- Ag price: $21/oz (approximate three-year trailing average as of June 30, 2022)
- Ag process recovery: 94%
- Marginal mining cost: $40/t;
- Processing cost: $40/t
- G&A: $15/t.

The AgEq cut-off value of the underground Mineral Resource is calculated as follows:

- ($40+ $40+$15)/($21/31.1035 x 94%) = ~**150 gpt AgEq**

The AgEq cut-off value of the historic stockpiles is 110 gpt considering deduction of mining cost.

14.15 Las Chispas Operation Mineral Resource Estimate

Las Chispas Operation Mineral Resource Estimate includes historic stockpiles, ROM stockpiles, and in-situ vein mineralization. The Mineral Resource Estimate with an effective date of June 30, 2022, for Measured and Indicated for the surface stockpiles and the in-situ vein mineralization, and March 21, 2023, for the Inferred Mineral Resources of the veins is tabulated in **Table 14-13**.

Table 14-13: Mineral Resource Statement for Depleted In-situ Vein, ROM Stockpile and Historic Stockpile

Resource Area	Classification	Tonnes (k)	Au (gpt)	Ag (gpt)	AgEq (gpt)	Contained Au (k oz)	Contained Ag (k oz)	Contained AgEq (k oz)
Babicanora Area Veins	Measured	206.6	13.67	1,289	2,376	90.8	8,561	15,779
	Indicated	1,726.3	7.09	658	1,222	393.6	36,540	67,832
	Meas + Ind	1,932.9	7.79	726	1,345	484.3	45,101	83,611
Las Chispas Area Veins	Indicated	441.6	4.22	552	888	60.0	7,835	12,605
Total Undiluted Veins	Meas + Ind	2,374.5	7.13	693	1,260	544.3	52,936	96,216
Historic Stockpiles	Indicated	151.8	1.14	112	203	5.6	546	990
ROM Stockpiles	Measured	168.1	5.56	428	869	30.0	2,311	4,699
Total (Veins + stockpiles)	**Meas + Ind**	**2,694.4**	**6.69**	**644**	**1,176**	**579.9**	**55,794**	**101,905**
Babicanora Area Veins	Inferred	953.5	4.49	267	624	137.5	8,188	19,123
Las Chispas Area Veins	Inferred	373.6	1.81	274	418	21.7	3,296	5,024
Total Undiluted Veins	**Inferred**	**1,327.1**	**3.73**	**269**	**566**	**159.2**	**11,484**	**24,147**

Notes:

1. Mineral Resources that are not Mineral Reserves and do not have demonstrated economic viability.
2. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
3. 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 can be reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
4. The Mineral Resource is estimated using the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standards for Mineral Resources & Mineral Reserves.
5. The effective date for Measured + Indicated estimates of the veins and stockpiles was June 30, 2022, while Inferred estimates for the veins was effective March 21, 2023.
6. Mined areas as of June 30, 2022, were removed from the wireframes and block models.
7. AgEq is based on Ag:Au ratio of 79.51:1 calculated using $1,650/oz Au and $21/oz Ag, with average metallurgical recoveries of 97.9% Au and 96.7% Ag, and 99.9% payable for both Au and Ag.
8. Mineral Resources are inclusive of the Mineral Reserves.
9. All numbers are rounded.
10. Cut-off grade (COG) used for In-situ material is 150 gpt AgEq and, for Historic stockpiles is 110 gpt AgEq. No cut-off grade was applied to ROM stockpile as it is based on material mined.

14.15.1 Historic Stockpiles Mineral Resource Estimate

A total of 38 stockpiles (historic dumps and tailing deposits) were sampled with trench and RC drill hole cuttings. The perimeters and surfaces of the stockpiles were surveyed between December 14, 2017, and January 26, 2018, using a Trimble Spectra Total Station Model TS-415. The surveyed outlines and sample points were imported into GOVIA GEMS™ 6.8.2. Generally, the sample points matched the perimeters well with a few sample points relabelled to the appropriate stockpiles.

The area of each stockpile was calculated using its perimeter in GEMS. The average thickness of the stockpiles was estimated based on the trench profiles and RC drill holes. The bulk density of the stockpiles was estimated at 1.7 t/m^3. The estimated tonnage of each stockpile was calculated using the average thickness, estimated bulk density, and its measured surface area.

Average grades were estimated for each stockpile area based on the samples collected. Grade capping was applied as presented in Table 14-14.

Table 14-14: Las Chispas Stockpile Grade Capping

Stockpiles	Au Capping				Ag Capping			
	Au Uncapped Max (gpt)	Au Cap Value (gpt)	Percentile (%)	No of Samples Capped	Ag Uncapped Max (gpt)	Ag Cap Value (gpt)	Percentile (%)	No. of Samples Capped
La Capilla	138.0	20	97.5	4	1,675	425	97.5	4
San Gotardo	74.1	35	99.9	2	10,000	2,535	99.7	4
Lupena	12.2	12.2	100	0	651	530	99.5	1
Las Chispas 1	17.9	7	99.7	1	1,240	550	99.2	3

San Gotardo and Lupena stockpiles were partially mined and processed in 2022. The Babicanora stockpile was mined in early 2021 and relocated to the ROM Stockpile; it is no longer reported as a Historic Stockpile. The tonnage and average grades for remaining stockpiles as of June 30, 2022, at a cut-off of ≥110 gpt AqEq were tabulated in Table 14-15. A gold and silver ratio of 79.51:1 was used for the AgEq calculation. The gold and silver grades from the assay results were averaged for each stockpile, which can have a significant standard deviation and difference between the minimum and maximum values as well as spatial distribution bias.

Table 14-15: Las Chispas, Historic Stockpile Indicated Mineral Resource Estimate at 110 qpt AgEq Cut-Off as of June 30, 2022(1-9)

Stockpiles	Area (m²)	Ave. Height (m)	Density (t/m³)	Tonnes (kt)	Au (gpt)	Ag (gpt)	AgEq (gpt)	Contained Au (koz)	Contained Ag (koz)	Contained AgEq (koz)
North Chispas 1	344	2	1.7	1.2	0.54	70.5	113	0.02	3	4
La Capilla	3,686	2	1.7	12.5	3.66	123	414	1.48	49	167
San Gotardo*	NA	NA	1.7	82.3	0.71	105	161	1.88	278	427
Lupena*	NA	NA	1.7	11.2	1.62	81	209	0.59	29	76
Las Chispas 1 (LCH)	5,932	2.4	1.7	24.2	0.75	120	180	0.58	93	140
Las Chispas 2	274	2.3	1.7	1.1	1.23	236	334	0.04	8	12
Las Chispas 3 (San Judas)	233	2.5	1.7	1.0	2.05	703	866	0.07	22	28
La Central	750	3	1.7	3.8	0.75	116	176	0.09	14	22
Chiltepines 1	88	1	1.7	0.2	0.87	1745	1814	0.00	1	1
Espíritu Santo	486	2	1.7	1.7	0.52	93.9	135	0.03	5	7
La Blanquita 2	1,083	2.5	1.7	4.6	0.53	118	160	0.08	17	24
El Muerto	1,370	2.5	1.7	5.8	2.52	79.4	280	0.47	15	52
Sementales	236	2	1.7	0.8	4.38	47	395	0.11	1	10
Buena Vista	153	1.5	1.7	0.4	4.62	56.9	424	0.06	1	5
Babicanora 2	269	2.2	1.7	1.0	2.63	275	484	0.09	9	16
Total Historic Stockpiles	**NA**	**NA**	**1.7**	**151.8**	**1.14**	**112**	**203**	**5.6**	**546**	**990**

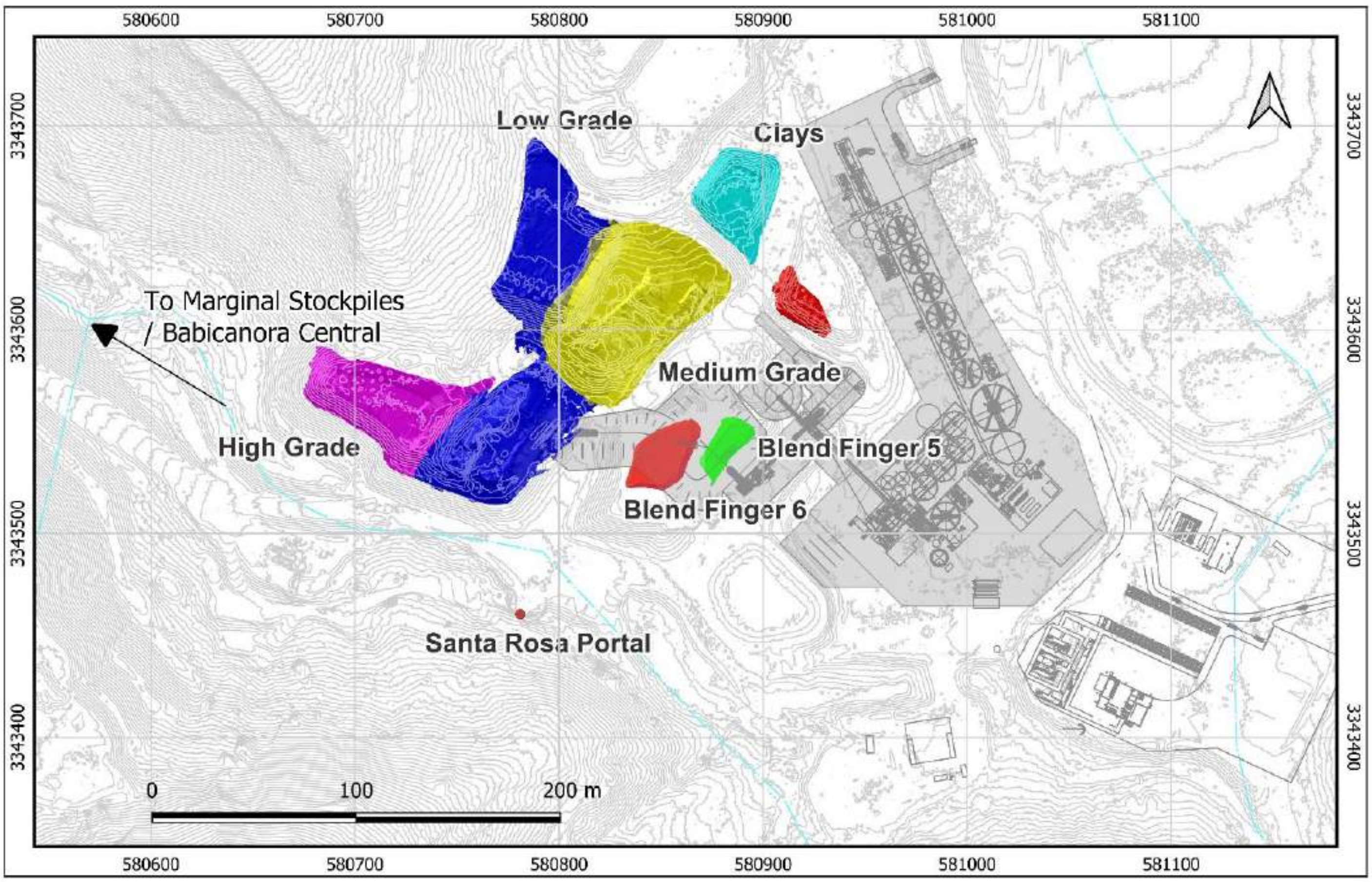
Notes:
1. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
2. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
3. The Mineral Resources in the Report were estimated using the 2014 CIM Definition Standards on Mineral Resources and Mineral Reserves.
4. The data cut-off date for stockpiles and Measured + Indicated Mineral Resources of the veins was June 30, 2022, while Inferred of the veins was March 21, 2023.
5. AgEq is based on Ag:Au ratio of 79.51:1 calculated using $1,650/oz Au and $21/oz Ag, with average metallurgical recoveries of 97.9% Au and 96.7%.
6. Ag and 99.9% payable for both Au and Ag.
7. Mineral Resources are inclusive of the Mineral Reserves stated in Section 15.
8. All numbers are rounded.
9. Cut-off grade used for historic stockpiles is 110 gpt AgEq.
10. Mined tonnage for historic stockpile was estimated with the mining truck counts and verified with topographic survey.

14.15.2 ROM Stockpile Mineral Resource Estimate

The ROM Stockpile is located approximately 100 m north of the Santa Rosa Portal and has been active since July 2019. All mineralized material mined from the underground, recovered from the Babi Central Historic workings (BAC Chorros), or from historic stockpiles was placed in this stockpile, previously referred to as the Santa Rosa Stockpile, without grade segregation to the end of 2020.

Starting in January 2021, material moved into stockpile was subject to grade segregation. Material with grade between 500-1,000 gpt AgEq was placed on top of the previous Santa Rosa Stockpile and renamed the ML stockpile (media ley, or medium grade). Four additional stockpiles were constructed, which were the incremental grade stockpile (marginal, or MG) with grade between 100-150 gpt AgEq, the low-grade stockpiles (baja ley, or BL) with grade between 150-500 gpt AgEq, the high grade stockpile (alta ley, or AL) with grade above 1,500 gpt AgEq, and the elevated clay content stockpile (arcillas, or AR) with variable grades.

Figure 14-5: Location of ROM Stockpiles, June 30, 2022



Source: P&E 2023.

Movement into and out of (only in May and June 2022) the ROM Stockpile has been tracked and reported as part of the Mine Geology grade control and production database. Tonnage for material placed into the stockpiles is based on underground CMS volume surveys and converted using the fixed in-situ bulk density of 2.55 t/m^3. Tonnage is validated with truck counts and verified with end of month topographic surveys of the stockpile. Input grade is based on production estimates, which is based on the Production Block model diluted grades for material mined in stopes, and on diluted channel samples grades for material mined in-vein ore development. Volume of material removed from the stockpile is estimated using truck counts and converted to tonnage using a fixed bulk density of 1.8 t/m^3 and is validated by topographic survey of each Blend Finger (BF) and end of month stockpile survey and is reconciled to the Process Plant scales. Grade of material removed from the stockpile is based on all a rolling end-of-month average grade and reconciled to the Process Plant head grade.

The ROM stockpiles were classified as Measured Resources and shown in Table 14-16.

Table 14-16: ROM Stockpile Measured Resources as of June 30, 2022 (1-8)

Stockpile	Tonnes (k)	Au (gpt)	Ag (gpt)	AgEq (gpt)	Contained Au (koz)	Contained Ag (koz)	Contained AgEq (koz)
AL	21.5	11.30	1,026	1,924	7.8	710	1,332
ML	77.3	5.08	433	837	12.6	1,077	2,080
BL	53.7	4.73	214	590	8.2	370	1,018
AR	7.1	4.06	506	828	0.9	116	190
MG	4.7	1.56	141	265	0.2	21	40
BF	3.8	2.22	141	317	0.3	17	38
Total	**168.1**	**5.56**	**428**	**869**	**30.0**	**2,311**	**4,699**

Notes:
1. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
2. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
3. The Mineral Resources in the Report were estimated using the 2014 CIM Definition Standards on Mineral Resources and Mineral Reserves.
4. The data cut-off date for stockpiles and Measured + Indicated Mineral Resources of the veins was June 30, 2022, whereas that for Inferred Mineral Resources of the veins was March 21, 2023.
5. AgEq is based on Ag:Au ratio of 79.51:1 calculated using $1,650/oz Au and $21/oz Ag, with average metallurgical recoveries of 97.9% Au and 96.7% Ag and 99.9% payable for both Au and Ag.
6. Mineral Resources are inclusive of the Mineral Reserves stated in Section 15.
7. All numbers are rounded.
8. No cut-off grade was applied to ROM stockpile as is based on material mined.

14.15.3 Vein Mineral Resource Estimate

The Mineral Resource Estimate of the vein mineralization is reported with an effective date of June 30, 2022, for Measured and Indicated Mineral Resources, and March 21, 2023, for Inferred Mineral Resources and is tabulated in Table 14-17. The QPs consider the vein mineralization of the Las Chispas Operation to be potentially amenable to underground mining methods. The QPs are of the opinion that there are no known legal, political, environmental, or other risks that could materially affect the potential development of the Mineral Resources.

Table 14-17: Detailed Mineral Resource Estimate of Depleted in-situ Vein Mineralization [1-11]

Vein	Meas + Ind Tonnes (k)	Au (gpt)	Ag (gpt)	AgEq (gpt)	Meas + Ind Au (koz)	Meas + Ind Ag (koz)	Meas + Ind AgEq (koz)
BAM Main	499.8	9.24	848	1,582	148.5	13,621	25,430
BAM Central	208.3	3.03	300	541	20.3	2,010	3,621
BAM FW	110.1	7.16	731	1,300	25.4	2,587	4,604
BAM HW	79.7	2.89	201	431	7.4	515	1,104
El Muerto	132.7	3.54	253	535	15.1	1,081	2,282
BAN Main NW	58.5	5.83	647	1,111	11.0	1,218	2,090
BAN Main CEN	23.5	9.02	987	1,704	6.8	747	1,290
BAN Main SE	129.9	12.13	1,596	2,560	50.7	6,662	10,690
BAN HW NW	12.8	1.67	296	429	0.7	122	176
BAN HW SE	54.5	3.11	331	578	5.4	579	1,012
BAV Main	259.9	15.29	1,345	2,561	127.8	11,239	21,398
BAV FW	37.5	5.68	602	1,054	6.9	726	1,270
Granaditas 1	27.6	7.37	1,019	1,605	6.5	903	1,423
Granaditas 2	8.7	5.99	195	671	1.7	55	189
BAS Main	251.1	5.66	360	810	45.7	2,907	6,540
BAS HW	13.8	3.96	34	349	1.8	15	155
BAS FW	24.4	3.54	146	428	2.8	115	336
In-situ Babicanora Area Meas + Ind	**1,932.9**	**7.79**	**726**	**1,345**	**484.3**	**45,101**	**83,611**
Las Chispas	207.2	5.76	751	1,209	38.4	5,004	8,056
Giovanni	70.1	2.78	397	618	6.3	895	1,394
Gio Mini	54.6	3.71	467	762	6.5	821	1,339
William Tell Main	17.0	2.01	286	446	1.1	157	244
Luigi	61.1	2.50	341	540	4.9	671	1,061
Luigi FW	31.5	2.77	284	504	2.8	288	510
In-situ Las Chispas Area Ind	**441.6**	**4.22**	**552**	**888**	**60.0**	**7,835**	**12,605**
Total In-situ Meas + Ind Undiluted Veins	**2,374.5**	**7.13**	**693**	**1,260**	**544.3**	**52,936**	**96,216**

Vein	Inferred Tonnes (kt)	Au (gpt)	Ag (gpt)	AgEq (gpt)	Inferred Au (koz)	Inferred Ag (koz)	Inferred AgEq (koz)
BAM Main	26.8	1.65	244	375	1.4	210	323
BAM Central	0.2	0.34	188	215	0.0	1	2
BAM FW	13.1	1.89	314	464	0.8	133	196
BAM HW	2.5	5.07	175	578	0.4	14	47
El Muerto	121.6	4.35	356	702	17.0	1,392	2,744
Los Parientes	27.9	4.53	391	751	4.1	351	674
BAN Main NW	18.4	2.29	279	462	1.4	165	273
BAN Main CEN	9.1	1.32	211	316	0.4	62	93
BAN Main SE	26.9	2.52	331	531	2.2	286	459
BAN HW NW	0.9	1.32	161	266	0.0	5	8
BAN HW SE	36.7	2.62	524	732	3.1	618	865
BAN NW EXT	44.3	5.95	751	1,224	8.5	1,071	1,745
BAV Main	13.6	2.08	220	385	0.9	96	169
BAV FW	35.0	7.62	687	1,294	8.6	774	1,456
BAV Andesite	7.9	39.28	42	3,165	10.0	11	807
Granaditas 2	5.4	0.7	118	174	0.1	20	30
BAS Main	249.5	4.19	189	522	33.6	1,517	4,187
BAS HW	2.7	2.81	4	227	0.2	0.3	20
BAS FW	149.3	5.19	234	646	24.9	1,122	3,103
Encinitas	68.4	6.51	49	567	14.3	109	1,247
La Victoria	93.0	1.88	77	227	5.6	231	678
In-situ Babicanora Area Inferred Total	**953.5**	**4.49**	**267**	**624**	**137.5**	**8,188**	**19,123**

Vein	Inferred Tonnes (kt)	Au (gpt)	Ag (gpt)	AgEq (gpt)	Inferred Au (koz)	Inferred Ag (koz)	Inferred AgEq (koz)
Las Chispas	71.3	3.28	471	732	7.5	1,080	1,678
Gio Mini	6.7	2.23	539	716	0.5	117	155
William Tell Main	153.4	1.50	235	354	7.4	1,161	1,748
William Tell HW	55.0	2.02	240	401	3.6	425	709
William Tell Mini	32.9	1.61	174	302	1.7	184	319
Luigi	19.3	1.15	163	254	0.7	101	157
Luigi FW	35.0	0.32	203	229	0.4	228	257
In-situ Las Chispas Area Inferred Total	**373.6**	**1.81**	**274**	**418**	**21.7**	**3,296**	**5,024**
Total In-situ Inferred Undiluted Veins	**1,327.1**	**3.73**	**269**	**566**	**159.2**	**11,484**	**24,147**

Notes:
1. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
2. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
3. 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 can be reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
4. The Mineral Resources in the Report were estimated using the 2014 CIM Definition Standards on Mineral Resources and Mineral Reserves.
5. The effective date for stockpiles and Measured + Indicated of the veins was June 30, 2022, while Inferred of the veins was March 21, 2023.
6. Mined areas as of June 30, 2022, were removed from the wireframes and block models.
7. AgEq is based on Ag:Au ratio of 79.51:1 calculated using $1,650/oz Au and $21/oz Ag, with average metallurgical recoveries of 97.9% Au and 96.7% Ag and 99.9% payable for both Au and Ag.
8. Mineral Resources are inclusive of the Mineral Reserves stated in Section 15.
9. All numbers are rounded.
10. Cut-off grade used for In-situ material is 150 gpt AgEq.
11. Bifurcations and Splays are included in the adjacent vein.

14.16 Difference from 2020 Mineral Resource Estimate Explanation

The Mineral Resource Estimate of the Las Chispas Area only was updated with an Ag:Au ratio of 79.51:1 gpt from 86.9:1 gpt in the 2021 FS Report.

The Mineral Resources of the historic stockpiles were updated with an Ag:Au ratio of 79.51 gpt and three stockpiles were partially depleted in 2022.

The Mineral Resource Estimate of the Babicanora Area was updated from the 2021 FS Report mainly subject to:

- Drilling programs including both exploration and delineation drilling, and underground channels completed during 2021-2023
- Vein mineralization re-interpretation
- Underground mining depletion
- Metal price and Ag:Au ratio
- Grade capping and high-grade transition
- Grade interpolation methods and parameters.

The parameter changes from the 2020 Mineral Resource Estimate to 2023 Mineral Resource update are listed in the following Table 14-18.

Table 14-18: Model Parameter Changes of the Vein Mineralization Resource Estimate from 2020 to 2023

	2020 MRE	2023 MRE	Results
Mineralized Solid	Minimum thickness of 0.5 m true width	True thickness	Fewer tonnes, higher grade
	Manually clipped solid	Clipped solid using indicators in Leapfrog	Minimal affect
	Hole intercepts outside of the mineralized solid were not allowed to affect the edge shape	Hole intercepts outside the mineralized solid were allowed to affect the edge shape	Thinner vein shapes along the edge of the model
	Bifurcations were included in the main veins	Bifurcations were broken out into subdomains	Loss of ounces and thickness in areas with bifurcations
Block Model	Soft boundary creating grade transition zone	Hard boundary on mineralized solid	More control on high grade ore chutes and smearing effect of mineralized material
	Both unclipped and clipped wireframes were used	Only clipped wireframes were used	Loss of ounces outside of mineralized shape
	Block model constructed in GEOVIA GEMS™ V6.8.2	Block model constructed in Leapfrog Geo 2021.2.5	Minimal change
	No Variable Orientation	Use of Variable Orientation in main veins	More control on high grade chutes
AgEq Calculations	Ag:Au ratio of 86.9:1 used	Ag:Au ratio of 79.51:1 used	4.5% loss in overall AgEq ounces due to change in Ag:Au ratio

14.17 Block Model Extraction to ROM Stockpile Comparison

Validation of the Mineral Resource has been completed through the comparison of the model against operational Mine Production information. Table 14-19 compares the estimated Block Model Extraction within the as-built topographic survey, against the Mine Production estimate, which is comprised of the sum of estimated ROM stockpile inventory plus the material processed in the plant, as of June 30, 2022. The ROM stockpile estimate is based on approximately 70% material mined from in-vein development, and 30% material mined from stopes. A mining recovery factor of 95% has been applied to the Block Model Extraction.

Comparing the extraction estimate to the Surface plus Processed estimate results in ratio of 1.04 for Au ounces, 0.89 for Ag ounces, or 0.96 for AgEq ounces, indicating good correlation between the estimates. A full reconciliation of the Reserve Depletion Estimate to the Plant Head Grade is included in Section 15.

Table 14-19: Comparison Between Mineral Resource Extraction with Surface Inventory + Processed (1-4)

Data Source	Tonnes	Au oz	Ag oz	AgEq oz[1]
On Surface + Processed				
ROM Stockpile[2,3]	168,099	30,033	2,311,151	4,699,071
Plant Processed	12,736	420	39,199	72,559
Total On Surface and Processed	**180,835**	**30,453**	**2,350,350**	**4,771,629**
In Situ Resource				
Block Model Extraction[3,4]	61,999	29,172	2,652,346	4,971,838
Ratio of Resource Extraction to Material On Surface[3]	**n/a**	**1.04**	**0.89**	**0.96**

Notes:
1. AgEq is based on Ag:Au ratio of 79.51:1 calculated using $1,650/oz Au and $21/oz Ag, with average metallurgical recoveries of 97.9% Au and 96.7% Ag and 99.9% payable for both Au and Ag.
2. ROM Stockpile values are reported as of June 30, 2022.
3. Block Model Extraction is reported as undiluted; ROM Stockpile is reported as diluted.
4. A mining recovery factor of 0.95 has been applied to the Block Model to estimate Block Model Extraction.

14.18 Model Validation

The QPs validated the block models of the Babicanora Area generated by SilverCrest and the Las Chispas Area, which were independently constructed by the QPs using a number of industry standard methods including block model interpolation using GEOVIA GEMS™, visual and statistical methods.

Visual examination of composites and adjacent block grades on successive plans and cross-sections were performed on-screen to confirm that the block models correctly reflect the distribution of composite grades (Appendices E to G). The review of estimation parameters included:

- Number of composites used for estimation
- Number of drill holes used for estimation
- Mean distance to sample used
- Number of passes used to estimate grade
- Actual distance to closest point
- Grade of true closest point
- Mean value of the composites used.

A comparison of mean grades of Measured and Indicated blocks of five largest vein (BAM Main, BAN SE, BAS Main, BAV Main and LC Main, which combined account for approximately 76% of the total estimated AgEq oz of the In-situ vein Mineral Resources), block models interpolated with ID3 and NN at a 0.001 AgEq cut-off grade are presented in Table 14-20.

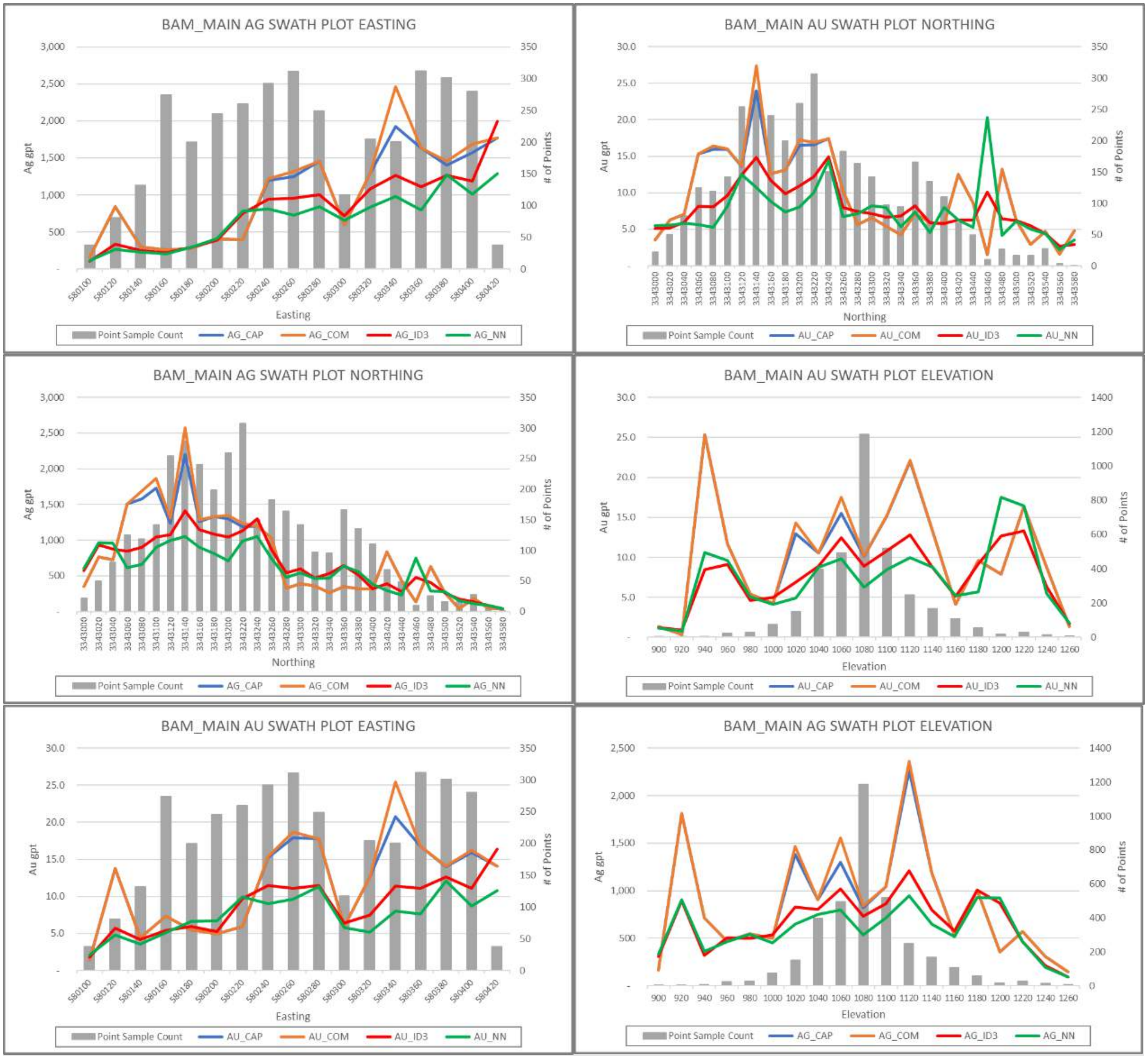
Table 14-20: Average Grade Comparison of the Measured and Indicated Block Models of the Main Veins

Vein	Data Type	Au (gpt)	Ag (gpt)
BAM Main	Block model ID^3_Leapfrog	6.9	625
	Block model ID^3_Gems	6.9	619
	Block model NN_Gems	6.1	539
BAN Main SE	Block model ID^3_Leapfrog	12.2	1609
	Block model ID^3_Gems	11.7	1523
	Block model NN_Gems	11.4	1483
BAS Main	Block model ID^3_Leapfrog	6.0	366
	Block model ID^3_Gems	6.9	359
	Block model NN_Gems	5.9	351
BAV Main	Block model ID^3_Leapfrog	15.8	1385
	Block model ID^3_Gems	14.4	1259
	Block model NN_Gems	13.9	1200
Las Chispas	Block model ID3_Gems	3.4	458
	Block model NN_Gems	3.7	485

Notes:
ID^3 = Au and Ag interpolated with Inverse Distance Cubed.
NN = Au and Ag interpolated using Nearest Neighbour.
Leapfrog™ = Block model was constructed using the Leapfrog™ software by SilverCrest.
Gems™ = Block model was verified using GEOVIA GEMS™ software by the QPs.

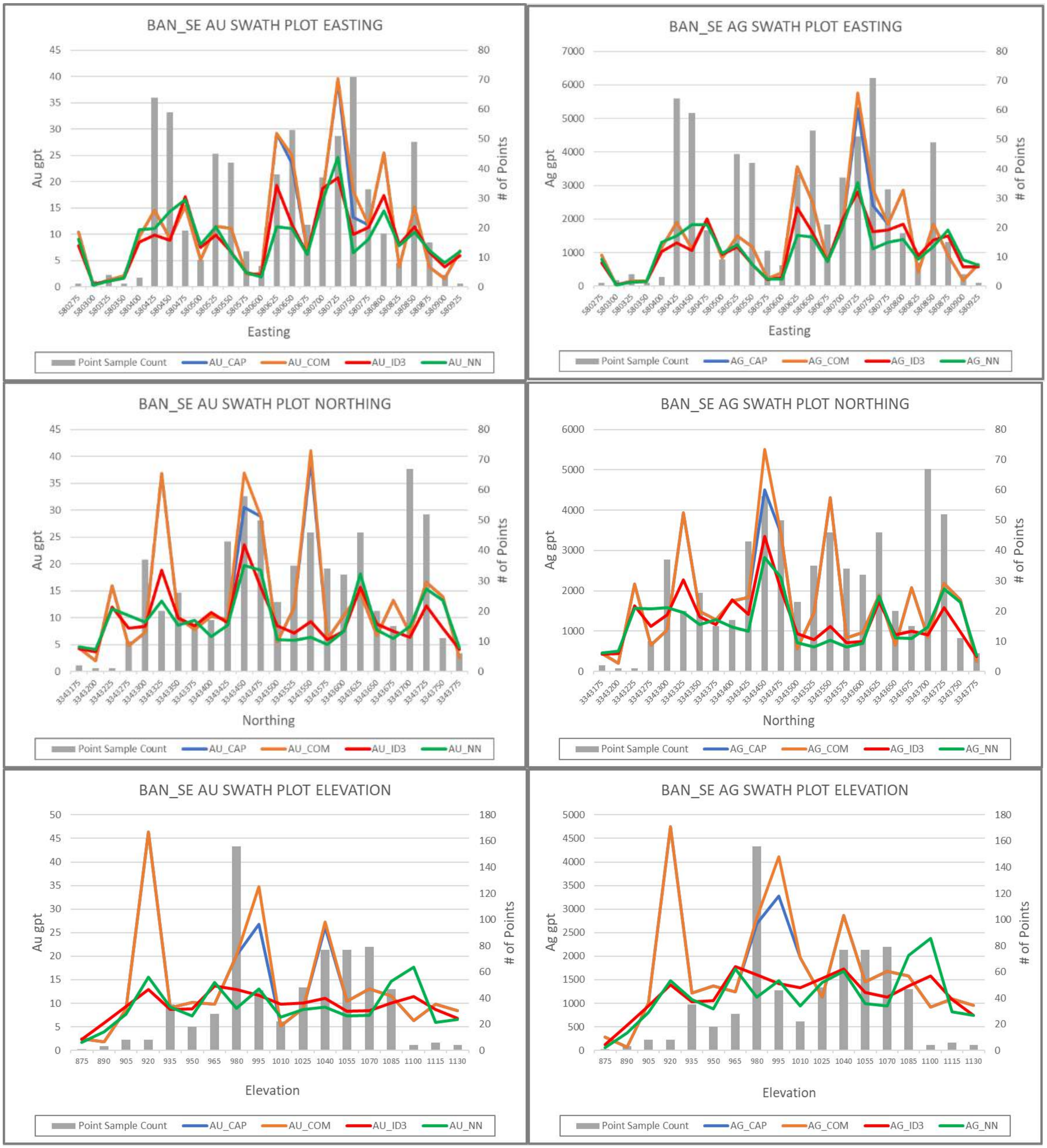
Local trends for gold and silver were evaluated by comparing the ID^3 and NN estimate against the composites. The selected special swath plots of the five largest veins are shown in Figure 14-6 through Figure 14-10. The drill hole data between July 31, 2022, and March 21, 2023, which were used for the Inferred Mineral Resource Estimate, were included for the comparisons.

Figure 14-6: Babicanora Main Vein Au and Ag Grade Swath Plot



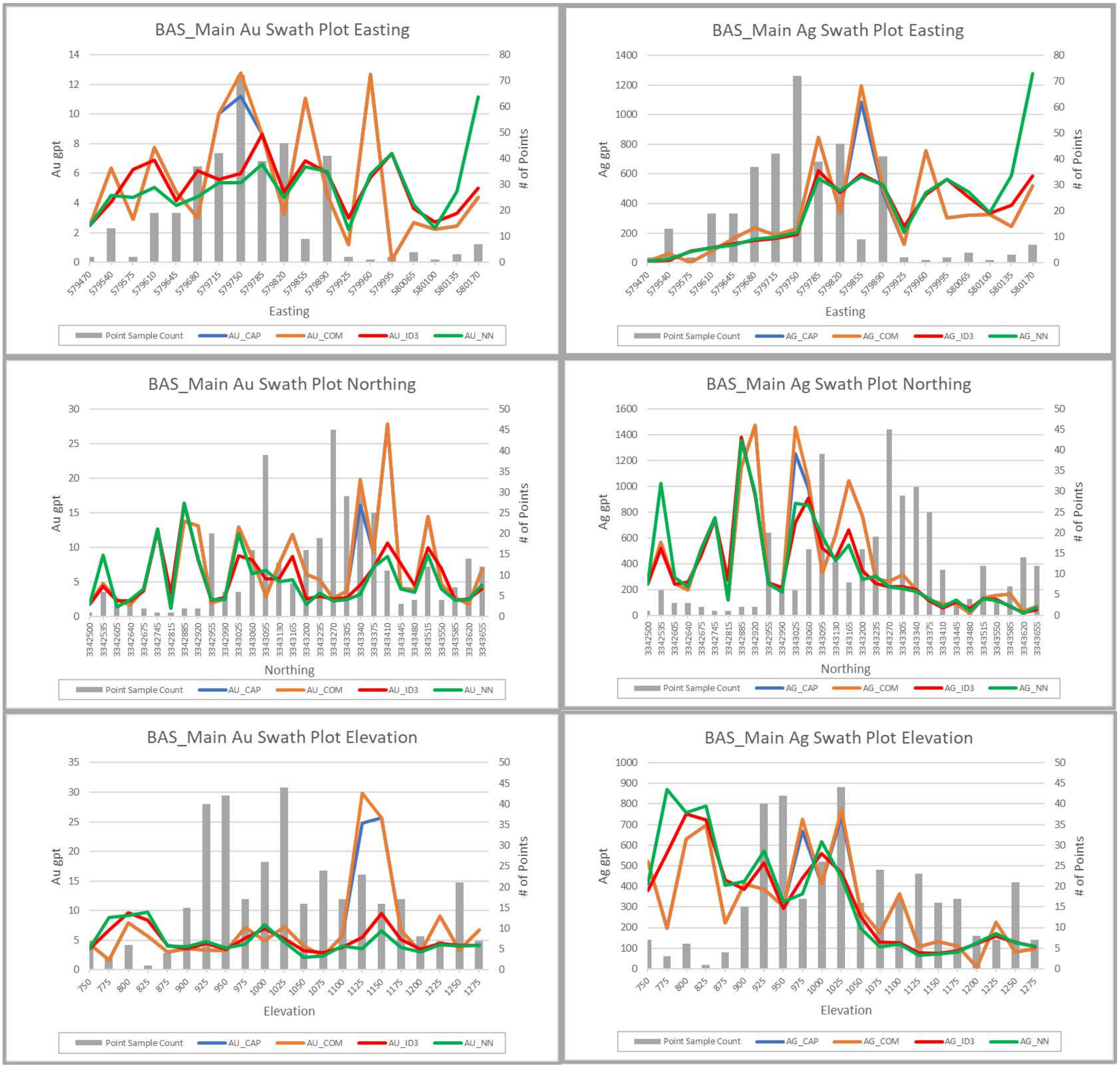
Source: P&E, 2023. _COM: Uncapped composite; _CAP: Capped composite

Figure 14-7: Babicanora Norte SE Vein Au and Ag Grade Swath Plot



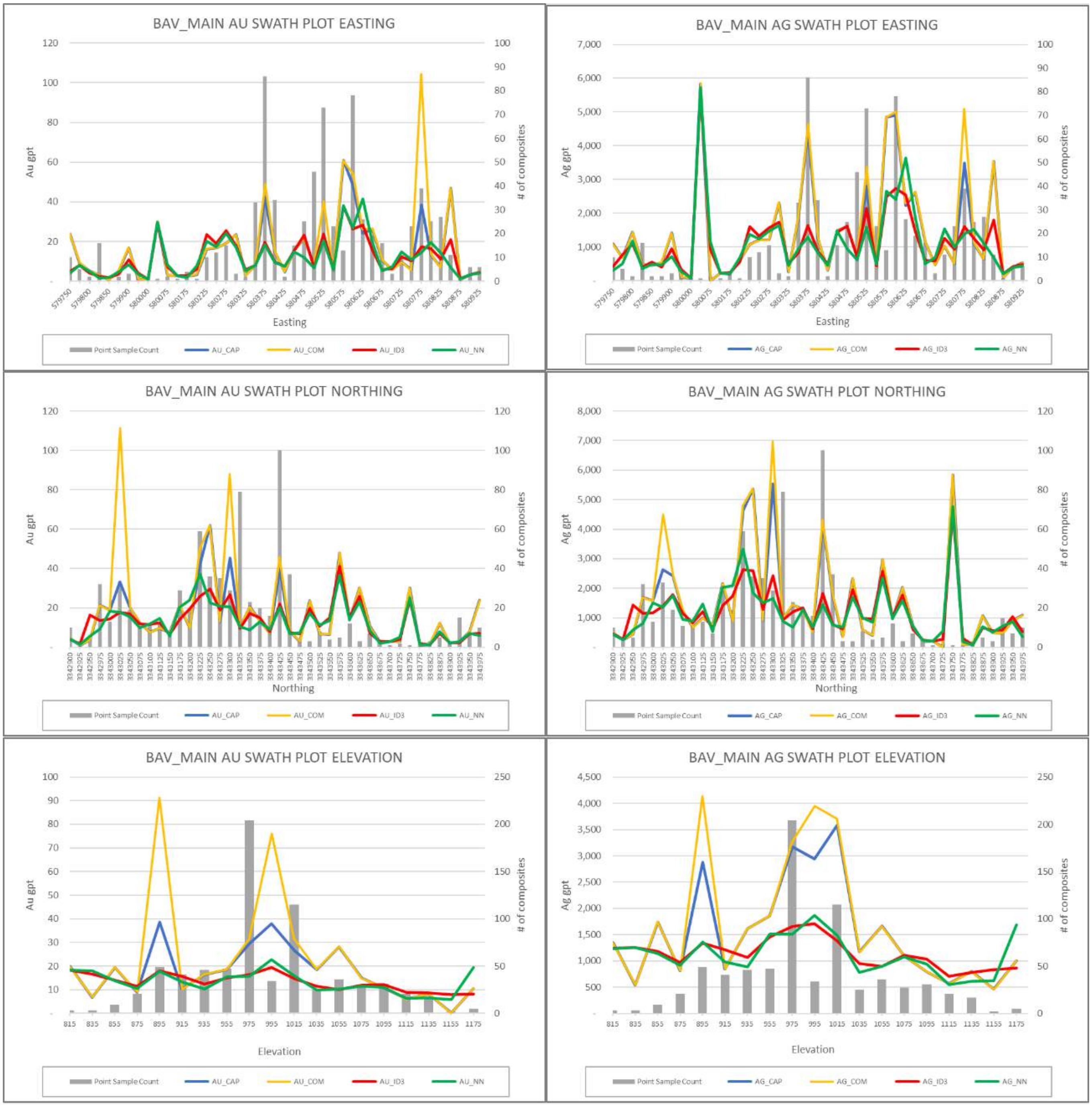
Source: P&E, 2023. _COM: Uncapped composite; _CAP: Capped composite

Figure 14-8: Babicanora Sur Main Vein Au and Ag Grade Swath Plot



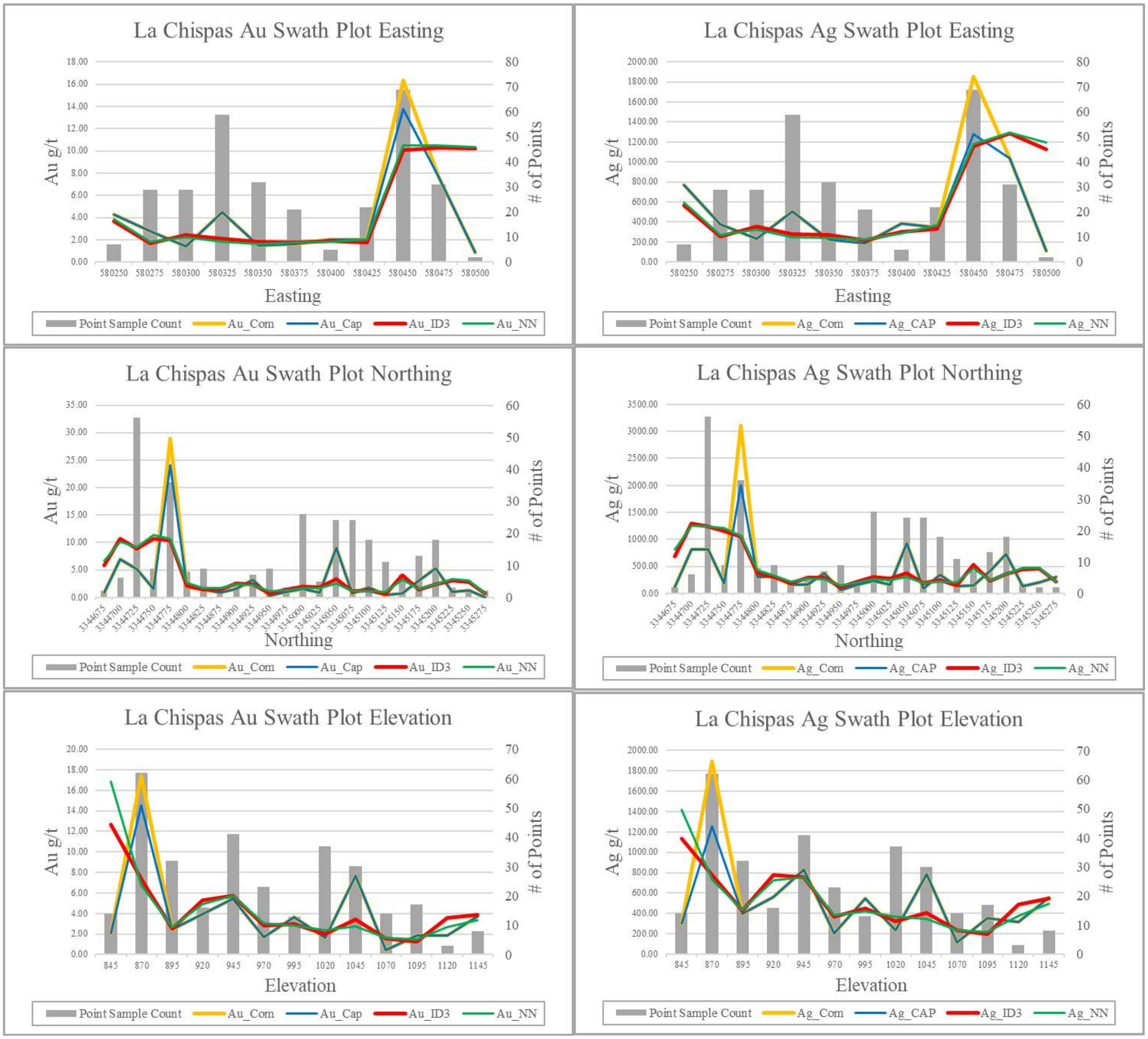
Source: P&E, 2023. _COM: Uncapped composite; _CAP: Capped composite

Figure 14-9: Babicanora Vista Main Vein Au and Ag Grade Swath Plot



Source: P&E, 2023. _COM: Uncapped composite; _CAP: Capped composite

Figure 14-10: Las Chispas Main Vein Au and Ag Grade Swath Plot



Source: P&E, 2023. _COM: Uncapped composite; _CAP: Capped composite.

14.19 Comments on the Mineral Resource Estimate

The QPs are of the opinion that there are no known legal, political, environmental, or other risks that could materially affect the potential development of the Mineral Resources.

15 MINERAL RESERVE ESTIMATE

15.1 Mineral Reserve Estimation Process

A process was followed to convert measured and indicated mineral resources to mineral reserves, which is supported by the design, schedule, and economic evaluation completed by Entech. Entech's general conversion process is described in the following points, with further detail provided in subsequent sections.

- A set of Mineral Resource block models were provided by P&E Mining to Entech through SIL. These are the same models that support the Mineral Resource Estimate with the addition of a 0.25 m low grade (<150 gpt AgEq) halo around the mineralized vein to account for background diluting grade. The block models are listed in Table 15-1.

Table 15-1: Mineral Resource Models

Geological Area	File Name	Release Date
Babicanora Main	SIL - BAM Diluted TR Model - 180423.dm	April 18, 2023
Babicanora Norte	SIL - BAN Diluted TR Model - 180423.dm	April 18, 2023
Babicanora Sur	SIL - BAS Diluted TR Model - 180423.dm	April 18, 2023
Babicanora Vista	SIL - BAV Diluted TR Model - 180423.dm	April 18, 2023
El Muerto	SIL - EM Diluted TR Model - 180423.dm	April 18, 2023
Las Chispas	SIL - LAS Diluted TR Model - 220423.dm	April 22, 2023
Giovani	SIL - GIO Diluted TR Model - 220423.dm	April 22, 2023
Giovani Mini	SIL - GIO MINI Diluted TR Model - 220423.dm	April 22, 2023
Luigi	SIL - LUI Diluted TR Model - 220423.dm	April 22, 2023
Luigi FW	SIL - LUI FW Diluted TR Model - 220423.dm	April 22, 2023
William Tell	SIL - WT Diluted TR Model - 220423.dm	April 22, 2023

- Using the Datamine™ software, the Mineral Resource models were filtered so that modelled grades within the Inferred material were set to zero. Stope optimisations were completed using Datamine Mineable Shape Optimiser™ (MSO) considering a preliminary incremental cut-off grade of 165 gpt AgEq for longhole, 215gpt AgEq for cut and fill and 262 gpt AgEq for resue.
- Unplanned dilution was added during the MSO stage and then optimized for grade. ELOS for longhole considers 0.5 m hangingwall and 0.5 m footwall dilution. ELOS for resue considers 0.2 m hangingwall and 0.2 m footwall dilution. Cut and fill mining was assumed as breasting in all cases, using the ore sill drive width of 3.5 m as a minimum mining width inclusive of dilution. The resulting stope shapes were reviewed for practicality of mining, with impractical mining shapes removed or adjusted.
- The minimum unplanned dilution applied as part of the MSO process was evaluated with the diluted Mineral Resource models noted above and therefore may carry grade.
- Modifying factors were applied to these stope shapes including backfill dilution and recovery factors based on geotechnical recommendations and actual operational data.

- A development design was produced to align with the resulting stope shapes that tied into the existing underground as-builts. The development design follows current site design criteria and geotechnical recommendations. A development ore dilution factor of 5% and recovery factor of 98% was applied.
- Stope shapes were depleted with development drives. Estimated maximum mining recoveries for stoping was 95%, with lower recoveries assumed for specific locations due to ground conditions, quality of existing backfill above and pillar requirements.
- The mine design was then depleted with reference to the current site as-builts provided by SilverCrest up to June 30, 2022.
- All stope and development designs (the mine design) were then evaluated. Economic evaluations were completed using the cost and revenue assumptions applied in the cut-off grade estimation and sub-economic levels and stopes were removed from the mineral reserve.
- The mine design was sequenced and scheduled in Deswik® to produce a mine plan.
- The resulting plan was evaluated in a financial model based on estimated mining costs to confirm economic potential.

15.2 Mineral Reserve Estimate

The Proven and Probable Mineral Reserve for the Las Chispas Operation is estimated at 3.4 Mt, at an average grade of 4.08 gpt Au, 395 gpt Ag or 719 gpt AgEq, as summarized in Table 15-2.

Table 15-2: Mineral Reserves Estimate

Area	Classification	Tonnes (k)	Au (gpt)	Ag (gpt)	AgEq (gpt)	Contained Au (koz)	Contained Ag (koz)	Contained AgEq (koz)
Babicanora	Proven	345	7.03	665	1,224	78	7,382	13,589
	Probable	2,334	3.90	370	679	292	27,734	50,987
Las Chispas	Proven	-	-	-	-	-	-	-
	Probable	401	3.09	399	645	40	5,152	8,323
Babicanora + Las Chispas	**Proven + Probable**	**3,081**	**4.14**	**407**	**736**	**410**	**40,269**	**72,899**
ROM Stockpile	Proven	168	5.56	428	869	30	2,311	4,699
Historic Stockpile	Proven	150	1.14	112	203	6	541	980
Total Stockpile	**Proven**	**318**	**3.47**	**279**	**555**	**36**	**2,852**	**5,679**
Total Mineral Reserve Estimate	**Proven + Probable**	**3,399**	**4.08**	**395**	**719**	**446**	**43,121**	**78,579**

Notes:
1. The effective date of the estimate is June 30, 2022.
2. The Mineral Reserve is estimated using the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines and 2014 CIM Definition Standard for Mineral Resources & Mineral Reserves.
3. The Mineral Reserve is estimated with a 372 gpt AgEq fully-costed COG for the deposit and an 85 gpt AgEq Marginal COG for development.
4. The Mineral Reserve is estimated using long-term prices of $1,650/oz for gold and $21.00/oz for silver.
5. A government gold royalty of 0.5% is included in the Mineral Reserve Estimate.
6. Stockpile values were provided by SilverCrest and account for approximately 7% of Mineral Reserve ounces.
7. The Mineral Reserve is estimated with a maximum mining recovery of 95%, with reductions in select areas based on geotechnical guidelines.
8. The Mineral Reserve presented includes both planned and unplanned dilution. The unplanned dilution includes a mining dilution of 0.5 m width on both the hangingwall and footwall for the longhole mining method (1 m total), and a 0.2 m width on both the hangingwall and footwall for the resue mining methods (0.4 m total). Cut and fill mining was assumed as breasting in all cases, using the ore sill drive width of 3.5 m as a minimum mining width inclusive of dilution. Additional unplanned dilution was applied in select areas based on geotechnical recommendations. Backfill dilution is also included and represents 4% for the longhole mining method and 7% for cut and fill and resue mining methods.
9. A minimum mining width, exclusive of unplanned dilution, of 1.5 m, 3.3 m and 0.5 m was used for the longhole, cut and fill and resue mining methods, respectively.
10. Average metallurgical recoveries applied are 96.7% Ag and 97.9% Au.
11. AgEq(gpt) = (Au(gpt) * 79.51 + Ag(gpt)). AgEq calculations consider metal prices, metallurgical recoveries, and Mexican Government gold royalty.
12. Estimates use metric units (metres (m), tonnes (t), and gpt). Metal contents are presented in troy ounces (metric tonne x grade / 31.103475).
13. The independent Qualified Person is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues, or any other relevant issue that could materially affect the Mineral Reserve Estimate.
14. Totals may not add due to rounding.

The Mineral Reserve Estimate by vein is summarized in Table 15-3.

Table 15-3: Mineral Reserve Estimate by Vein

Vein	Classification	Tonnes (k)	Au (gpt)	Ag (gpt)	AgEq (gpt)	Contained Au (koz)	Contained Ag (koz)	Contained AgEq (koz)
Babicanora Main	Proven	335	6.20	561	1,054	67	6,036	11,338
	Probable	740	3.75	363	661	89	8,632	15,714
Babicanora Norte	Proven	72	5.34	731	1,156	12	1,692	2,675
	Probable	433	3.28	400	661	46	5,566	9,197
Babi Vista	Proven	40	8.69	787	1,479	11	1,018	1,912
	Probable	657	4.86	420	807	103	8,881	17,043
Babi Vista FW	Proven	2	3.81	313	615	0	16	32
	Probable	17	2.55	278	481	1	151	261
Babicanora Sur	Proven	-	-	-	-	-	-	-
	Probable	291	3.55	231	513	33	2,155	4,791
Granaditas	Proven	-	-	-	-	-	-	-
	Probable	49	3.19	433	687	5	684	1,085
El Muerto	Proven	-	-	-	-	-	-	-
	Probable	45	2.11	199	366	3	286	527
Total Babicanora Area	**Proven**	**448**	**6.28**	**608**	**1,107**	**90**	**8,762**	**15,957**
Total Babicanora Area	**Probable**	**2,231**	**3.90**	**367**	**678**	**280**	**26,354**	**48,620**
Las Chispas	Probable	219	4.31	543	886	30	3,824	6,236
Giovanni	Probable	58	1.66	252	384	3	472	719
Gio Mini	Probable	50	1.94	255	409	3	411	659
Luigi	Probable	33	1.69	241	375	2	259	403
Luigi FW	Probable	34	1.23	143	241	1	159	267
William Tell	Probable	6	0.68	136	190	0	27	37
Total Las Chispas Area	**Probable**	**401**	**3.09**	**399**	**645**	**40**	**5,152**	**8,323**
Run of Mine Stockpile	Proven	168	5.56	428	869	30	2,311	4,699
Historic Stockpile	Proven	150	1.14	112	203	6	541	980
Total Stockpiles	**Proven**	**318**	**3.47**	**279**	**555**	**36**	**2,852**	**5,679**
Total Mineral Reserve Estimate	**Proven**	**767**	**5.11**	**471**	**878**	**126**	**11,614**	**21,636**
	Probable	**2,632**	**3.78**	**372**	**673**	**320**	**31,507**	**56,942**
	Proven + Probable	**3,399**	**4.08**	**395**	**719**	**446**	**43,121**	**78,579**

15.3 Preliminary Cut-Off Grade Derivation

Incremental cut-off grades used in the design and scheduling process are based on preliminary revenue inputs and estimated costs as stated in Table 15-4 and Table 15-5, respectively.

Table 15-4: Preliminary Revenue Inputs

Factor	Unit	Ag Assumption	Au Assumption
Metal Price	US$/oz	21	1,650
Mill Recovery	%	96.7	97.9
Payable	%	99.90	99.85
Royalty	%	0.50	0.50
Ag:Au Ratio	Ratio	79.51	
Total Revenue per Ounce of AgEq	**$/oz**	**19.88**	

Table 15-5: Preliminary Operating Cost Estimates

Factor	Unit	Longhole Stoping	Cut and Fill Stoping	Resue Stoping
Mining Cost (exclusive of Operating Development)	$/t ore	44	80	110
Processing, Tailings, Water Treatment Costs	$/t ore	45	45	45
Underground G&A	$/t ore	12	12	12
Operating Development Cost	**$/m**	**2,250**	**2,250**	**2,250**

The preliminary cut-off grades are summarized in Table 15-6.

Table 15-6: Preliminary Cut-Off Grades

Longhole Incremental Cut-Off Grade (gpt AgEq)	Cut and Fill Incremental Cut-Off Grade (gpt AgEq)	Resue Incremental Cut-Off Grade (gpt AgEq)	Development Marginal Cut-Off Grade (gpt AgEq)
165	215	262	85

15.4 Preliminary Economic Potential

The economic potential of all material for inclusion in the Mineral Reserve were evaluated using the preliminary cost and revenue assumptions summarised in Table 15-7. Sustaining capital outside of development and site G&A were excluded at this stage to evaluate the full potential of the deposit.

Table 15-7: Stope Economics Parameters

Stope Economic Inputs	Unit	Longhole Unit Rate	Cut and Fill Unit Rate	Resue Unit Rate
Mining Cost (exclusive of Operating Development)	$/t	44	80	110
Processing, Tailings, Water Treatment	$/t	45		
Underground G&A	$/t	12		
Development Cost - Lateral CAPEX	$/m	2,850		
Development Cost - Lateral OPEX	$/m	2,250		
Development Cost - Vertical	$/m	2,450		
Revenue per Ounce of Silver	$/oz	19.88		

15.5 Final Economic Analysis

Once the mining design and schedule were complete, a final economic model was developed, and the overall operation analysed for economic viability.

Final calculated cut-off grades based on this economic model are summarised in Table 15-8 as an average, and in Table 15-9 by method. Variance between these final values and the preliminary values used in the mine design are within the accuracy level required of this study, except for the resue mining method. Due to the small volume of resue tonnes (representing 7% of the total stoping) and SilverCrest's plan to maintain resue at this level or lower, there are no concerns as to its economic impact to the Mineral Reserves. The total quantity of resue material that falls below the 371 gpt AgEq Incremental COG represents 14% of the total Mineral Reserve ounces.

Table 15-8: Final Average Operating Costs and Cut-Off Grade Calculation for the Las Chispas Operation

Description	Unit	Full Economic Cut-off Grade	Break-Even Cut-off Grade	Incremental Cut-off Grade	Marginal Cut-off Grade
Production Operating Costs	$/t ore	67	67	67	-
Operating Development Costs	$/t ore	26	26	-	-
Underground Sustaining Capital[1]	$/t ore	61	8	-	-
Underground G&A	$/t ore	14	14	-	-
Processing Costs	$/t ore	48	48	48	48
Site G&A Costs	$/t ore	22	22	22	-
Total Operating Cost	**$/t ore**	**237**	**185**	**133**	**48**
Fully Costed Stope Cut-Off Grade	**gpt AgEq**	**372**	-	-	-
Break-Even Stope Cut-Off Grade	**gpt AgEq**	-	**289**	-	-
Incremental Stope Cut-Off Grade	**gpt AgEq**	-	-	**208**	-
Marginal Cut-Off Grade	**gpt AgEq**	-	-	-	**75**

Notes:
1. Underground sustaining capital includes development for the Fully Costed COG and is excluded in the Break-Even COG.

Table 15-9: Final Operating Costs and Cut-Off Grade Summary

Description	Unit	Break-Even Cut-off Grade			Incremental Cut-off Grade			Marginal Cut-off Grade
		Longhole	Cut and Fill	Resue	Longhole	Cut and Fill	Resue	
Production Operating Costs	$/t ore	45	96	168	45	96	168	-
Operating Development Costs	$/t ore	26	26	26	-	-	-	-
Underground G&A	$/t ore	14	14	14	-	-	-	-
Subtotal UG Operating Cost	**$/t ore**	**86**	**136**	**210**	**45**	**96**	**168**	**-**
Underground Sustaining Capital[1]	$/t ore	8	8	8	-	-	-	-
Processing Costs	$/t ore	48	48	48	48	48	48	48
Site G&A Costs	$/t ore	22	22	22	22	22	22	-
Total Mining Cost	**$/t ore**	**164**	**214**	**286**	**115**	**165**	**237**	**48**
Break-Even Stope Cut-Off Grade	**gpt AgEq**	**256**	**335**	**448**	**-**	**-**	**-**	**-**
Incremental Stope Cut-Off Grade	**gpt AgEq**	**-**	**-**	**-**	**179**	**258**	**371**	**-**
Marginal Cut-Off Grade	**gpt AgEq**	**-**	**-**	**-**	**-**	**-**	**-**	**75**

Notes:
1. Underground sustaining capital includes development for the Fully Costed COG and is excluded in the Break-Even COG.

15.6 Comparison to Previous Reserve

The Las Chispas Operation Proven and Probable Mineral Reserves in Table 15-10 are compared to the previous Mineral Reserve Estimate dated January 4th, 2021 (both including surface stockpiles) released with the disclosure of the previous Feasibility Study (2021 FS Report). The previous estimate may no longer be relied upon and has been replaced with the new Mineral Reserve Estimate dated June 30, 2022.

Table 15-10: Comparison to Previous Reserve (4 Jan 2021)

Reserve Statement (Proven + Probable)	Tonnes	Au	Ag	AgEq	Contained Au	Contained Ag	Contained AgEq
	(k)	(gpt)	(gpt)	(gpt)	(koz)	(koz)	(koz)
FS, 4 Jan 2021 @86.9 AgEq	3,351	4.81	461	879	518	49,679	94,704
FS, 4 Jan 2021 @79.51 AgEq	3,351	4.81	461	843	518	49,679	90,875
TR, 30 June 2022	3,399	4.08	395	719	446	43,121	78,579
Difference	**48**	**-0.73**	**-66**	**-124**	**-72**	**-6,558**	**-12,296**

The difference can be attributed to changes in the Mineral Resource model, a change in the AgEq ratio, increased cut-off grade and updates to geotechnical assessments and assumptions.

15.7 Ore Reconciliation

15.7.1 Reconciliation

Reconciliation of the Reserve has been completed between the dates July 1, 2022, to April 30, 2023, representing the first complete ten months of the Las Chispas Process Plant operation. The reconciliation provides a basis for accuracy of the Mineral Reserve Estimate for predicting ounces produced in the Process Plant.

The methodology used for reconciliation was derived from the work presented by Parker (2012) using fundamental factor assessment where the F1 factor represents a comparison between the Reserve depletion to Mine Production (ore control) models, and the F2 factor represents a comparison between the mine estimate of Material Sent to the Process Plant and the Material Received at the Process Plant. The F3 factor is the product of F1 and F2 and represents the effective conversion of predicted ounces in the Reserve to actual ounces processed at the Process Plant.

15.7.1.1 F1 Reconciliation Factor

The Reserve Depletion has been calculated from the June 30, 2022 Reserve shapes mined and has been evaluated against the Mine Production estimate. Mine Production estimates are generated through site grade control processes which evaluate actual surveyed volumes against models updated with geological mapping, delineation drilling and channel samples.

The Mine Production estimate by source during this period is shown in Table 15-11.

Table 15-11: Mine Production Estimate, by Source, July 1, 2022 to April 30, 2023

Vein	Tonnes (k)	Au (koz)	Ag (koz)	AgEq (koz)
BAM	106.7	13.5	1,190	2,268
BAN	63.9	7.8	1,070	1,692
BAV	29.2	7.6	626	1,231
BAC	2.3	0.1	134	25
BVS	0.5	0.2	245	44
Total	**202.7**	**29.4**	**2,924**	**5,260**

The F1 reconciliation factor is summarized in Table 15-12 using the Mine Production Estimate compared to the Depleted Reserve for in situ veins. Surface stockpiles are not considered in the F1 factor. The F1 for tonnes is greater than 1, due to the stopes being mined with a higher dilution mining method than planned in reserves as well as higher dilution experienced during the mine ramp up. The F1 for Au and Ag ounces are below 1 indicating that the Mine Production Estimate is lower than the Reserve Depletion.

Table 15-12: F1 Reconciliation Factor for July 1, 2022 to April 30, 2023

Description	Tonnes (k)	Au (koz)	Ag (koz)	AgEq (koz)
Mine Production Estimate	203	29.4	2,924	5,260
Reserve Depletion	153	32.5	3,178	5,761
F1 Factor	**1.27**	**0.90**	**0.92**	**0.91**

15.7.1.2 F2 Reconciliation Factor

The F2 factor is the ratio of ounces contained in material Received at the Process Plant as reported by the Process Plant compared to the ounces contained in material Sent to the Process Plant as reported by the mine Production Estimate. The Sent to Process Plant estimate is largely based on estimated material movements from the stockpiles to the Plant which in turn have been estimated using fully diluted Mine Production estimates. The material is blended in mini-stockpiles called Blend Fingers before being sent to the crusher. Material from all stockpiles was fed to the plant during this period.

The estimated breakdown of Process Plant feed during this ten-month period is shown in Table 15-13, generated from the composition of Blend Fingers 5 through 144.

Table 15-13: Blend Finger Composition, for July 1, 2022 to April 30, 2023

Source	Tonnes (k)	Au (koz)	Ag (koz)	AgEq (koz)
ROM Stockpiles	210.6	33.1	2,916.8	5,550.5
Historic Stockpiles	85.9	2	290	446
Direct UG ROM	29.9	3.7	373	669
Grand Total	**326.4**	**38.8**	**3,580**	**6,665**

Stockpiles have largely provided the bulk of the feed material into Blend Fingers. For the period July 1, 2022, to April 30, 2023, detailed tracking of the stockpiles has enabled a reasonable estimate of the origin source material that was used to build the Blend Fingers as fed to the Process Plant. A percentage breakdown by original source is estimated and summarized in Table 15-14.

Table 15-14: Percent Distribution of Plant Feed Origin, for July 1, 2022 to April 30, 2023

Ore to process (from F2 Recon)	% Tonnes	% Au_oz	% Ag_oz	% AgEq_oz
Historic	27%	5%	8%	7%
BAM	43%	52%	44%	48%
BAN	20%	22%	31%	27%
BAV	9%	20%	16%	18%
BVS	0.1%	1%	1%	1%
BAC	1%	0.4%	0.3%	0.3%
Total	**100%**	**100%**	**100%**	**100%**

The F2 reconciliation factor is summarized in Table 15-15 as the ratio of the Received at Process Plant to the Sent to Process Plant values. Surface Stockpile are included in the F2 factor. The F2 for tonnes and Au ounces both show good correspondence <5% from 1. The F2 for Ag ounces is 8% higher than 1. The F2 for AgEq ounces is balanced for the Au and Ag values and show good correspondence <5% from 1.

Table 15-15: F2 Reconciliation Factor for July 1, 2022 to April 30, 2023

Description	Tonnes (k)	Au (koz)	Ag (koz)	AgEq (koz)
Received at Plant	305	37.3	3,805	6,772
Sent to Plant	322	38.4	3,519	6,484
F2 Factor	**0.95**	**0.97**	**1.08**	**1.04**

Note: Sent to Plant values have been adjusted to remove F2 reconciliation applied at end of February 2023 to be comparable with the Mine Production Estimate used in the F1 calculation.

15.7.1.3 F3 Reconciliation Factor

The F3 reconciliation factor is summarized in Table 15-16 as the ratio of the Received at Process Plant to the Reserve Depletion values. The reconciliation of individual metals indicates that Ag ounces are being estimated within 1% of the material processed, and that Au may be overestimated by 13%. Overall, the F3 for AgEq ounces indicates that the Reserve Depletion is 0.95, indicating the long-term estimate is within 5% of what has been processed in the Process Plant on AgEq oz, albeit with an additional 21% of material mined. This is based on the F1 for tonnes being greater than 1, due to the stopes being mined with a higher dilution mining method than planned in reserves as well as higher dilution experienced during the mine ramp up.

Table 15-16: F3 Reconciliation Factor for July 1, 2022 to April 30, 2023

Description	Tonnes	Au oz	Ag oz	AgEq oz
F1 Factor	1.27	0.90	0.92	0.91
F2 Factor	0.95	0.97	1.08	1.04
F3 Factor	1.21	0.87	0.99	0.95

15.8 Comment on Mineral Reserve Estimate

Mineral Reserve estimation uses industry-accepted practices, and the estimate is reported using the 2014 CIM Definition Standards, and the 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines.

Mineral Reserves were converted from Measured and Indicated Mineral Resources and do not include any Inferred Mineral Resources.

Factors that may affect the Mineral Reserve Estimate include geological complexity, geological interpretation, and Mineral Resource block modelling; COG estimations; commodity prices, market conditions and foreign exchange rate assumptions; operating cost and productivity assumptions; sustaining capital costs to maintain production; rock quality and geotechnical constraints, dilution and mining recovery factors; hydrogeological assumptions; and metallurgical process recoveries.

The independent Qualified Person is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues, or any other relevant issue that could materially affect the Mineral Reserve Estimate.

16 MINING METHODS

16.1 Introduction

The Las Chispas Operation orebody extracted in the mine plan are contained in two distinct areas: Las Chispas and Babicanora. The Las Chispas and Babicanora Areas include mineral reserves over a strike length of approximately 1,200 m and 2,300 m, respectively, and extend from surface to a depth of approximately 300 m and 500 m, respectively. Each area is characterized by multiple veins, which mainly trend NW to SE and have a vertical to subvertical plunge. The underground mining methods currently in use include longitudinal longhole stoping, cut and fill stoping and resue stoping, with cemented or uncemented rockfill as backfill.

Longhole stope dimensions vary from 15 m to 18 m in height, 12.5 m to 25 m in strike length, and have a minimum thickness of 1.5 m exclusive of unplanned dilution. Cut and fill breasting and resue stope lift heights are 3.6 m, unless mining the final lift under a sill pillar, in which case the height would be a minimum of 5 m for geotechnical stability purposes.

Mine access is provided by three Portals; Santa Rosa, Babicanora Central and Las Chispas. The portals and raises to surface provide the primary ventilation.

Development and production operations are completed through contract mining using a variety of equipment, at an average lateral development rate of 31.3 mpd and average material movement rate of 2,250 tonnes per day, inclusive of waste over the life of mine (LOM). The mine ore production rate averages 1,000 tpd over the LOM and 1,220 tpd from 2025 to 2029.

Operations management, Technical Services and fixed equipment maintenance is managed and provided by LLA.

16.2 Geotechnical Considerations

A detailed geomechanical assessment was carried out on the mine plan and schedule by Knight Piésold. The available geomechanical data were reviewed and used to define rock mass quality and rock mass structure domains. Geotechnical design input to the mine plan was then provided based on the domains, stability analyses, and experience at Las Chispas Operation and other similar mines. The design input included:

- Stope dimensions and overbreak
- Dimensions for crown, sill, rib and inter-lode pillars
- Offsets and strategies for mining around voids and historic workings
- Offsets between stopes and development
- Extraction sequencing
- Strategies for temporary sill pillar recovery under sill mats; and
- Ground support.

The data review, domain definition and stability analyses are described in the following sub-sections.

16.2.1 Review and Limitations of Geomechanical Data

SIL has completed extensive geomechanical core logging and underground mapping in the Babicanora and Las Chispas Areas. These activities are ongoing. This study relied on the following data collected by SIL.

- Geomechanical Core Logging - Logging of 39,000 m of resource drill core using the RMR76 and Q' rock mass classification systems. The logging is typically completed for the mineralized zone and approximately 15 to 20 m on either side. SIL staff were trained in geomechanical logging by Rockland. Discontinuity orientation data are not available from these drillholes.
- Underground Mapping - Rock mass quality and structural mapping are completed on an ad hoc basis in the sill drives at BAN, BAV, and BAM. A total of 530 m of mapping was available for use. Limited mapping is also completed in the waste development.

KP reviewed the available data to assess its reliability for use in the current study and supplemented it through the targeted collection of additional data. Ben Peacock (Specialist Rock Mechanics Engineer and Qualified Person) made two site visits in 2022 and Madison Raddatz (Senior Rock Mechanics Engineer) made a site visit in February 2023. A total of 1,280 m of drill core was reviewed and 110 m of mapping completed. The reviews concluded that the SIL data were suitable for use in the Report. In some cases, the mapping data could not be linked to a spatial position or lithology and it was excluded. It is important to note that the majority of the data are available for BAM, BAN and BAV. Relatively few data are available for the Las Chispas area, particularly discontinuity orientation data.

16.2.2 Rock Mass Characteristics and Domain Definition

16.2.2.1 Intact Rock Properties

Intact rock properties were based on the results of the laboratory strength tests completed by EPGC (2020), underground observations, and experience at other projects in Mexico. Each of the intact rock properties are briefly discussed below.

- Intact Strength - the average unconfined compressive strength (UCS) values for each of the major lithologies ranged from approximately 25 to 55 MPa. Based on underground observations, these results may under-represent the strength of the rock mass. A UCS of 5 MPa was defined for the fault zone at BAM and BAC based on field observations during the site visits.
- Hoek-Brown mi - triaxial compressive strength testing and Brazilian indirect tensile strength testing have not been completed to date. Therefore, Hoek-Brown mi values were estimated based on the published typical and lower bound values for Tuff (Hoek et. al, 1992). Values of 13 and 8 were selected.

16.2.2.2 Rock Mass Structure

The dominant discontinuity orientations observed at the mine are summarized below. Some areas, particularly in the LAT1, are massive and limited joints are observed while other areas are blocky. Not all discontinuity orientations are observed at each vein, but the general trends observed are similar.

- Joint sets sub-parallel to mineralization - The mineralization strikes approximately 130° at the Babicanora Area and 155° at the Las Chispas Area, and dips steeply towards the Southwest to West. There are several joint sets (A, A', B, and D) striking parallel to sub-parallel to the mineralization.
- Joint sets sub-perpendicular to the strike of the Mineralization - Joint sets E, F and G strike southwest to west, and generally dip steeply towards the northwest to north.

- Joint Sets Sub-Perpendicular to the dip of the Mineralization - Joint sets H and I cross-cut the dip of the mineralization, striking Northwest to North and dipping moderately towards the Northeast to East.
- Sub-Horizonal Joint Set - Minor set referred to as Joint Set C.

These general trends were reviewed in detail for each of the areas and veins. Potential controls on the rock mass structure were evaluated, including spatial variation between and within the veins, as well as between lithologies. The final domains are listed below.

- Las Chispas Area - All Veins
- Babicanora Area - LAT1 (BAC, BAM & BAS)
- Babicanora Area - LAT1 (BAN & BAV)
- Babicanora Area - SACTS (All Veins)

16.2.2.3 Rock Mass Quality

The rock mass quality varies between the veins. Prior to the start of the domain definition process, a combination of underground observations, development performance, the RQD model, drillhole and mapping RMR76 data, and a low core recovery model were used to define volumes of reduced rock mass quality in the vicinity of the existing and planned stopes. The results are summarized below.

- BAM - 3D solids were developed for areas of Moderate and Major reduced rock mass quality. Areas of Moderate Reduced Rock Mass Quality are associated with RMR_{76} values between 30 and 50. Areas of Major Reduced Rock Mass Quality are associated with RMR_{76} between 20 and 40. Outside of these areas, the rock mass quality ranges between RMR_{76} values of 55 and 60.
- BAC - Most of the planned stopes are within the FLTC fault. An area of Major Reduced Rock Mass quality was produced as a 3D solid for this area. The RMR_{76} data inside the reduced rock mass quality area ranges between 20 and 35 and is significantly lower than the rock mass quality outside of the solid (RMR_{76} values between 35 and 80).
- BAS - The rock mass quality data for this vein is almost uniformly distributed between RMR_{76} values of 25 and 75. Reviews of core photos and the RQD block model were not able to adequately define spatial controls on the reduced rock mass quality. As a result, three classes of rock mass quality were defined: Class 1 RMR_{76} 60 to 80 (25%), Class 2 RMR_{76} 40 to 60 (40%), and Class 3 RMR_{76} 20 to 40 (35%).
- BAN, BAV and Las Chispas Area - These veins are generally associated with GOOD rock mass quality (i.e., RMR_{76} values between 60 and 80).

Potential controls on the rock mass quality were evaluated included spatial variability, position relative to the mineralization, the influence of lithology and the influence of surface effects. The rock mass quality domains and the associated design values are summarized in Table 16-1.

Table 16-1: Typical Rock Mass Quality Ranges based on RMR76 Rock Mass Classification

Vein	Domain	Vein	Immediate HW-FW	Distal HW-FW
Babicanora Norte Babicanora Vista	All	60 Good	60 to 65 Good	70 Good
Babicanora Main Babicanora Sur	Low Quality Zones	20 to 40 Poor	20 to 50 Poor to Fair	-
	Outside Low-Quality Zones	60 Good	55 to 60 Fair	45 to 75 Good
Babicanora Central	Low Quality Zones	20 Poor	35 Poor	-
	Outside Low-Quality Zones	35 Poor	50 Fair	80 Good
Las Chispas Area	All	60 to 65 Good	65 Good	60 to 65 Good

16.2.2.4 Faults

The known faults in the vicinity of the planned mine workings and their typical characteristics are summarized below. The FLTC Fault and some of the regional faults have been modelled in 3D.

- FLTC Fault - This fault strikes sub-parallel to the mineralization at BAM and BAC. At BAM, the FLTC is typically located in the immediate HW of the planned stopes, but meanders and can be present in the back of the stopes or deeper in the HW. At BAC, the fault is wider and hosts most of the planned stopes. The thickness and geomechanical characteristics of the fault can vary significantly over a few metres and vary from a thin (approximately 10 cm) interval of clay gouge to a zone of gouge, rubble, and broken rock more than 4 m thick. The width, position, and characteristics of the fault have strongly influenced the performance of the development and stopes at BAM and BAC to date.
- William Tell Fault - A fault is locally present along the HW and FW of the William Tell Vein based on observations in the historic underground workings. The fault was observed to be approximately 10 cm thick and consists of gouge and altered rock. The drillhole database suggests that the fault is not continuous along the length of the vein.
- NE-SW Regional Faults - Several regional faults striking NE-SW and dipping to the NW cross-cut the veins. The geomechanical characteristics of these faults are not well known at this time.

16.2.2.5 Stress Regime

In-situ stress measurements have not been completed in the vicinity of the mine. The far-field stress conditions were estimated based on experience at other sites in Mexico as follows:

- σz (MPa) = 0.025z
- KH = 1
- Kh = 1 to 0.5

The orientation of the principal far-field horizontal stress was assumed to be perpendicular to the local strike of the veins.

16.2.3 Geomechanical Design Input

16.2.3.1 Mining Methods

The mine plan incorporates a combination of longitudinal longhole open stoping, cut and fill, and resue mining. Uncemented Rockfill (URF) is being used in most cases. The longhole stopes are backfilled with a combination of Cemented Rockfill (CRF) and URF to avoid the use of rib pillars. CRF is also used in all of the mining methods for sill matts above temporary sill pillars.

In most cases, a combination of these mining methods has been executed by the site and proposed by Entech for each vein. In the case of BAC, the use of cut and fill was recommended within the fault zone due to the poor rock mass quality and the expected influence on longhole stope performance and overbreak. Cut and fill mining is not planned at the Las Chispas Area.

16.2.3.2 Longhole Stope Dimensions

Achievable longhole open stope dimensions were assessed using the Stability Graph method (Potvin, 1988 and Nickson, 1992). The assessment focussed on the BAN, BAV, BAS veins as well as the veins in the Las Chispas Area. The analyses are based on a sub-level spacing of 15 to 18 m, a HW-FW width of 4.5 m and a strike length of up to 25 m. Stope widths are planned at 2.5m but 4.5m was used in this assessment to properly account for end-wall stability when considering a worst case top sill width.The results of the analyses are summarised below.

- BAN, BAV and Las Chispas (All Veins) - Strike lengths of 25 m are thought to be achievable.
- BAS - The sub-level spacing was limited to 15 m to improve stope performance. The following strike lengths are expected to be achievable with each of the rock mass quality classes.
    - Class 1 - 20 m.
    - Class 2 - 12.5 m, with cables installed in the HW of the sill drives.
    - Class 3 - 12.5 m, with cables installed in the HW of the sill drives and an allowance for increased costs.

At BAM, the achievable stope dimensions were evaluated through a review of the performance of the stopes mined between November 2022 to January 2023. Although the extraction of stopes began in January 2022, stopes mined before November 2022 were reviewed on a case-by-case basis as mining practices during this time were still being refined and are not thought to be representative of current practices. Based on this review, strike lengths of 15 m are thought to be achievable in all of the rock mass quality zones at BAM. In the areas of Moderate and Major Reduced Rock Mass Quality, cables will be required in the HW of the sill drives.

16.2.3.3 Longhole Stope Overbreak

Overbreak of the HW and FW for longhole stopes was estimated using the Equivalent Linear Overbreak/Slough (ELOS) Method (Clark, 1998 and Capes, 2009). The assessment uses the same inputs as the stope dimensions discussed in the previous section. The results are summarized below.

- BAN - 0.75 m overbreak in the HW and 0.5 m in the FW
- BAV - 0.5 m overbreak in the HW and 0.5 m in the FW
- BAS - 0.75 m overbreak in the HW and 0.5 m in the FW

- Las Chispas Area (All Veins) - 0.5 m overbreak in the HW and 0.5 m in the FW

Overbreak for the stopes at BAM were based on the review of the historic stope performance:

- BAM - Outside of / Moderate Reduced Rock Mass Quality Zones - 0.75 m overbreak in the HW and 0.25 in the FW. This assumes that cables are installed in the HW of the sill drives in the areas of Moderate Reduced Rock Mass Quality.
- BAM - Major Reduced Rock Mas Quality Zones - 1 m overbreak in the HW and 0.5 m in the FW, assuming the installation of cables into the HW of the sill drives.

16.2.3.4 Cut and Fill and Resue Stope Dimensions

The performance of the cut and fill and resue stopes was evaluated using empirical design methods developed by Ouchi et al. (2008) and Hoek and Brown (1980). The analyses considered the maximum stope span of 3.5 m and the design values for the Mineralized Zone rock mass quality domains. The results suggest that the planned stope dimensions are achievable using conventional mining practices in most cases. The stopes within the areas of Major Reduced Rock Mass Quality at BAM and BAC are expected to require upgraded ground support (i.e., shotcrete or fibrecrete on advance with spiling). This is consistent with current mining practices within these areas.

16.2.3.5 Crown Pillar Dimensions

The required thickness of the crown pillars stability was primarily evaluated using the empirical Critical Scaled Span Method (Carter, 2008). The assessment was completed for BAN, BAV, BAC and the Las Chispas Area, as the economic mineralization approaches within approximately 50 m of surface. The results of the analyses are summarized below. A minimum crown pillar thickness of 20 m has been recommended to reflect the limited geotechnical data currently available for the crown pillars.

- BAN and the Las Chispas Area - A crown pillar thickness of 20 m is recommended;
- BAV - A crown pillar thickness of 30 m is recommended; and
- BAC - The analyses suggest a crown pillar thickness greater than 50 m is required. These results are not considered to be representative. A 2D numerical analysis was completed in RS2 and the results suggest that a crown pillar thickness of 35 m is achievable.

The recommended crown pillar thicknesses refer to the thickness of the pillar within competent bedrock and do not include overburden or highly weathered/disturbed bedrock. SIL has concluded that there is typically 2 m of overburden and/or highly weathered bedrock present across the site.

A monitoring and instrumentation program is recommended during the mining of the crown pillars, particularly the crown pillars at BAN that underlie access roads.

16.2.3.6 Sill Pillar and Rib Pillar Dimensions

The proposed mine plan includes the recovery of temporary sill pillars below backfilled stopes. In some cases, these sill pillars may be supported by rib pillars. The stability of the sill and ribs pillars was assessed using 2D numerical models, an empirical method by Lunder and Pakalnis (1997) and experience at other mines. The results suggest that a minimum sill pillar thickness of 5 m and a rib pillar thickness of 5 m.

In cases where the stopes above the temporary sill pillars have not yet been mined, the stopes will be backfilled with CRF. However, in some of the existing stopes, CRF sill mats of varying thickness and quality have been constructed at the base of the stopes and the remainder of the stope has been backfilled with URF. Options for mining below these sill mats are discussed below.

- Areas where the CRF mat is greater than 3 m thick:
  - Longhole stopes - A permanent sill pillar is not required, however rib pillars should be left in place between the stopes to prevent deterioration of the hangingwall from undercutting the sill mat. At BAN, BAV and Las Chispas, Entech has proposed using 5 m x 5 m island pillars in place of permanent sill and rib pillars.
  - Cut and fill stopes - Maintain a minimum 5 m temporary sill pillar between man-entry openings and the CRF sill mat. Uppers can be used on retreat to recover the ore from the sill pillar.
- Areas where the CRF matt was not constructed or is less than 3 m thick:
  - Longhole stopes - Leave a permanent 5 m sill pillar in place. Rib pillars are recommended between the stopes to prevent deterioration of the stope HW undercutting the abutment of the sill mat.
  - Cut and fill stopes - Leave a permanent 5 m sill pillar in place. It is likely possible to recover the vein within the sill pillar using uppers on retreat.

In all cases, the sill pillar should only be recovered once mining of the overlying mining block is complete.

16.2.3.7 Boundary Pillar Dimensions Around Historic Voids

Historic voids and mine openings are present in the Las Chispas Area and at BAC. Unless these voids are backfilled with cemented fill, permanent boundary pillars are required between the proposed stopes and development and these voids.

At BAC, SIL has created a 3D model with solids representing known voids as well as areas where voids are likely present. A 10 m permanent boundary pillar is recommended between the known voids and all new development and stoping. Probe drilling is recommended for all stopes and development near known voids as well as within the solid representing areas where voids are likely present.

SIL has established access to the historic workings in the Las Chispas Area and has created a 3D model of the extensive workings, through the use of digitized historic long sections. However, there remains uncertainty in the position of some of the voids. The dimensions of the boundary pillars around the historic voids were assessed using numerical models in RS2 and the Pillar Stability Graph (Lunder and Pakalnis, 1997). The results suggest that a minimum 5 m boundary pillar is required.

It is recommended that a combination of LiDAR scans (handheld or drone-based) and probe holes with C-ALS surveys be completed in both areas to confirm the void position and geometry prior to further mining. Probe drilling will also be required on advance during development near potential voids.

16.2.3.8 Inter-Lode Pillars

Inter-lode pillars are included in select areas of the mine plan where there are splays in the mineralized zone. Recommendations for inter-lode pillar dimensions were provided based on experience at other mines. The pillar performance is sensitive to the mining method, mining sequence, and stope dip.

- Longhole stopes - Wherever possible, the stopes should be mined in sequence from the FW to the HW, so that the pillars are supported by backfill. In this scenario, an inter-lode pillar thickness of 5 m is recommended. Where the stopes are sequenced HW to FW and are dipping less than 75°, a 15 m inter-lode pillar is recommended.
- Cut and fill stopes - A 5 m pillar is recommended between adjacent stopes.

16.2.3.9 Offset Pillars

Recommendations on offset pillars between infrastructure was provided based on typical industry practice and experience at other mines. A lateral offset of at least two opening diameters and a vertical offset of at least three opening diameters is recommended between development drifts and/or raises. The ramp should be offset at least 20 m from the stopes.

16.2.3.10 Ground Support

The current ground support standards (provided by SIL on January 14, 2023) are summarized below for reference.

- Type I and II – 2.4 m long #5 resin rebar in the back and shoulders on a 1.4 x 1.2 m spacing in an overlapping dice pattern with welded wire mesh. Type I is installed to 3 m from the floor and Type II is installed to 2 m from the floor.
- Type III and IV – 1.8 m long #5 resin rebar or PM12 Swellex bolts in the back and 1. 8 m 39 mm Split Sets in the walls on 1.5 x 1.5 m spacing in an overlapping dice pattern with welded wire mesh. Type III is installed to 1.8 m from the floor and Type IV is installed to 1 m from the floor.
- Type V – In poor ground conditions, in-cycle shotcrete with a thickness of 2" (5 cm) is added to the Type IV standard to within 1.8 m of the floor. In practice, the shotcrete is typically extended to the floor.
- Intersections – 2.4 m long PM12 Swellex on a 1.5 m square pattern up to a maximum span of 5.5 m, and 4 m long cable bolts on a 2 m square pattern up to a maximum span of 7.5 m.

These ground support standards were reviewed relative to the opening dimensions and rock mass conditions expected over the life of mine. While the ground support standards are reasonable for the typical conditions currently encountered at the mine, the following modifications were made for the purposes of this study in order to reflect planned changes and current practices:

- Type V – The shotcrete will be applied to the floor, and a combination of short rounds and spiling with PM24 Super Swellex will be used in order to reflect current practice and recent ground support trials.
- Intersections – The maximum intersection spans were re-evaluated based on the planned changes to the development dimensions. The maximum span for which either 2.4 m long resin rebar or PM12 Swellex bolts can be used as intersection support was increased from 5.5 m to 8 m. For intersection spans greater than 8 m, 4 m long cable bolts on a 2 m square pattern will be installed in addition to the primary ground support standard.

Cable bolts are routinely installed in the HW of the sill drives of the longhole stopes. Cable bolts will continue to be required for the stopes at BAM in the Major and Moderate Reduced Rock Mass Quality zones and at BAS in the Class 2 and 3 rock masses but are not expected to be required for the longhole stopes outside of these areas. For planning purposes, it is assumed that each ring of cables will consist of four rows of 5 m long cables, with rings spaced 2 m apart. This is based on an assessment using empirical methods (Hutchinson and Diederichs, 1996) and the ground support elements currently in use at the mine.

16.2.3.11 Mine Plan Review

Several iterations of the mine plan were provided and reviewed from a geomechanical perspective. Recommendations resulting from the review were discussed with Entech, and SIL. The recommendations have been addressed through changes to the mine layout or through the incorporation of reductions in recovery, allowances for additional ground support and development meterage, and reduced mining rates.

16.3 Hydrological Considerations

A hydrological and hydrogeological study was completed by HRI. The general physiography of the Las Chispas Operation area and the prevailing climate were discussed in Sections 5.4 and 5.2 respectively.

16.3.1 Field Investigations

The following field investigations were completed:

- Installation of six (6) pressure probes to measure surface flow elevations, with measurements taken every 12 hr;
- Water elevation measurements taken for quality control purposes in three (3) piezometers to provide a cross-check on measurements taken by SilverCrest;
- Slug testing in three (3) piezometers to determine the hydraulic conductivity; and.
- Pump test in a stope at the base of the historical workings at Las Chispas that is filled with groundwater, and which is the only known location in the historical operations that has groundwater.
- Drilling of 2 pilot holes for pumping in Las Chispas area.

16.3.2 Field Investigation Results

There was insufficient rainfall during the monitoring period to generate any pressure variation between the six pressure probes.

Water elevation measurements indicated the presence of a perched phreatic surface considerably above the natural water table. The water table is at approximately 900 masl elevation, and the perched phreatic surface is at 1,032 m elevation. The perched phreatic surface does not impact the historical workings, and for the purposes of the mine plan, will not require dewatering. Some water could be intercepted, but since the upper aquifer is perched, pressure won't be an issue. Results of the slug tests are summarized in Table 16-2.

Table 16-2: Slug Test Summary

Piezometer	From (m)	To (m)	K (m/s)
3B	4.4	100.7	1.17e – 05
3A	4.8	100.7	1.30e – 06
6	15.25	36	1.81e – 06

Values in Table 16-2 apply to the upper, saturated, portion of the rock formations and are not suitable for use in underground dewatering calculations.

The pump test had two objectives, firstly to see if there was sufficient water to supply future mining operations, and secondly, to assess the potential groundwater inflow.

The water-filled stope volume was estimated at approximately 500 m3, and the total flow pumped during the pump test was measured at 3,297 m^3. The pump operated approximately 8 hr/day, at a flow rate of 6.3 L/s. The average flow rate was 1.7 L/s for the 24-day duration of the pump test. A drawdown of almost 9 m was measured for a flow rate of 1.7 L/s, giving an approximate specific yield of 0.19 L/s. The result indicated that the host rocks had low permeability. Two data trends were noted, with drawdowns at <3 m and >3 m. As a result, the theoretical flow rate was recalculated to ensure that the drawdown was <3 m. After 15 years, to maintain the drawdown at <3 m, the sustainable flow rate would be 0.31 L/s. This theoretical flow rate agrees with the pump-test results and supports the interpretation of a low-permeability medium.

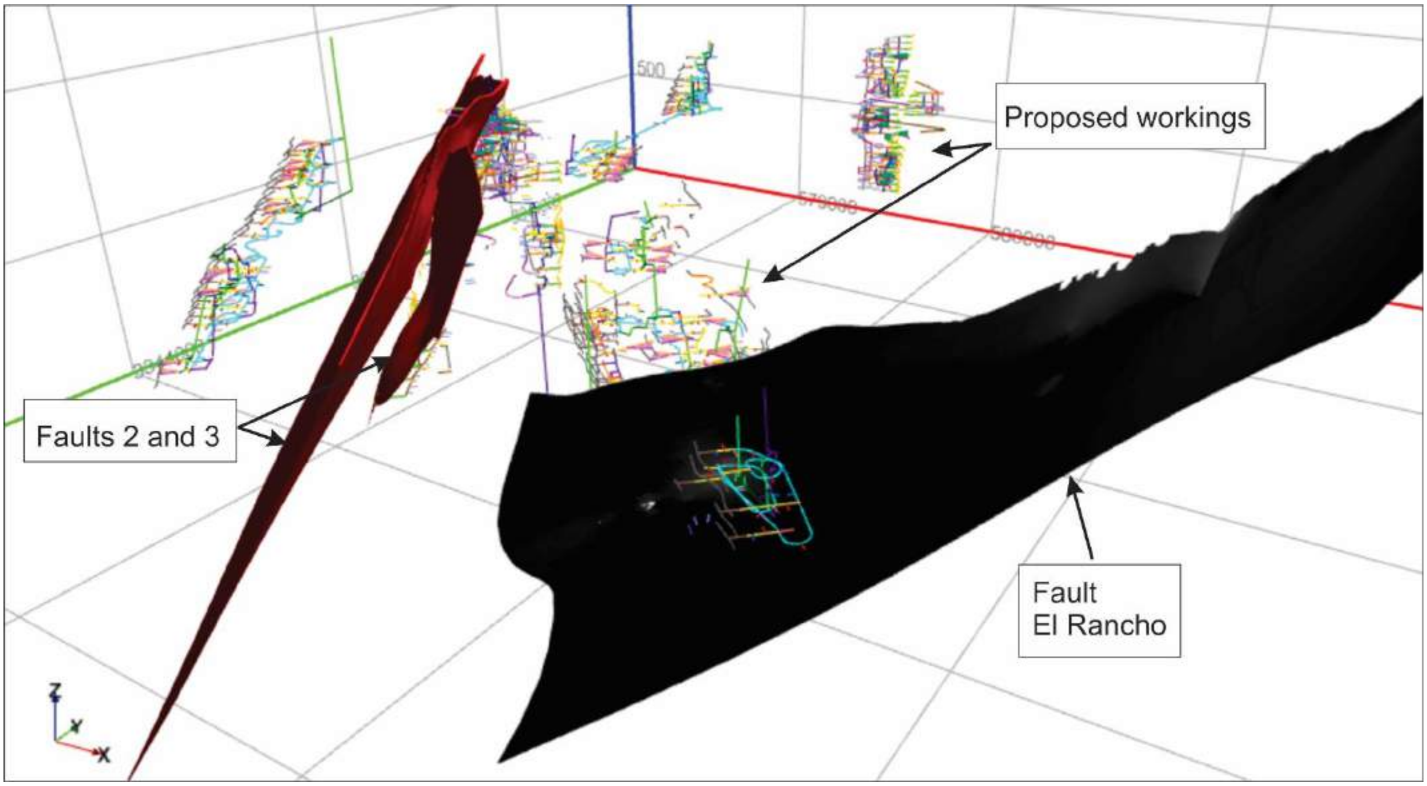
Evaluation of the data collected from the pump test indicated that the flow rate used during testing was too low (on its own) to provide a reliable and sustainable water source for operations (see Section 18.18.2 for the site water balance).

Additional drilling was done in 2021 to supply water to the mill. 2 boreholes were completed and tested by Profile Tracer Test approach. Results indicate low permeability and low flow velocity near Las Chispas historical mine. The drilling of a pumping well was completed, and the yield was poor (around 1-2 L/s), and even insufficient for the purpose of the well to be drilled.

16.3.3 Structural Analysis

A review of SilverCrest's structural model was conducted by Hydro-Ressources Inc (HRI). Several faults were added since the 2021 FS and some of them are worth mentioning (see Figure 16-1):

Figure 16-1: Faults Interpreted by SilverCrest

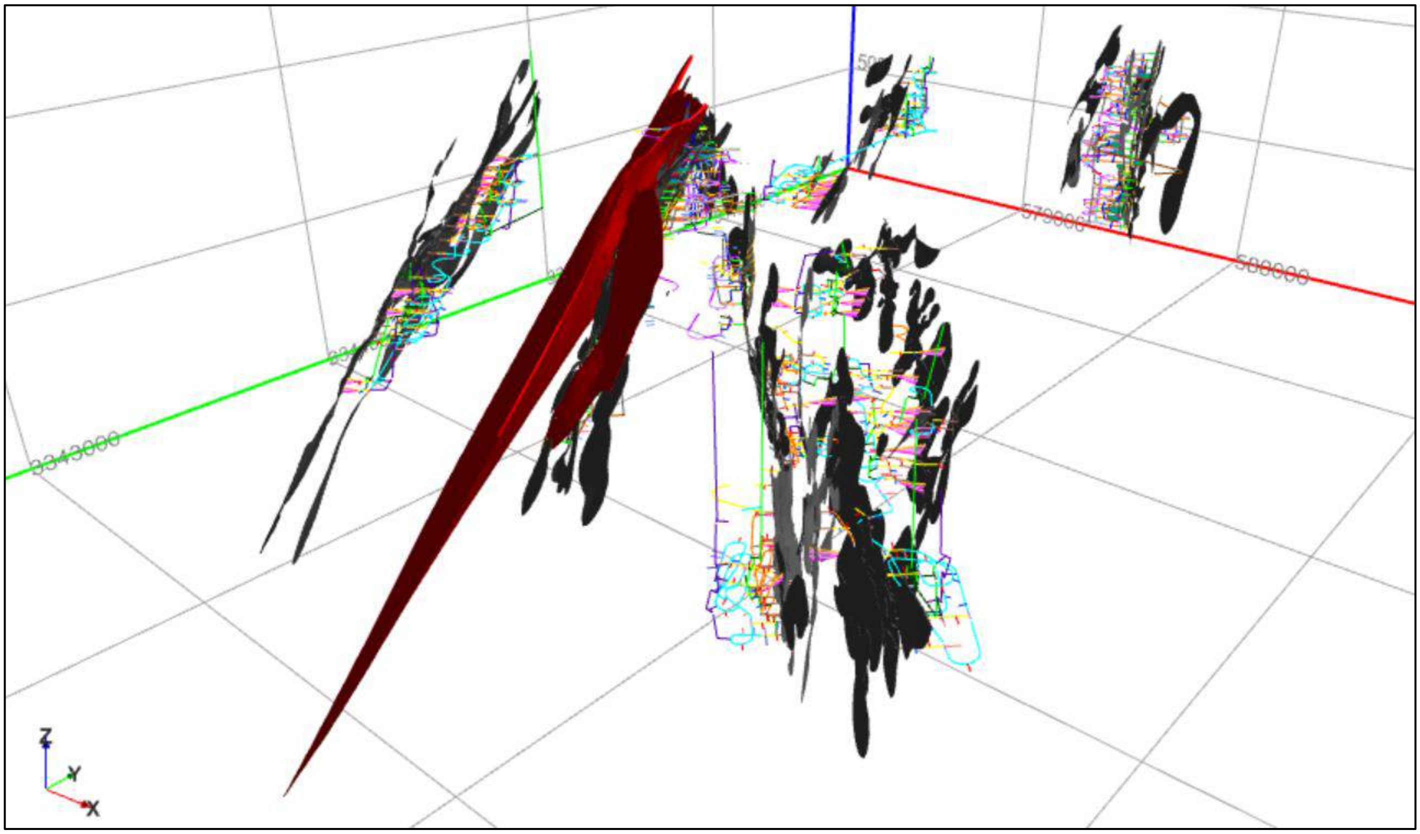


Source: HRI, 2023.

- Multiple faults in the current Silvercrest structural model are not obvious to detect with regular database tools, such as Roc Quality Designation (RQD), Fracture Frequency (FF), etc.
- By filtering the data, 3 faults seem obvious at site, which are the faults 2 and 3, and the Fault El Rancho. The fault 3 is a splay of the fault 2 and matches with previous analysis.

Also, there are the veins containing the ore that are clearly structurally controlled. The Figure 16-2 below is showing those veins, plus the faults 2 and 3.

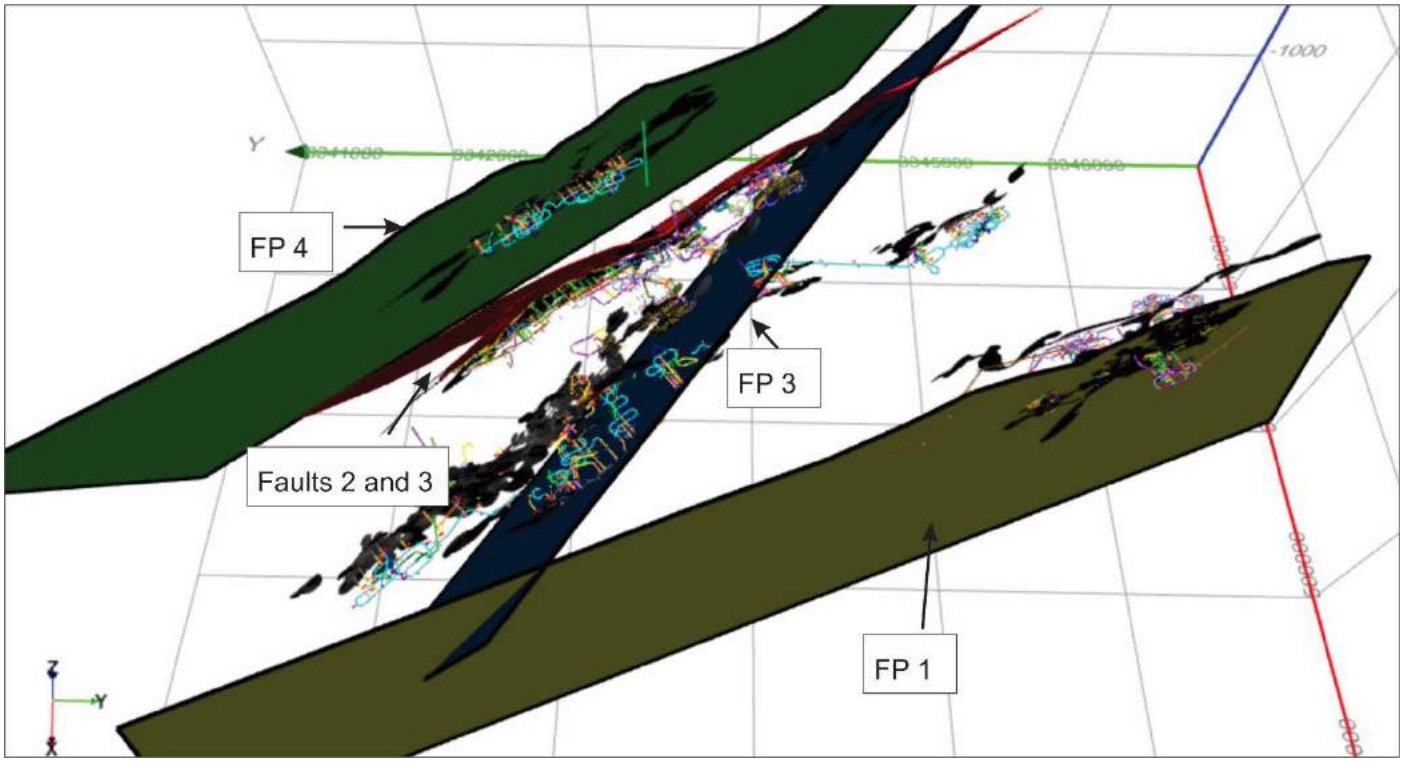
Figure 16-2: Mineralized Veins and Faults in SilverCrest Model



Source: HRI, 2023.

HRI performed a review of drill core logging data to identify areas of discontinuity. Four components were verified, which are the RQD, the FF, the structure intensity and the surface topography. Three obvious trends are suggesting presence of additional faults at site (see Figure 16-3).

Figure 16-3: Discontinuities Interpreted by HRI



Source: HRI, 2023.

The first discontinuity (FP1) is aligned northwest and intersects the historical Las Chispas mine at a sub-vertical inclination. This discontinuity is likely associated with the fracturing of the vein system in the mine. The FP1 is expected to cause some inflow into the Las Chispas mining area when the mine plan is below the 900 m level. The lowest planned mining elevation is 850 m, 50 m beneath the water table elevation of 900 m.

Based on the pump test results, a maximum flow of ~9.4 L/s could be expected in the deepest mining level. There is insufficient data to determine if this flow rate will be sustained in the long-term. As a result, the mine plan in this area has been designed with a dewatering system in the lower levels of the deposit with a pumping capacity of 9.4 L/s; however, this pumping system will not be required until late in the mine life.

The FP3 is aligning within Babicanora North and shifting the ore lenses, suggesting movement along this trend. Only the SE portion of Babicanora will be submerged and this fault does not seem to align that far. Also, there is no hydrogeological information in this portion of the proposed mine. Therefore, considering the available data, one can suppose that the inflow will be relatively low, averaging 20 L/s in this area.

The last fault is FP4, located on the SW portion of the property. No workings are expected to be within the saturated portion of the formation. Then, no inflow is to be expected.

16.3.4 Potential Environmental Impacts

No impacts to surrounding perennial streams or valley bottoms are expected from mine dewatering activities, since these are typically dry other than during short-term, low precipitation rainfall events.

The Rio Sonora, located 7 km west of the operation, is considered to be too distant to be affected by any mine-related pumping.

16.4 Underground Mining

16.4.1 Mining Methods

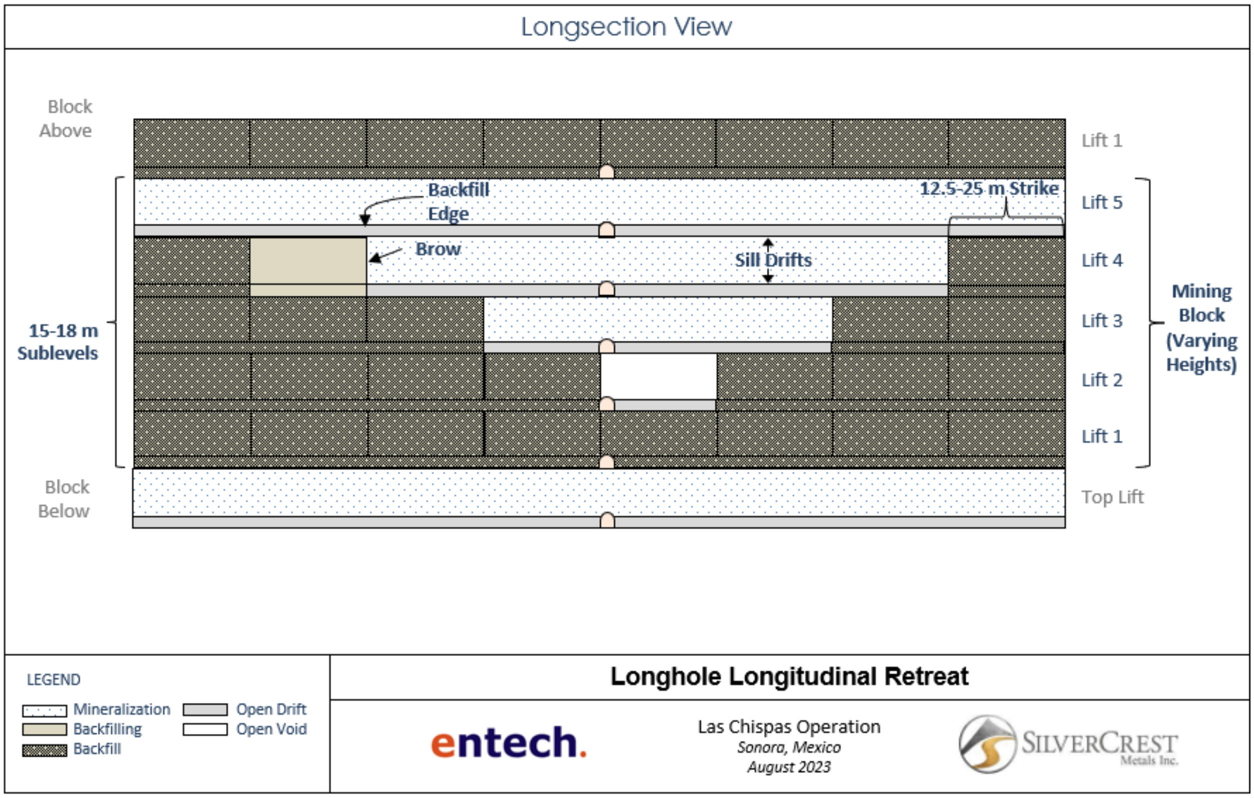
The Las Chispas Operation contains mineralized zones varying in dip and thickness both along strike and at depth. While all geometries are suitably extracted using the longitudinal longhole stoping method, particular areas have been selected for cut and fill mining due to geotechnical considerations. Additionally, resue mining sees limited use to minimize dilution in high-grade narrow veins.

16.4.1.1 Longitudinal Longhole with Backfill

Longitudinal longhole mining is suitable for the Las Chispas Operation, where the dip of the mineralization is 45° or greater, and the materialized zones are of sufficient width and grade that the estimated dilution does not eliminate the profitable recovery of the material. Mining will consist of an undercut level, plus an overcut level where practical. Each level is accessed from a main ramp via an access drift. Each sill will be accessed perpendicularly from the access drift, and then developed along strike of the vein to the economic extents of the mineralization.

Once sill development is completed on each level, production holes are drilled between the sills and then blasted until the stoping panel is completed. Following cavity monitoring of the stope, the void is then prepared for backfill. Once a sufficient distance along strike (one to two stope lengths) has been extracted and backfilled, mining can progress either up-dip or down-dip and extraction can recommence opening another mining location. A production layout example for a mining block is illustrated in Figure 16-4.

Figure 16-4: Longhole Production Layout Example



Source: Entech, 2023.

Stope heights of 15 m to 18 m were selected based on geotechnical considerations. Stope heights are measured from the floor of the undercut to the floor of the overcut level. Stope lengths are based on geotechnical guidance as outlined in Section 16.2.3.2. A maximum panel length of 25 m has been established before being backfilled.

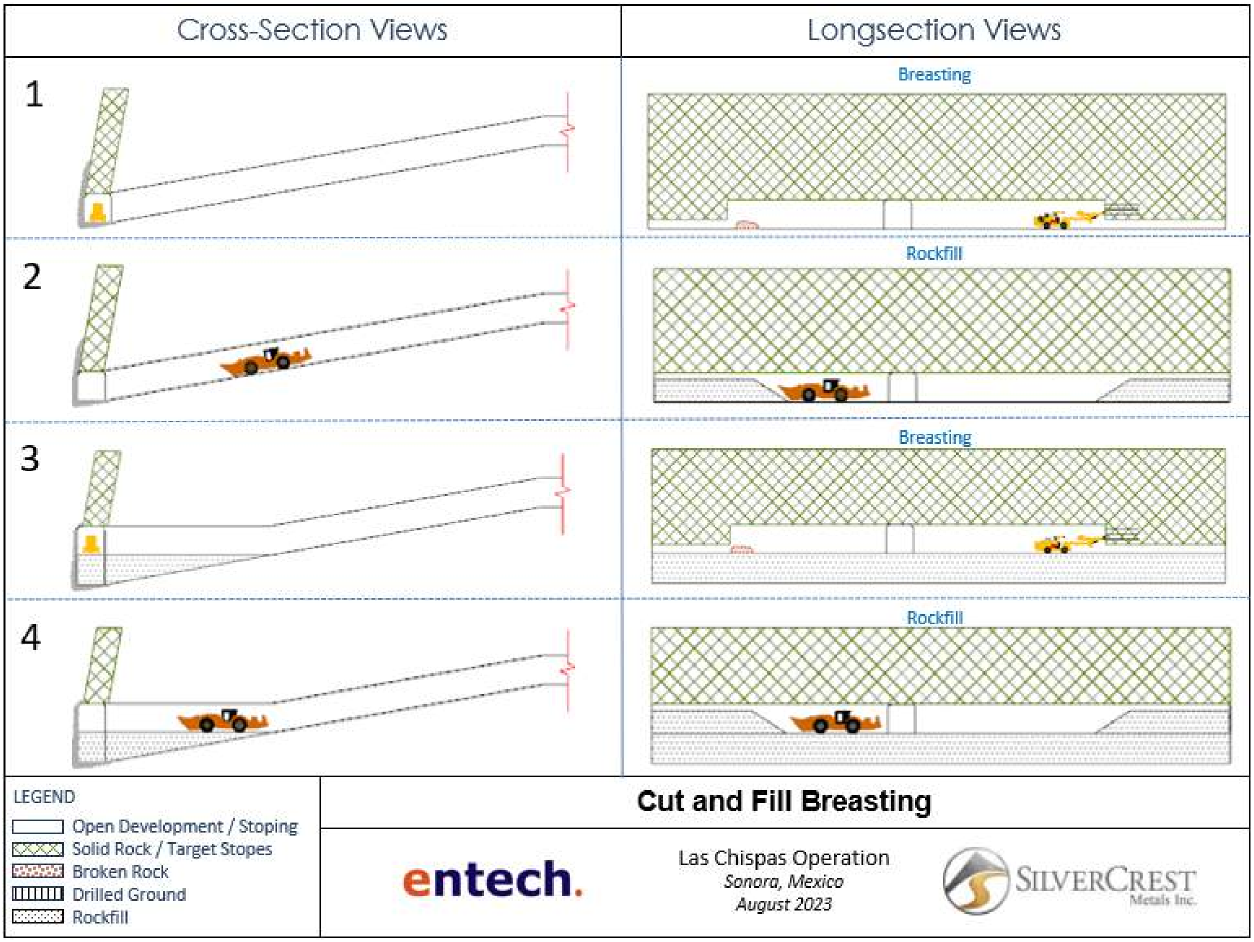
16.4.1.2 Cut and Fill Mining

Cut and fill breasting will be applied in mining areas with adverse ground conditions. Production areas employing this method will be driven at the established 3.5 m drive width for ore sills, inclusive of dilution.

The mining area will initially be accessed by developing a pivot drive. From that pivot drive, an ore sill will be developed to the economic extents of the orebody using a single-boom jumbo and extracted using a 3.5 t scoop. Once the sill is complete, rockfill will be placed to create a new working floor for the next cut to be mined in an overhand fashion. A new access to the next lift will be taken, through slashing of the pivot drive back.

Figure 16-5 is a schematic showing the cut and fill breasting method.

Figure 16-5: Cut and Fill Production Layout Example



Source: Entech, 2023.

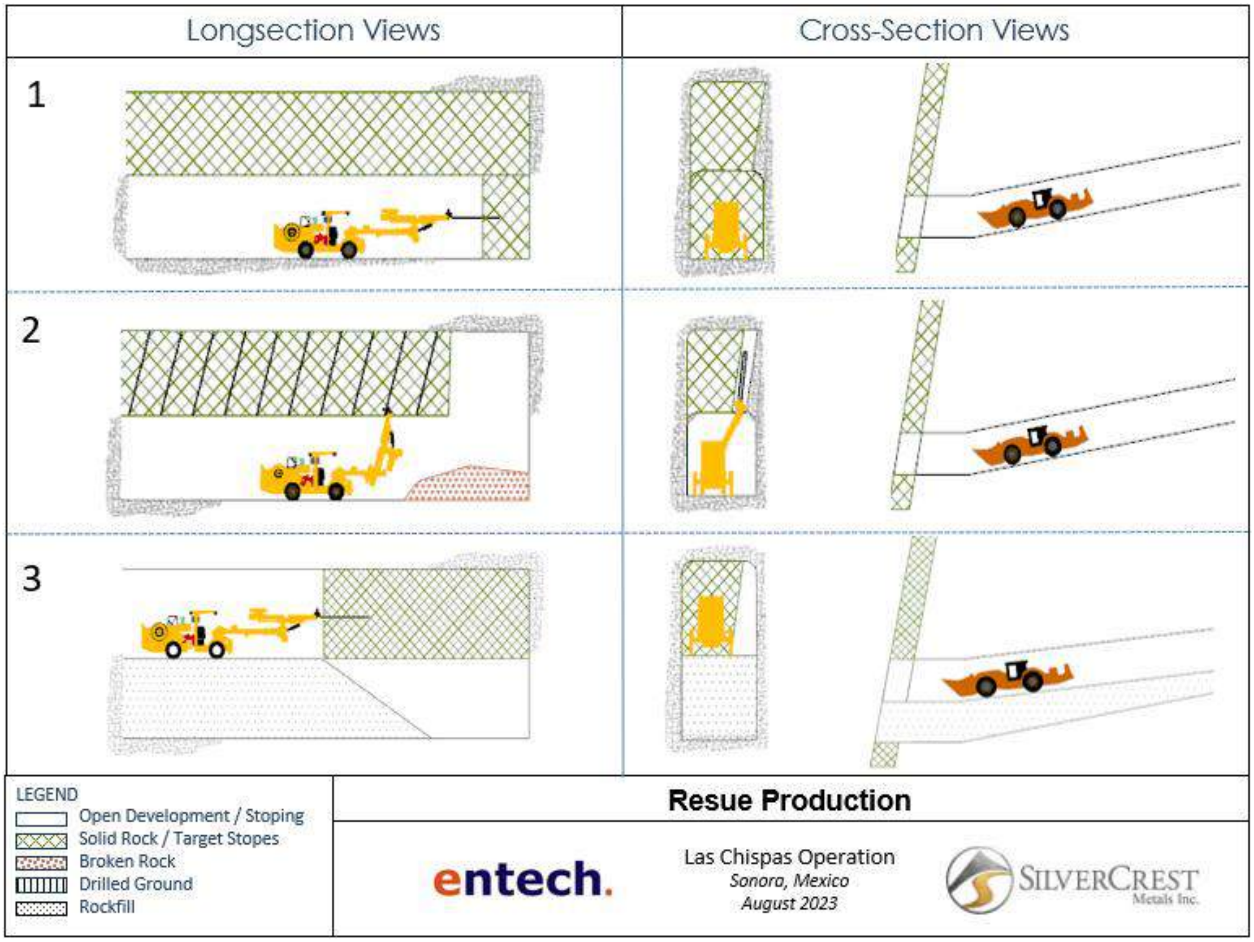
16.4.1.3 Resue Mining

Resuing will be used in select high-grade mining areas where the vein is narrow and high grade (<0.9 m), and the rock quality is considered “fair”. Resue mining occurs as follows:

- A sill is driven to the mineral extents of the lift.
- A minimum mining width of 0.5 m, exclusive of dilution, will be drilled and blasted to target the vein. Production will retreat towards the access, extracted remotely using a 3.5t scoop.
- Once the ore extraction is complete, a new access or ‘pivot drive’ to the next vertical lift will be taken, through slashing of the access’s back. The remaining in-situ waste rock is then blasted down into the void of the previous lift through breasting, with excess swell muck removed, to provide a new working floor for the next cut.

Figure 16-6 is a schematic showing the resue method.

Figure 16-6: Resue Production Layout Example



Source: Entech, 2023.

16.4.2 Stope Design Methodology

Preliminary stope shapes were created using Datamine® Mineable Shape Optimiser® (MSO). Preliminary shapes were assessed over 5 m sections and were used to guide the design of final shapes up to the geotechnically recommended maximum length for longhole, or to the extents of mineralization for cut and fill and resue.

A minimum horizontal mining width of 1.5 m, 3.3 m and 0.5 m was applied for longhole, cut and fill, and resue, respectively. MSO shapes were created using these minimum mining widths considering the addition of unplanned dilution. The minimum unplanned dilution for longhole is 0.5m on both the hangingwall and footwall, and 0.2 m on both the hangingwall and footwall for resue. Cut and fill mining was assumed as breasting in all cases, using the ore sill drive width of 3.5 m as a minimum mining width inclusive of dilution. All geotechnical recommendations stated in Section 16.2.3 were followed.

Once the stopes were generated and mining locations identified, an economic analysis was completed, as described in Section 15.4, to identify which production shapes were potentially economic and were to be included in the schedule using Deswik's Interactive Scheduler®.

16.4.3 Modifying Factors, Dilution and Mining Recovery

Modifying mining factors are used to account for the combination of dilution and recovery that affects the material quality and quantity of an operation. Dilution is waste material that enters the material movement stream and often has two negative impacts:

- Increased cost (mining, processing, treatment and increasing the storage of tailings); and,
- Increased mined material loss (through processing and impacting on mining recoveries).

There are multiple sources of dilution, which can be classified in the following two categories: unplanned and planned.

Planned dilution is additional waste that is deliberately mined concurrently with the target mineralised material, allowing the mineralised material to be fully recovered, albeit at an overall lower grade.

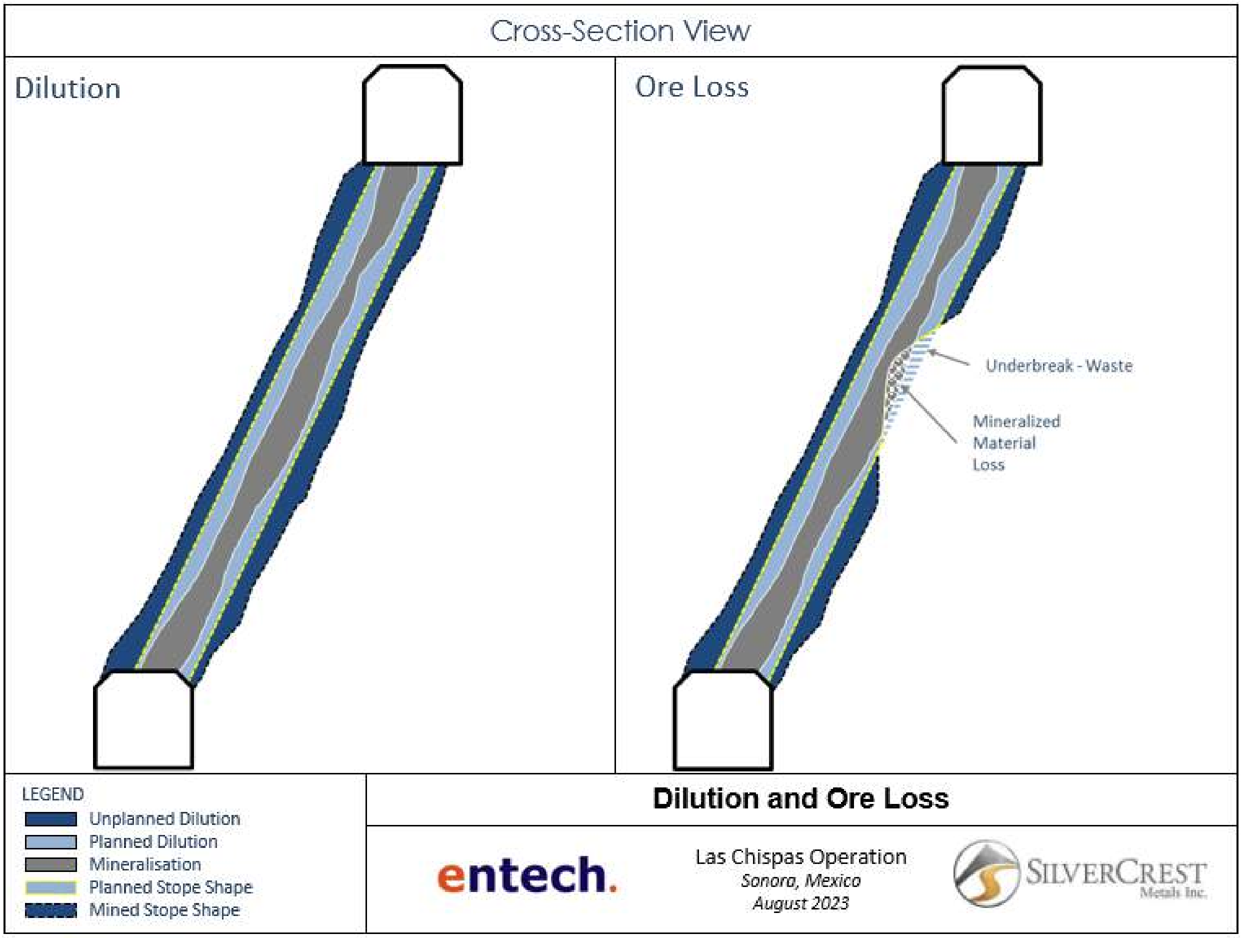
Unplanned dilution is waste material that unintentionally finds its way into the plant-feed during extraction and can be from a variety of sources including:

- Over-break during mining;
- Backfill dilution from adjacent stopes;
- Mucking of waste material (or backfill or road base material) during the mucking of mineralised material;

Mining loss has a significant impact on the mining business, with a reduction of revenue through the loss of mineralised material. Mining loss can occur in a variety of different ways such as poor blasting, poor recovery of blasted muck, and weak ground conditions impacting on the access to the mineralised material, among others. Mining loss was considered as an allowance for a reduction in production and revenue.

An example of dilution and underbreak, which impacts mining loss, due to blasting performance is illustrated in Figure 16-7. Underbreak in waste is an economic benefit; however, it also reflects that the operation is not achieving the target mining shape.

Figure 16-7: Dilution and Mining Recovery



Source: Entech, 2023.

Table 16-3 summarizes unplanned rock and paste dilution by mining method. Development dilution is based on actual dilution experienced at the Las Chispas Operation, while stope dilution is based on geotechnical recommendations as described in Section 16.3.2.

Table 16-3: Dilution Factors

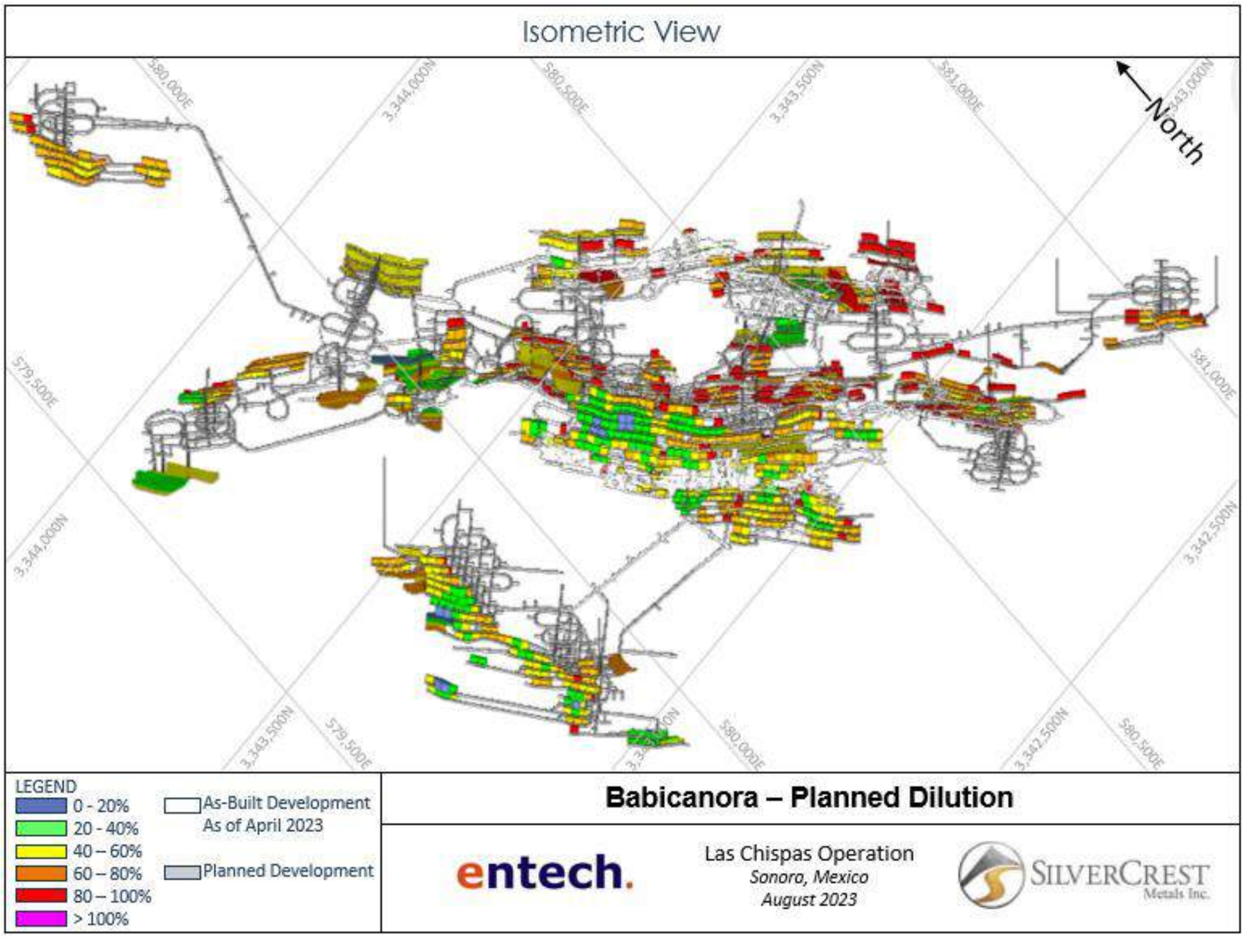
Mining Method	Unplanned Dilution
Development (Rock)	5%
Longhole Stoping (Rock)	1.0 m ELOS (0.5 m HW, 0.5 m FW) + Additional 5 – 20% due to poor ground conditions for areas requiring greater than 1.0 m ELOS.
Cut and Fill Stoping (Rock)	0.2 m ELOS (0.1 m HW, 0.1 m FW)
Resue Stoping (Rock)	0.4 m ELOS (0.2 m HW, 0.2 m FW)
All (Backfill)	0.25 m for each exposed backfill floor 0.5 m for each exposed backfill wall

The average unplanned dilution due to ELOS for stoping is approximately 57%. The total dilution added to longhole stoping in poor ground conditions is estimated to be an average of 2.9%.

The average total dilution for stoping, including both planned and unplanned dilution, is estimated at 166%.

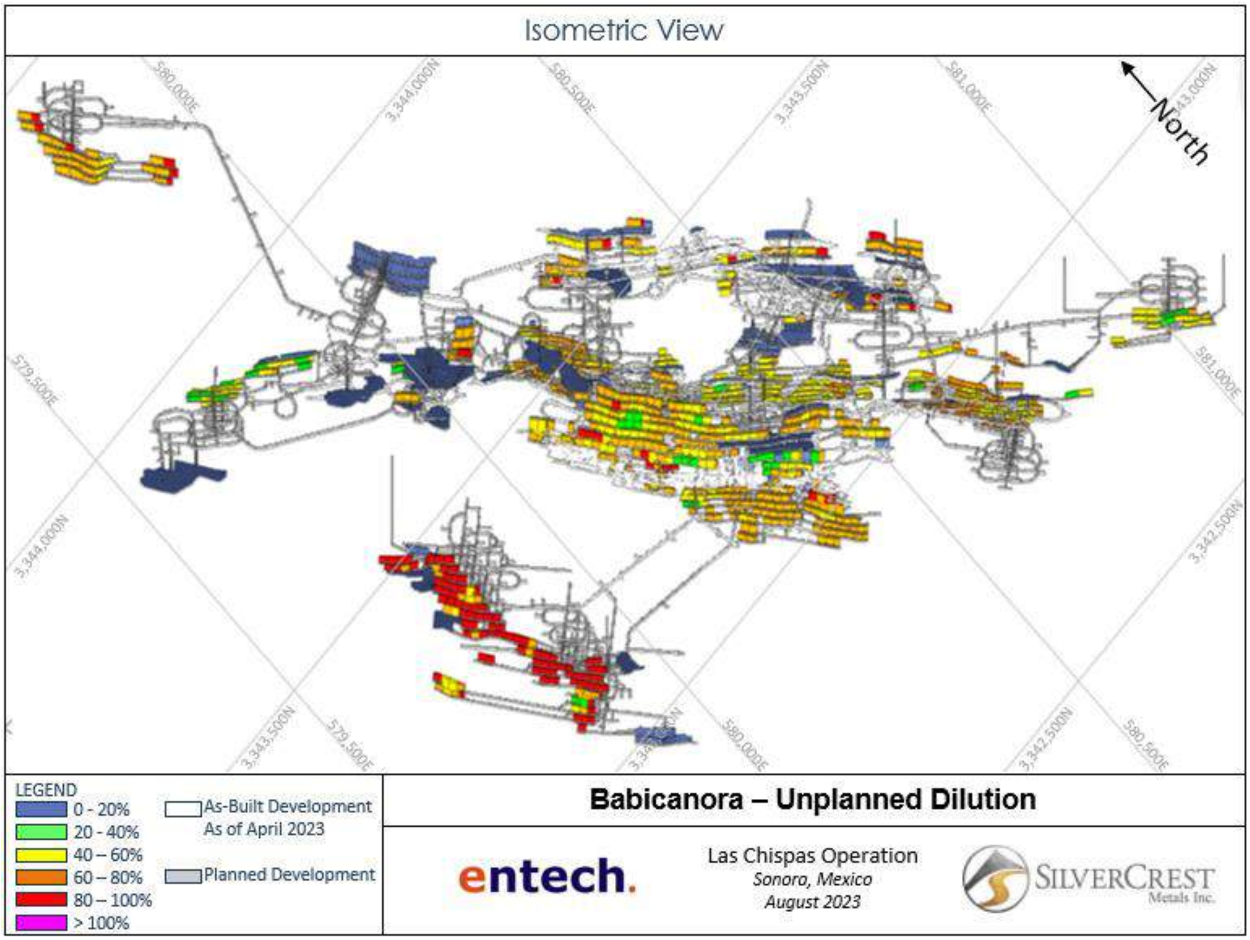
Isometric views of the mine design showing the planned, unplanned and total dilution for the Babicanora Area are illustrated in Figure 16-8, Figure 16-9 and Figure 16-10, and for the Las Chispas Area in Figure 16-11, Figure 16-12 and Figure 16-13.

Figure 16-8: Estimated Planned Dilution for the Babicanora Area



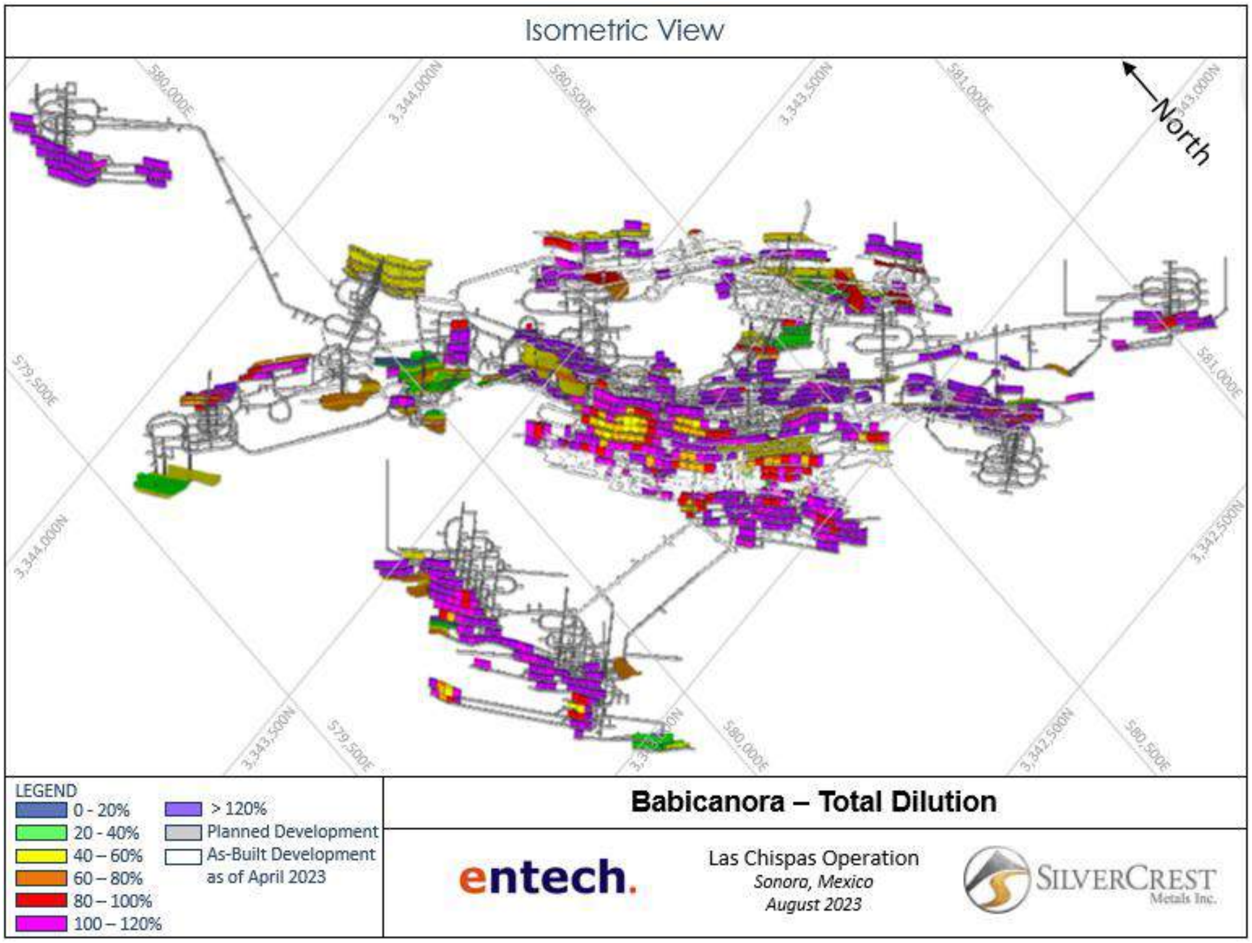
Source: Entech, 2023.

Figure 16-9: Estimated Unplanned Dilution for the Babicanora Area



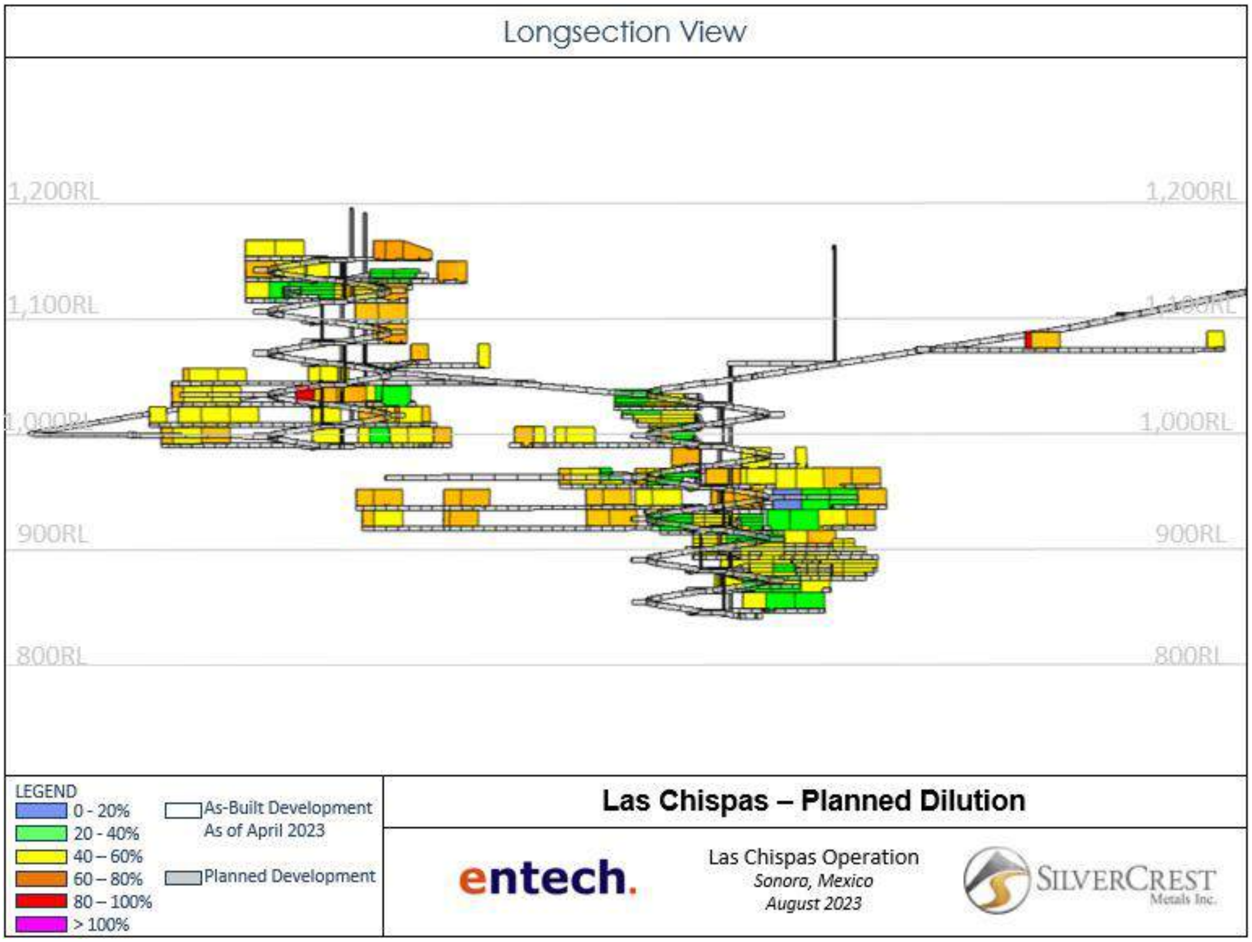
Source: Entech, 2023.

Figure 16-10: Estimated Total Dilution for the Babicanora Area



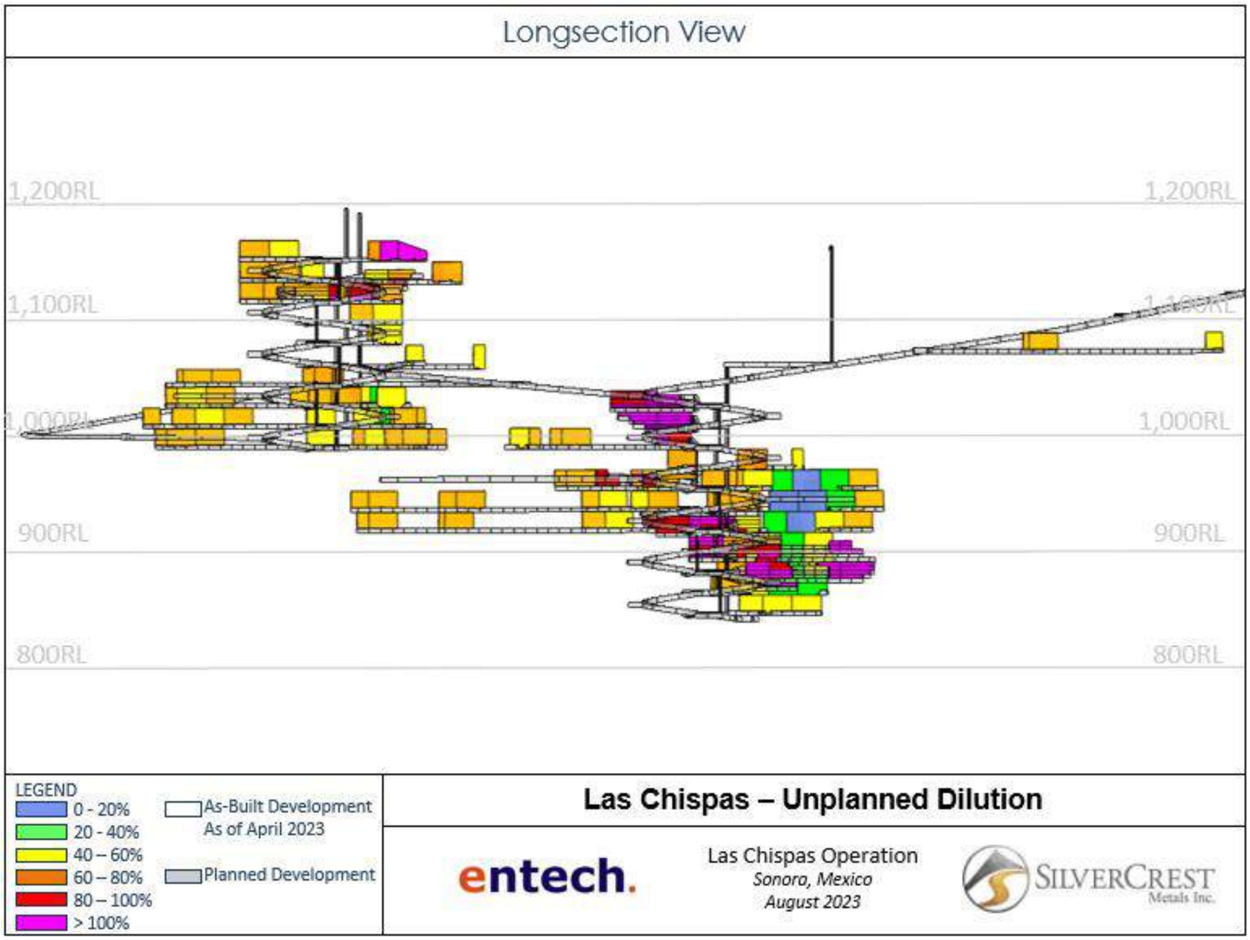
Source: Entech, 2023.

Figure 16-11: Estimated Planned Dilution for the Las Chispas Area



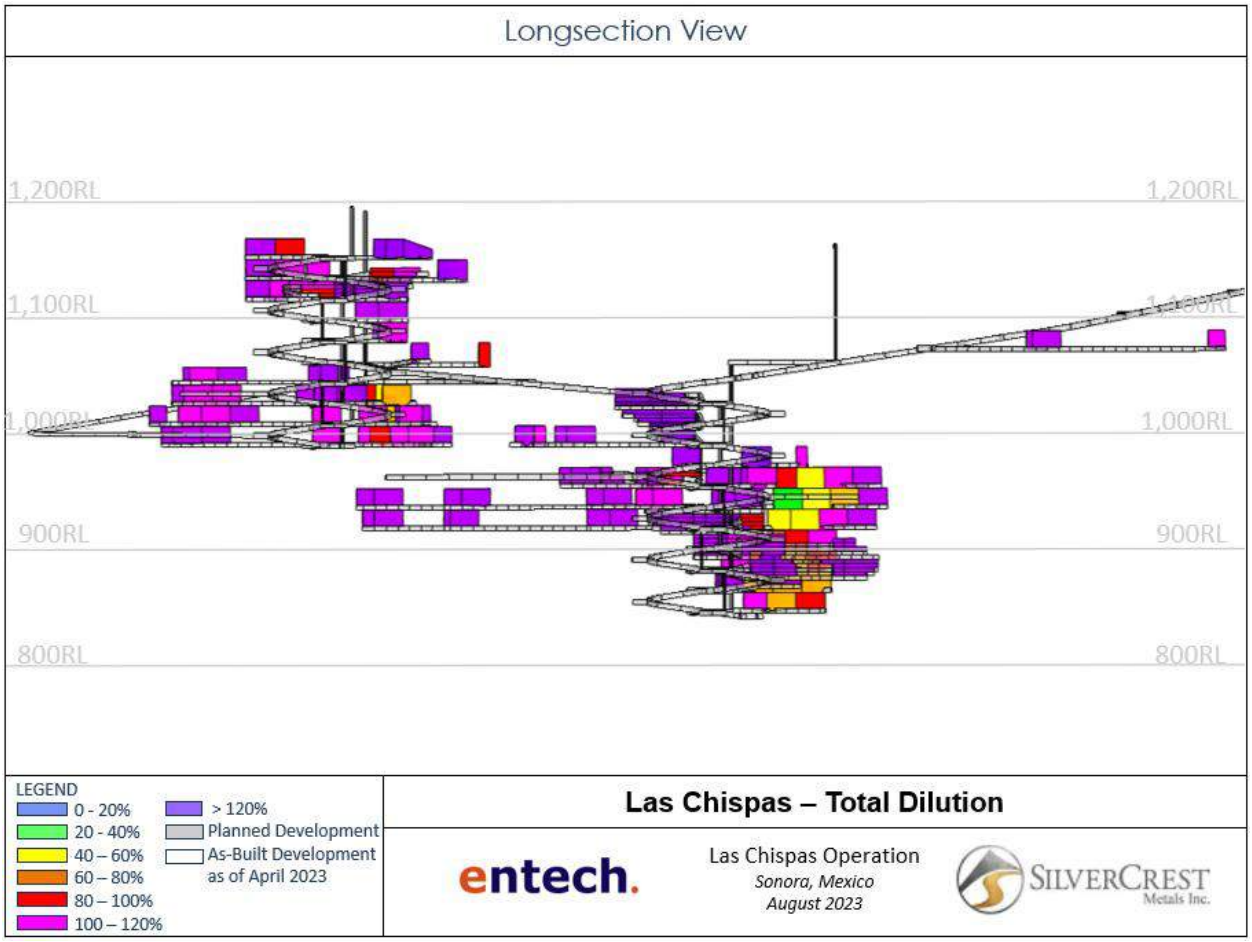
Source: Entech, 2023.

Figure 16-12: Estimated Unplanned Dilution for the Las Chispas Area



Source: Entech, 2023.

Figure 16-13: Estimated Total Dilution for the Las Chispas Area



Source: Entech, 2023.

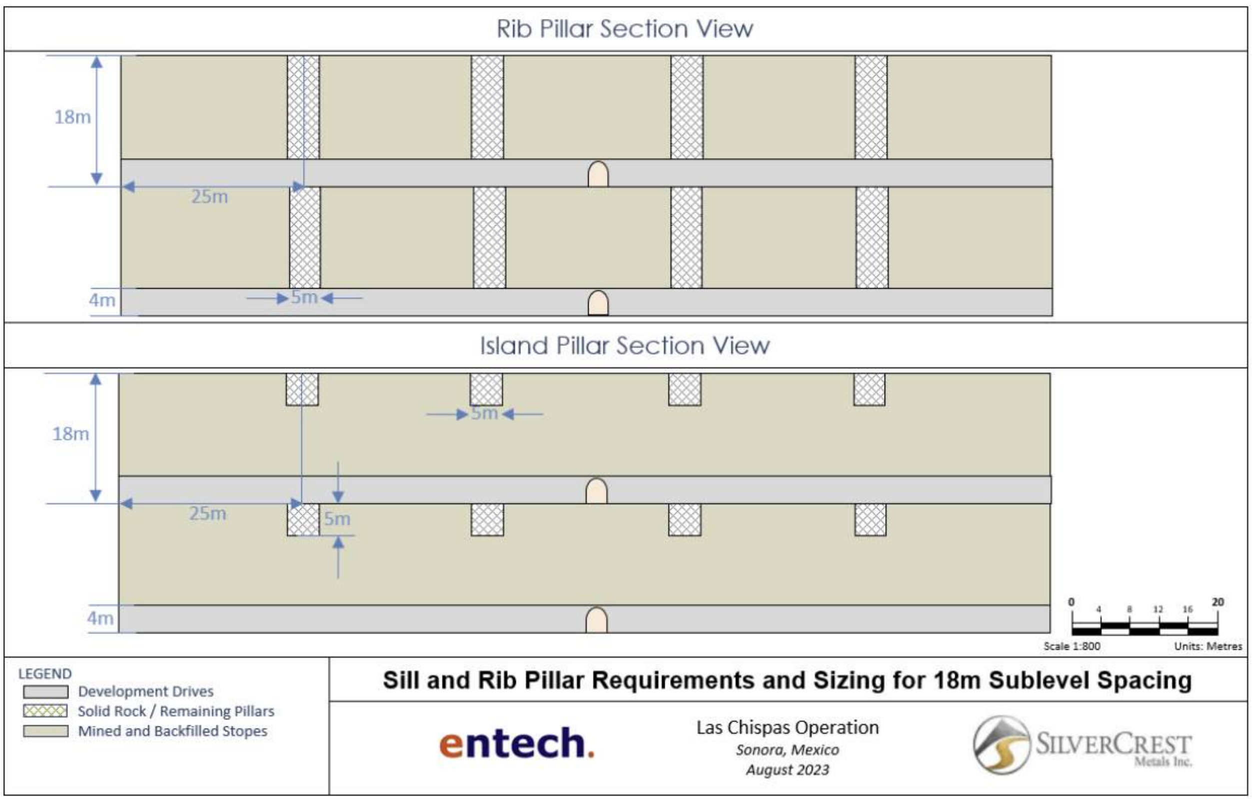
Assumed mining recoveries are 98% for development and a maximum of 95% for stopes. Additional recovery losses were included for areas with poor ground conditions, as well as stopes that require rib and/or sill pillars.

Areas undercutting fill or at the top level of a stoping block were left unfilled. To support these stopes, rib pillars were factored into mining recovery to allow for stabilisation of the hangingwall and backfill that are to be undercut. Areas without high quality cemented rock fill had an additional sill pillar included in the recovery factor. The pillar considerations are summarised in Table 16-4. An example of pillaring in stopes is shown in Figure 16-14. The factors applied to account for pillars in areas without fill are 54% to 90.6%.

Table 16-4: Pillar Factors by Mining Area

Mining Area	Pillar Assumption
HW – Poor Ground	5 m Rib Pillar every 20 m – 30 m
HW – Good	5 m x 5 m Island Pillar every 30 m
No Undercut	No Sill Pillar Required
Undercut High Quality CRF	No Sill Pillar Needed
Not Undercut High Quality CRF	Permanent 5 m Sill Pillar Needed

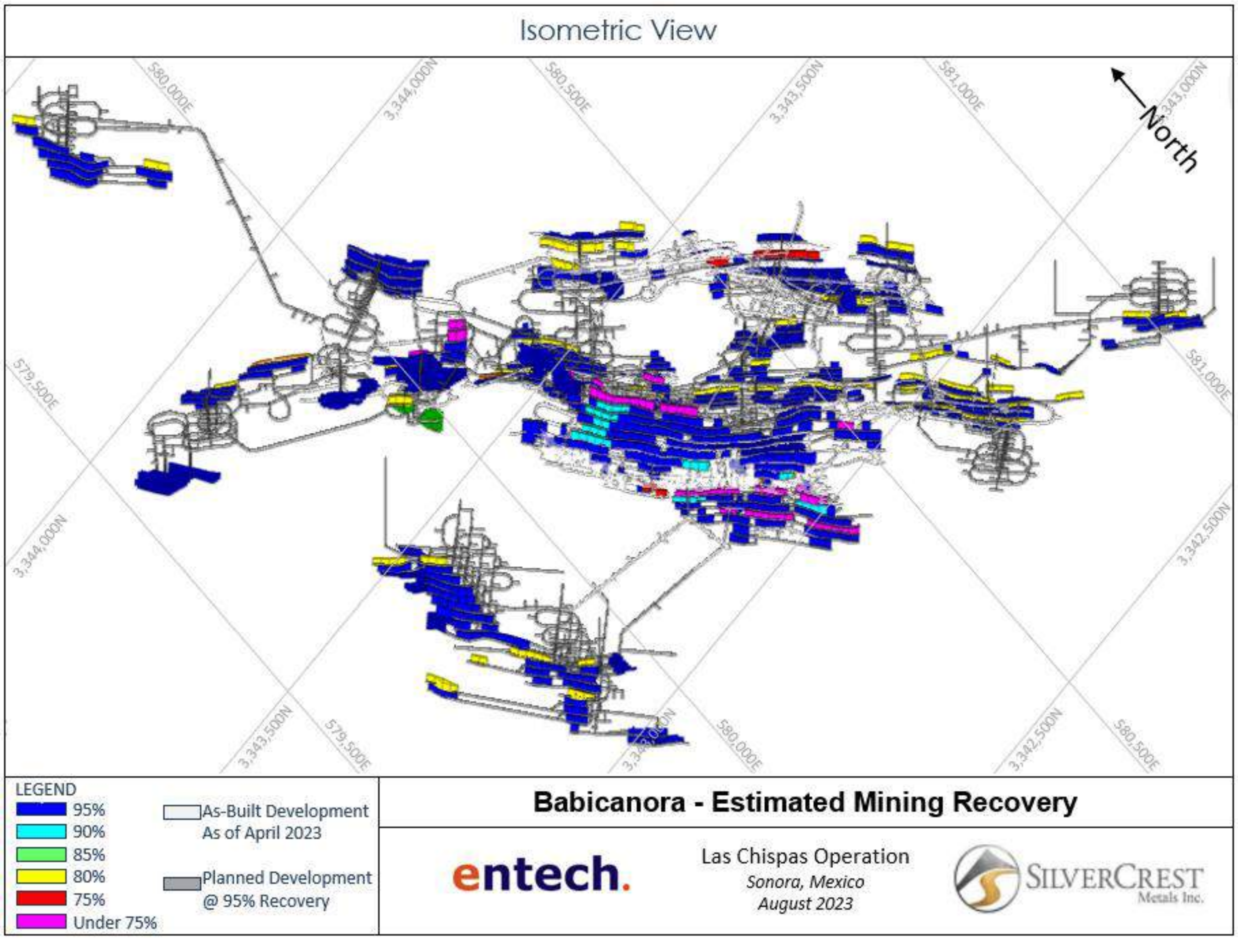
Figure 16-14: Sill and Rib Pillar Requirements and Sizing



Source: Entech, 2023.

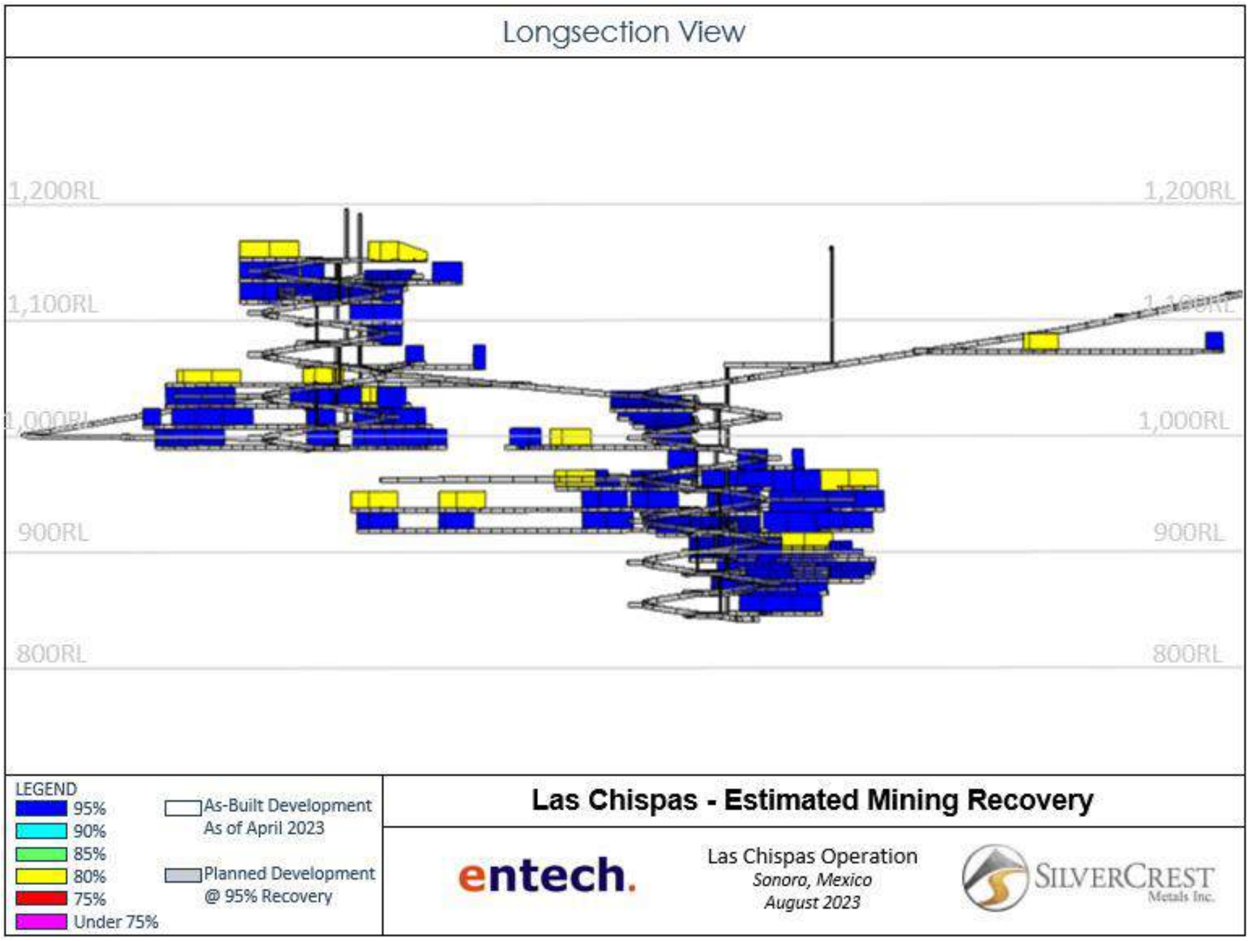
A longitudinal section view of the mine design showing the mining recovery is illustrated in Figure 16-15 and Figure 16-16.

Figure 16-15: Estimated Mining Recovery for the Babicanora Area



Source: Entech, 2023.

Figure 16-16: Estimated Mining Recovery for the Las Chispas Area



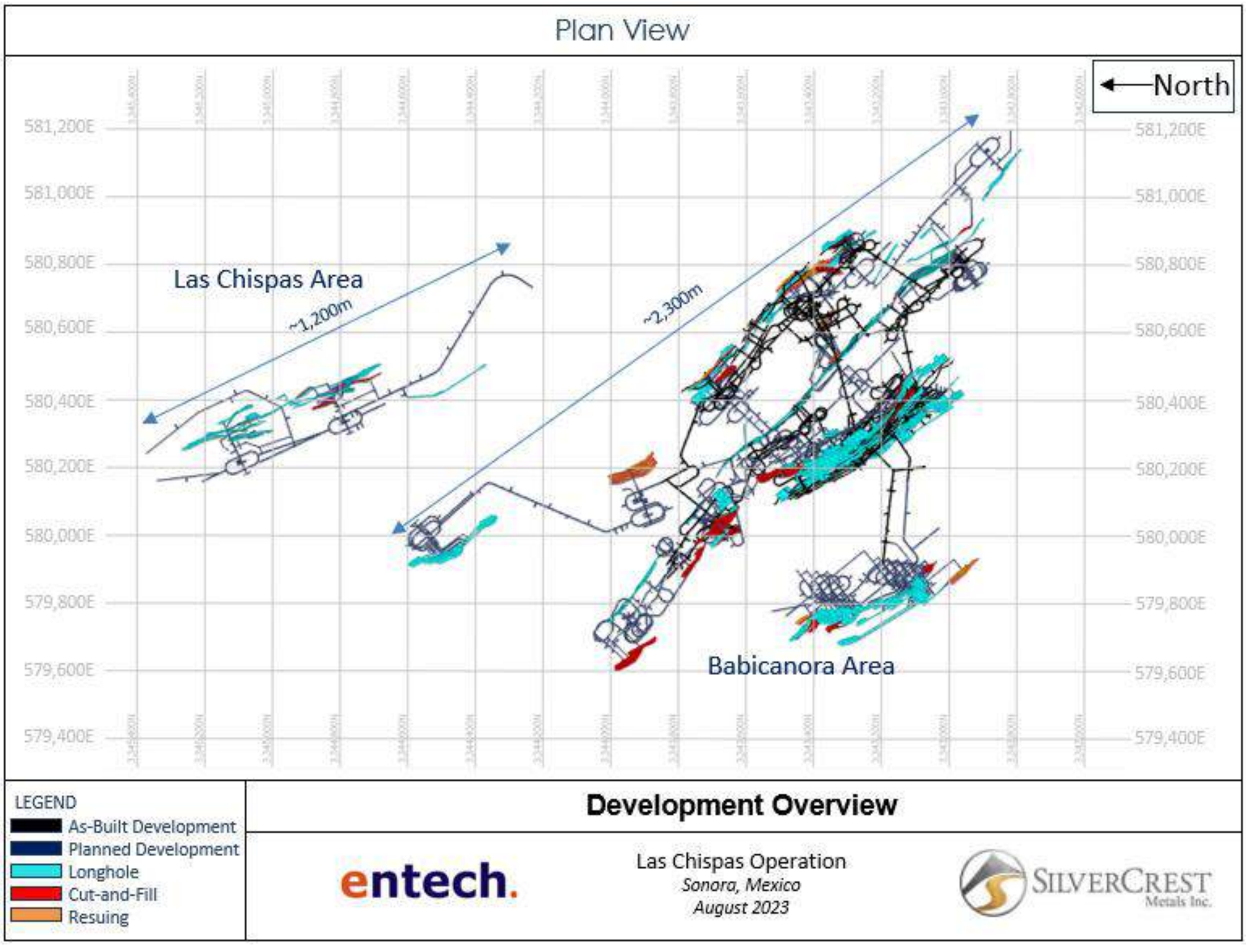
Source: Entech, 2023.

16.5 Development

The Las Chispas operation is divided into two main areas; Babicanora and Las Chispas. The deposit they host is a series of narrow vein deposits with strike lengths that total just under 3.0 km. Individual strike lengths of the veins vary from 170 m to 1,200 m.

An overview of the development design is illustrated in Figure 16-17.

Figure 16-17: Las Chispas Development Overview



Source: Entech, 2023.

Due to the varying nature of the veins at the Las Chispas Operation and the relatively complex interworkings of the veins, it is necessary to have multiple internal declines to access the various veins, with surface access maintained through three portals; two servicing the Babicanora area and one servicing the Las Chispas area.

Each decline is excavated with an arched profile to a width of 4.5 m and a height of 4.5 m. This profile allows sufficient room to accommodate current and anticipated underground fleet as well as secondary ventilation ducting and service piping. Other planned development includes the following:

- Access drifts
- Sills (development on mineralisation)
- Operating waste development (sills mining material below cut-off)
- Sumps, escapeways, and accesses to the escapeways
- Return airways and accesses to the return airways

- Remucks
- Infrastructure Drives, such as grade control drifts where required.

General development profiles used for the mine plan are summarised in Table 16-5.

Table 16-5: Development Profiles

Development Type	Width (m)	Height (m)
Ramp	4.5	4.5
Access	4.5	4.5
Remuck	4.5	4.5
Sump	3.3	3.6
Ventilation Access	3.3	4.0
Escapeway Access	3.3	3.6
Footwall Drive	4.5	4.5
Ore Drive – Longhole	3.3	4.0
Ore Drive – Cut and Fill and Resue	3.5	3.6
Ventilation Raise	3.6 Diameter	
Escapeway Raise	1.2 Diameter	

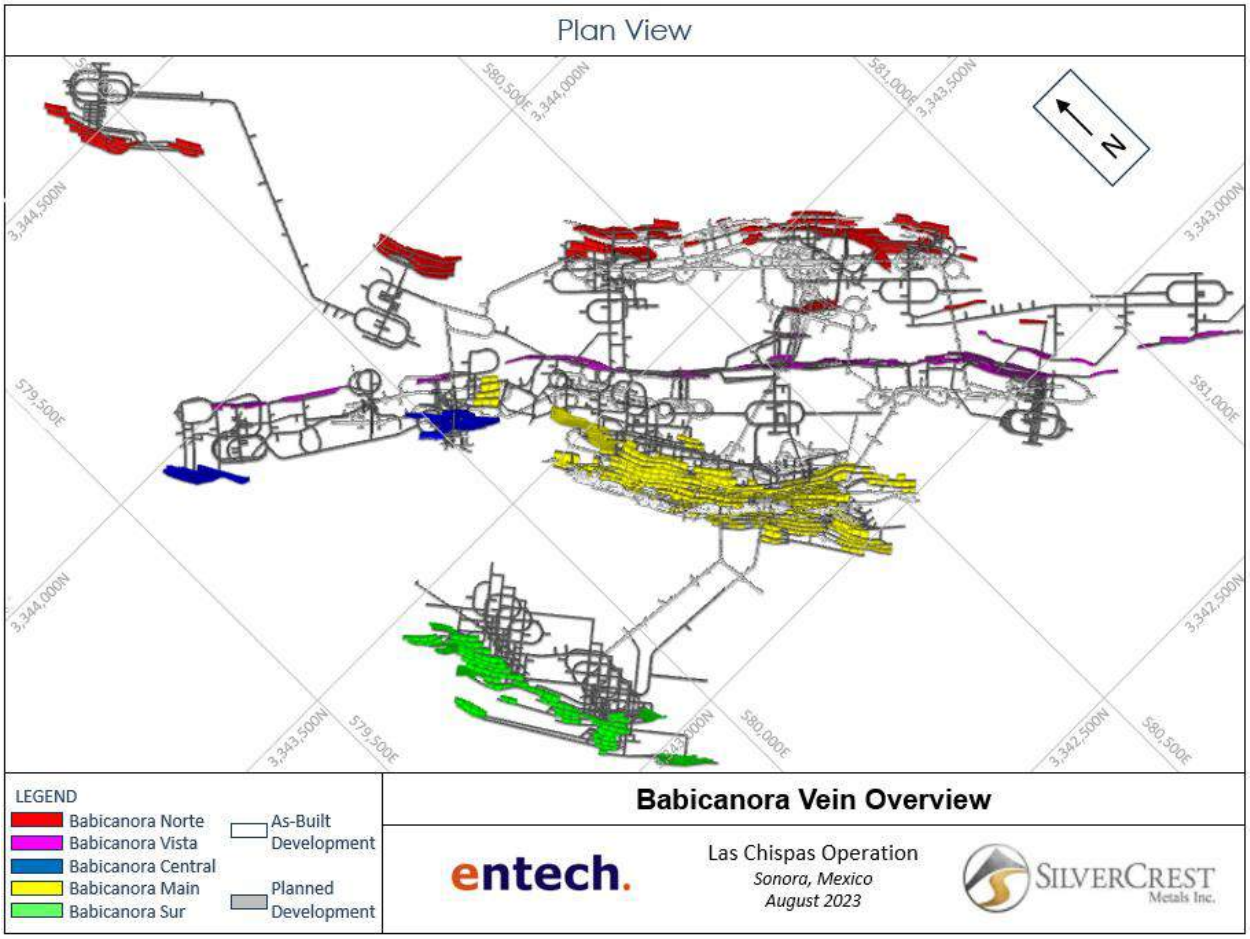
16.5.1 Babicanora Area

The Babicanora Area is located on the south side of the deposit and is an amalgamation of five smaller zones: Babicanora Norte, Sur, Main, Central and Vista. The Babicanora Area extends from surface at 1,250 masl down to 800 masl on 25 levels spaced 18 m apart, except for Babicanora Sur where levels are spaced 15 m apart. A total of 60 km of lateral development is scheduled in Babicanora and total stope production is estimated to be 2.0 Mt.

Maximum annual ore and waste totals over the life of mine are estimated to be 405 kt and 390 kt respectively, while average annual ore and waste totals over full production years (2025–2029) are 370 kt and 305 kt respectively.

An isometric view with the ramps and levels identifying the various zones can be seen in Figure 16-18.

Figure 16-18: Babicanora Area Overview



Source: Entech, 2023.

The Babicanora Area contains two primary ramp systems. Ramps have been completed down to 946 masl for BAM, 957 masl for BAV, 1,080 masl for BAC and 964 masl for BAN.

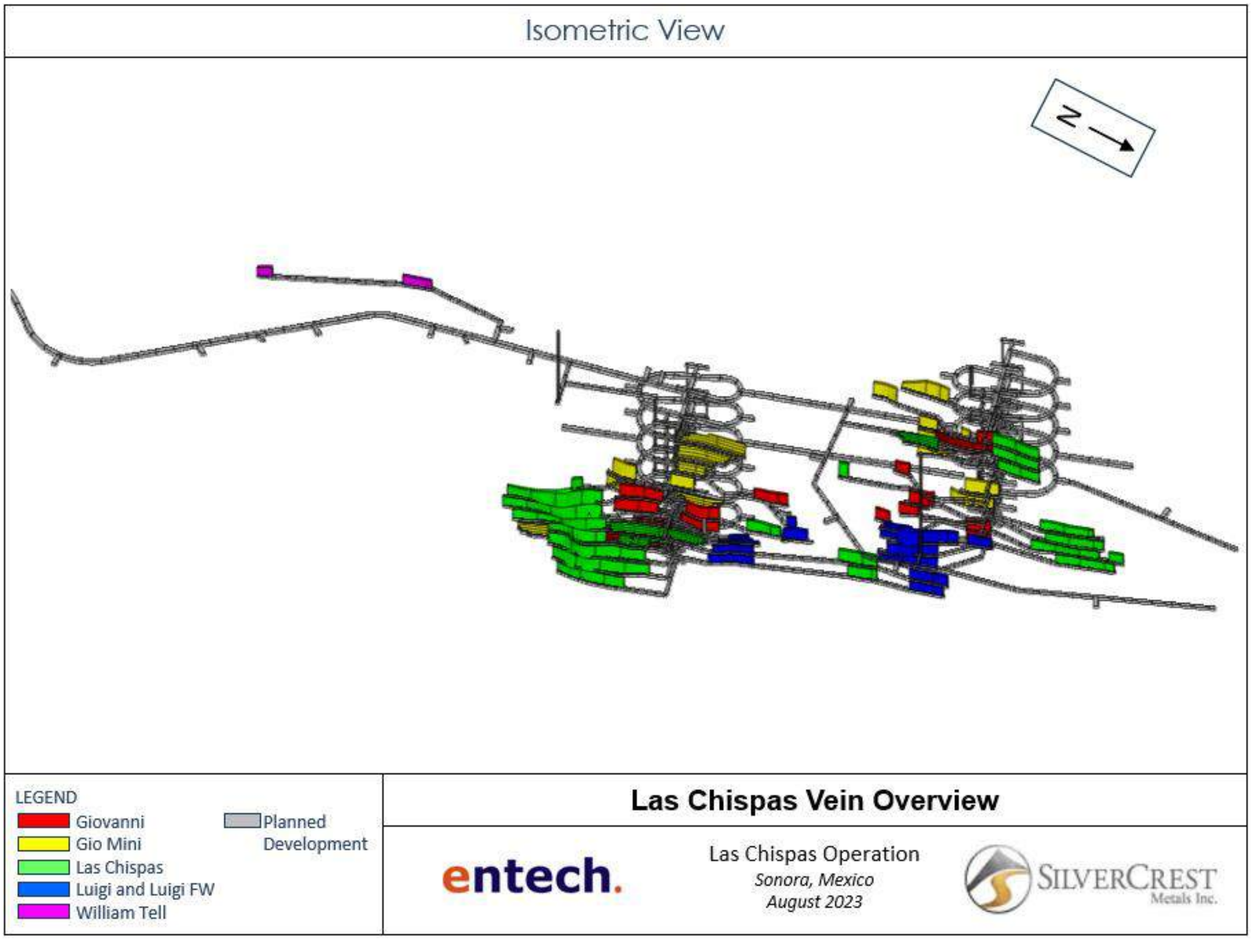
16.5.2 Las Chispas Area

The Las Chispas Area is located on the north side of the deposit and is an amalgamation of 6 smaller zones: El Muerto, Granaditas, Giovani, Las Chispas, Luigi, and William Tell. The Las Chispas Area extends from surface at 1,151 masl down to 845 masl on 17 levels spaced 18 m apart. A total of 16 km of lateral development is scheduled in Las Chispas and total stope production is estimated to be 305 kt.

Maximum annual ore and waste totals over the life of mine for the Las Chispas Area are estimated to be 150 kt and 165 kt respectively, while average annual ore and waste totals over full production years (2025-2029) are 75 kt and 90 kt respectively.

An isometric view with the ramps and levels identifying the various zones can be seen in Figure 16-19.

Figure 16-19: Las Chispas Area Overview



Source: Entech, 2023.

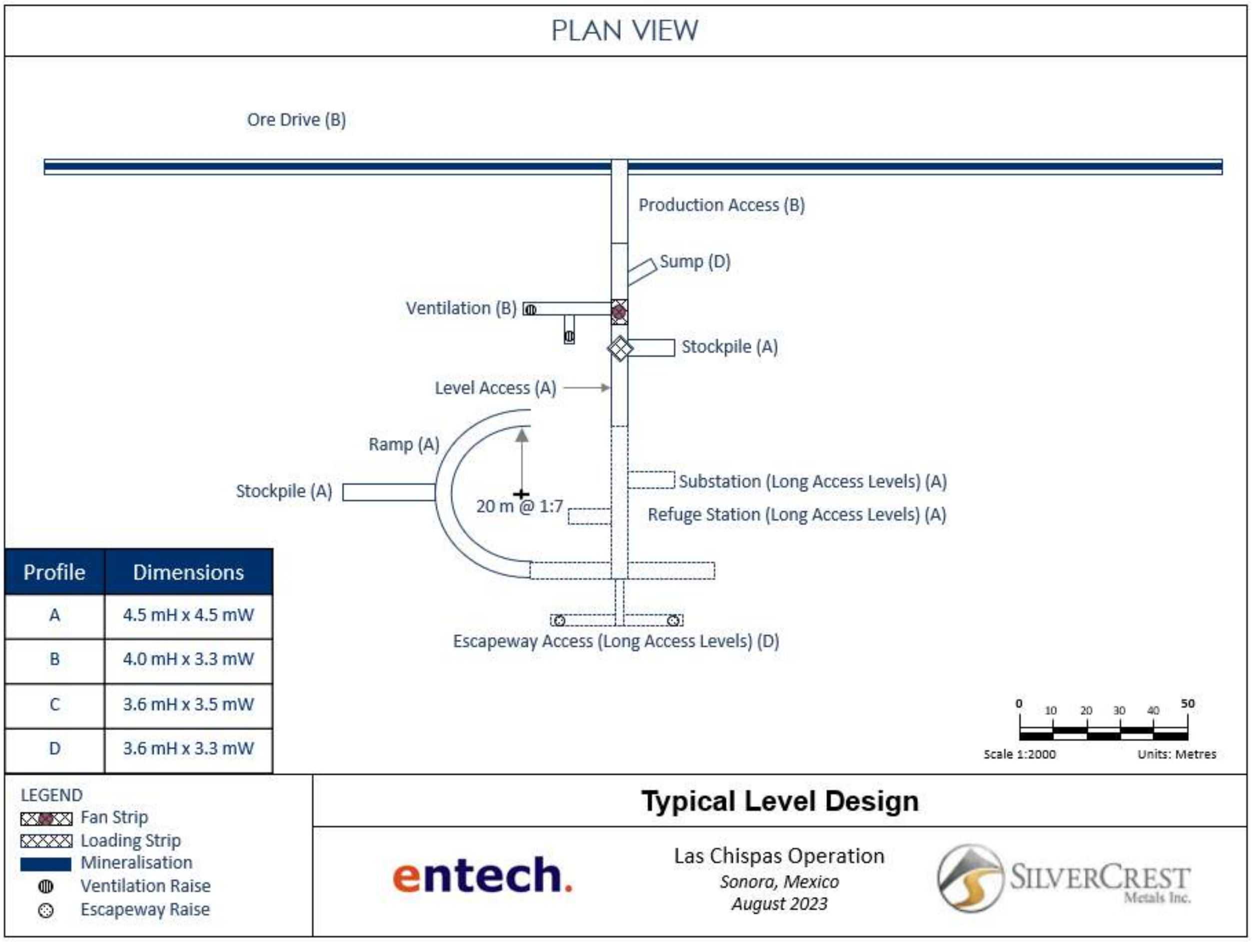
The Las Chispas Area contains two primary ramp systems that share infrastructure on the access ramp above 1,035 masl. The Las Chispas Portal began construction in May 2023.

16.5.3 Production Level Infrastructure

The development design for level infrastructure follows the geotechnical recommendations for minimum stand-off required to the mineralized zone to allow for infrastructure and to minimise damage from production blasting.

A typical level layout as well as the typical truck loading arrangement are illustrated in Figure 16-20 and Figure 16-21, respectively.

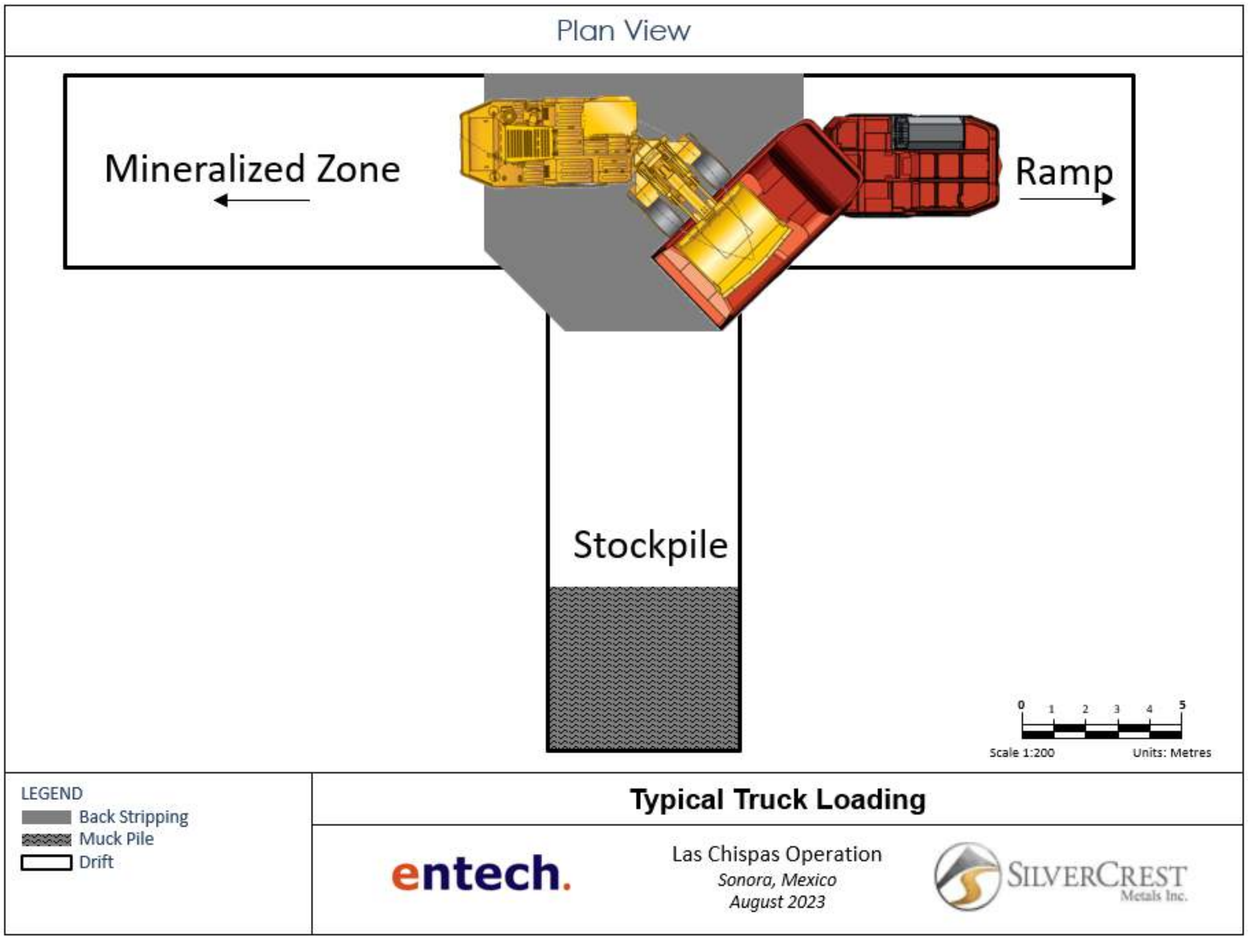
Figure 16-20: Typical Level Design



Profile	Dimensions
A	4.5 mH x 4.5 mW
B	4.0 mH x 3.3 mW
C	3.6 mH x 3.5 mW
D	3.6 mH x 3.3 mW

Source: Entech, 2023.

Figure 16-21: Typical Truck Loading Layout



Source: Entech, 2023.

16.6 Development Schedule

All development activities at Las Chispas will be completed by a mining contractor. The proposed lateral development schedule for the Las Chispas Operation has been established using performances as shown in Table 16-6.

Table 16-6: Development Rates

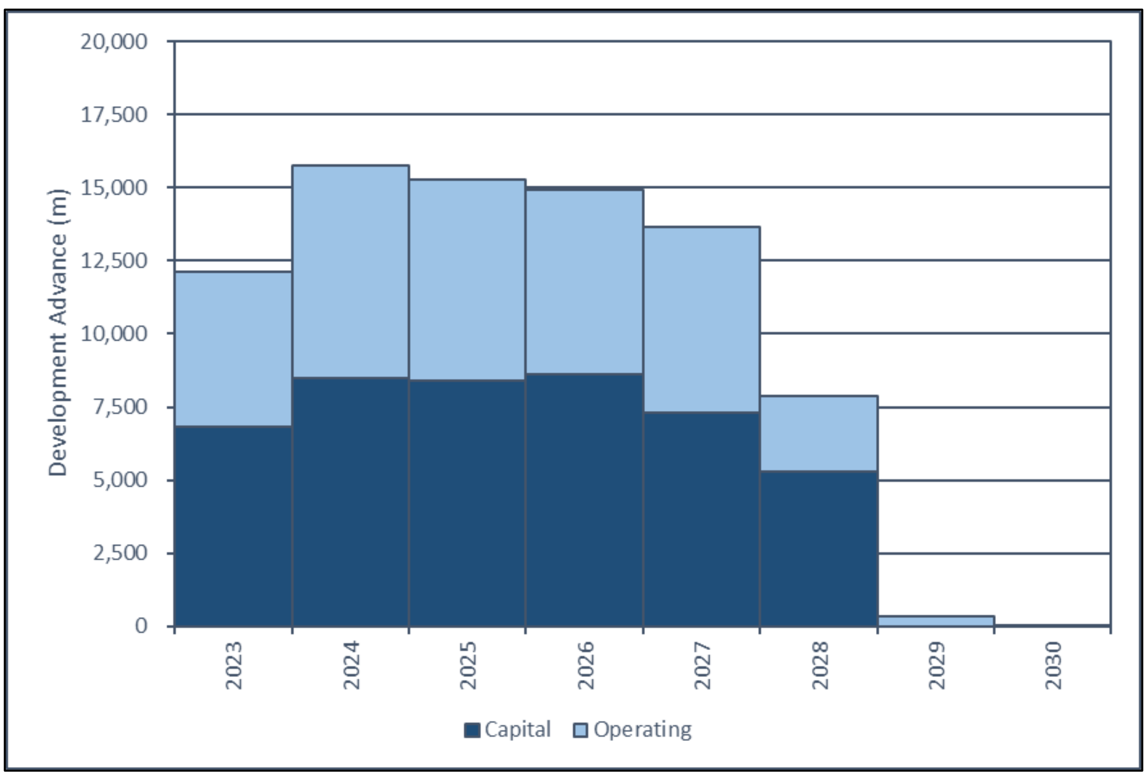
Activity	Productivity per Crew	Headings per Day	Heading Advance
Lateral Dev – CAPEX - Priority	7.0 m/day	2	3.5 m/day
Lateral Dev – CAPEX - Other	7.0 m/day	4	1.75 m/day
Lateral Dev – OPEX – Back Stripping	14.0 m/day	4	3.5 m/day
Lateral Dev – OPEX – Other	7.0 m/day	4	1.75 m/day
Vertical Development	1.8 m/day	1	1.8 m/day

16.6.1 Lateral Development

Total development advance in the already established Babicanora area is limited to 30 m/d in 2023, increasing to 35 m/d in Q1 2024. Total development advance in the Las Chispas area is limited to 5 m/d for single heading advance, increasing to a total limit of 14 m/d with multiple headings.

Annual advance totals are illustrated in Figure 16-22 and summarized in Table 16-7.

Figure 16-22: Annual Lateral Development Advance



Source: Entech, 2023.

Table 16-7: Total and Annual Lateral Development Advance

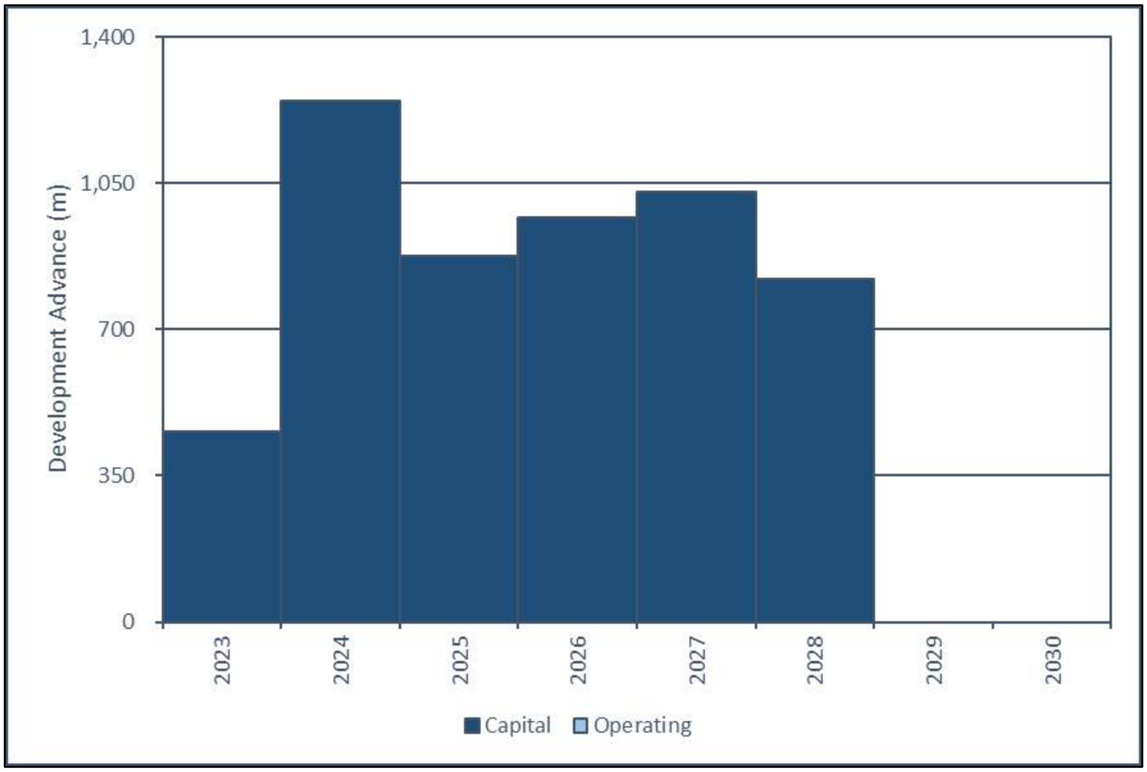
Period	Capital km	Operating km	Total km
2023	6.8	5.3	**12.2**
2024	8.5	7.2	**15.7**
2025	8.4	6.9	**15.3**
2026	8.6	6.3	**14.9**
2027	7.3	6.4	**13.7**
2028	5.3	2.6	**7.9**
2029	0.0	0.3	**0.3**
2030	0.0	0.0	**0.0**
Total LOM	**44.9**	**35.1**	**80.0**

16.6.2 Vertical Development

Vertical development over 30 m will be completed using a raise boring machine, owned and operated by a contractor. Vertical development of less than 30 m has been planned to be completed using a raisebore, however could be completed through longhole drop raise methods using production drills.

Ventilation raises are planned at a diameter of 3.6 m, while egress raises are planned at a diameter of 1.2 m. The annual vertical development schedule is illustrated in Figure 16-23 and summarized in Table 16-8. Four ventilation raises to surface are planned in 2024, resulting in a higher annual advance.

Figure 16-23: Annual Vertical Development Advance



Source: Entech, 2023.

Table 16-8: Total and Annual Vertical Development Advance

Period	Capital km	Ventilation km	Egress km	Total km
2023	0.4	0.1	0.3	**0.4**
2024	1.2	0.9	0.3	**1.2**
2025	0.9	0.7	0.1	**0.9**
2026	1.0	0.6	0.4	**1.0**
2027	1.0	0.7	0.3	**1.0**
2028	0.8	0.6	0.2	**0.8**
2029	0.0	0.0	0.0	**0.0**
2030	0.0	0.0	0.0	**0.0**
Total LOM	**5.2**	**3.4**	**1.8**	**5.2**

16.7 Production

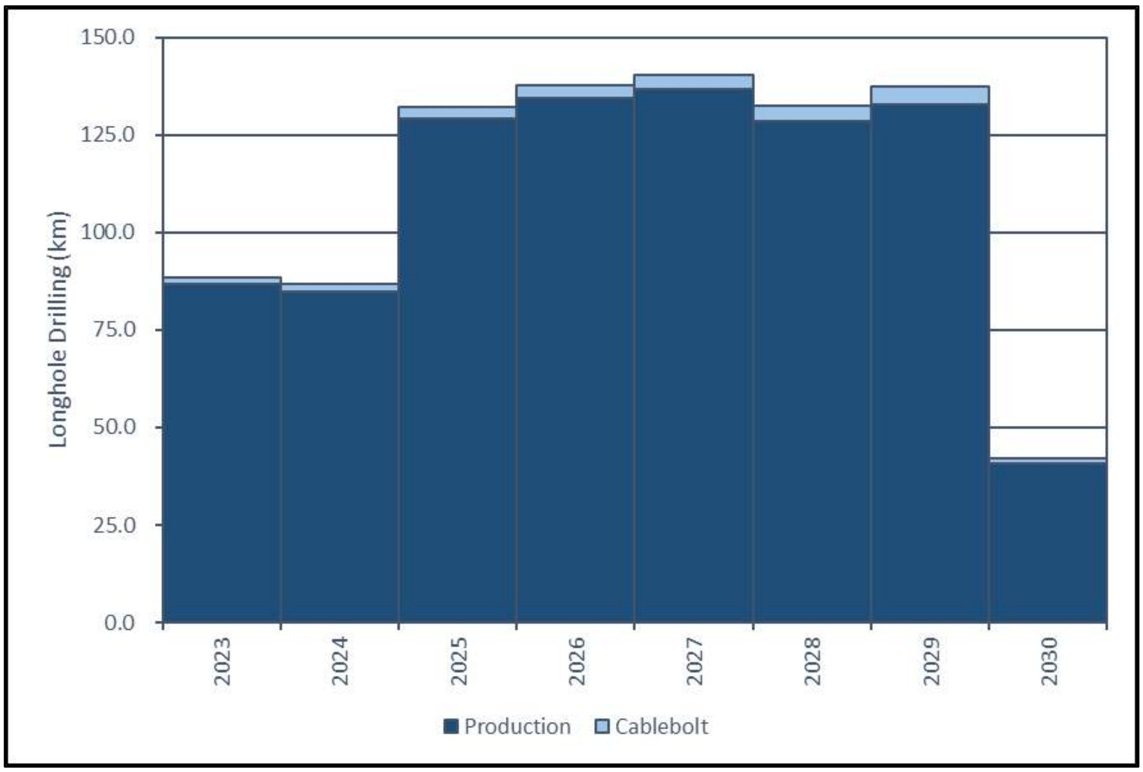
16.7.1 Production Drilling

Longhole drilling productivity is expected to be 108 m/d for downhole stopes and 135 m/d for uphole stopes. It is estimated that a maximum of 3 drill rigs will be required across the operation.

Production drilling efficiency was based on the site average of 3.7 tonnes per drill metre, exclusive of additional drilling required for the slot raises and stope cablebolts.

The annual longhole drilling schedule is illustrated in Figure 16-24 and summarized in Table 16-9.

Figure 16-24: Annual Longhole Drilling Schedule



Source: Entech, 2023.

Table 16-9: Total and Annual Longhole Drilling Schedule

Period	Production km	Stope Cablebolting km	Total km
2023	86.8	1.7	88.5
2024	84.7	2.2	86.9
2025	129.3	2.7	132.0
2026	134.3	3.2	137.5
2027	136.8	3.4	140.2
2028	128.5	4.1	132.6
2029	132.7	4.7	137.4
2030	40.7	1.4	42.1
Total LOM	**873.8**	**23.4**	**897.2**

Production drilling for cut and fill and resue stoping utilize jumbo drills and are considered development activities for scheduling purposes. As a result, their scheduling is driven by development advance rates discussed in Section 16.6.

16.7.2 Material Movement

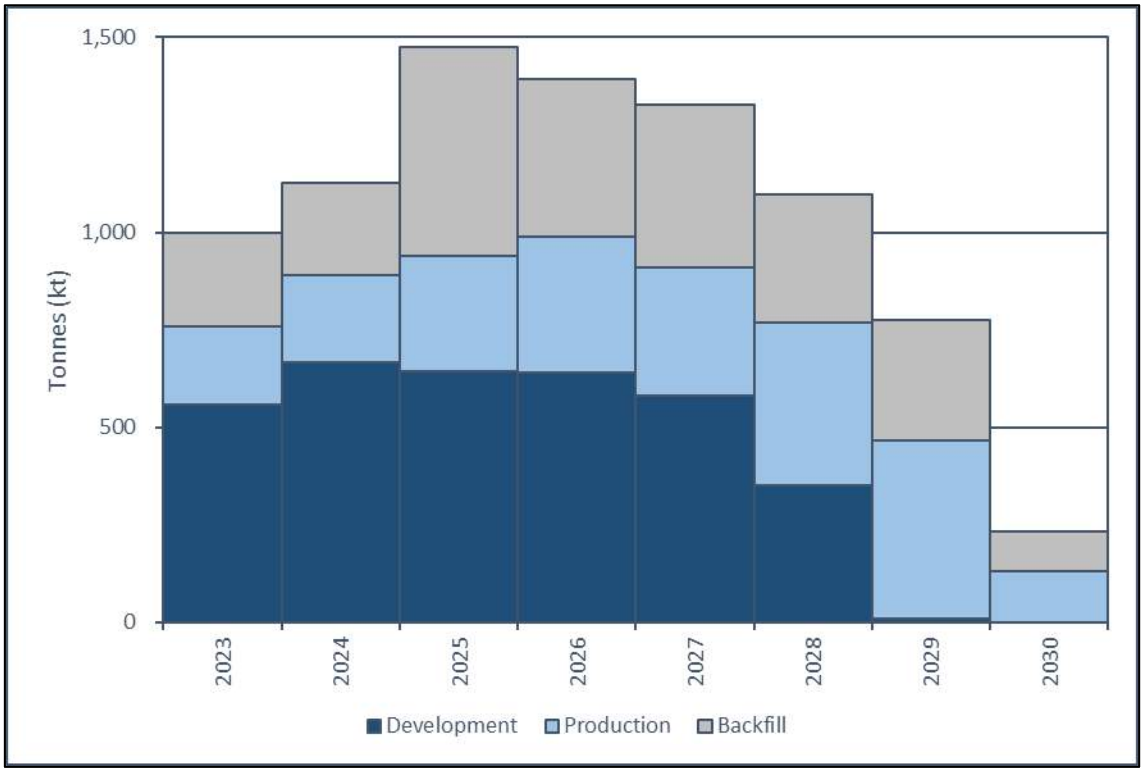
The current load-and-haul fleet is a mix of smaller sill development and stope loaders (LH203, and LH307) and LH410 truck loaders. The trucks on site are currently TH315 and TH430, however planned quantities over the LOM assume a fleet of TH430 trucks. The estimated peak annual quantities for Las Chispas are summarized in Table 16-10. Peak requirements are likely to be smoothed by further refinement of the schedule.

Table 16-10: Load and Haul Fleet

Equipment Type	Description	Peak Annual Requirement
Development/Stope Loader	LH203	4
Development/Stope Loader	LH307	4
Truck Loader	LH410	4
Truck	TH430	10

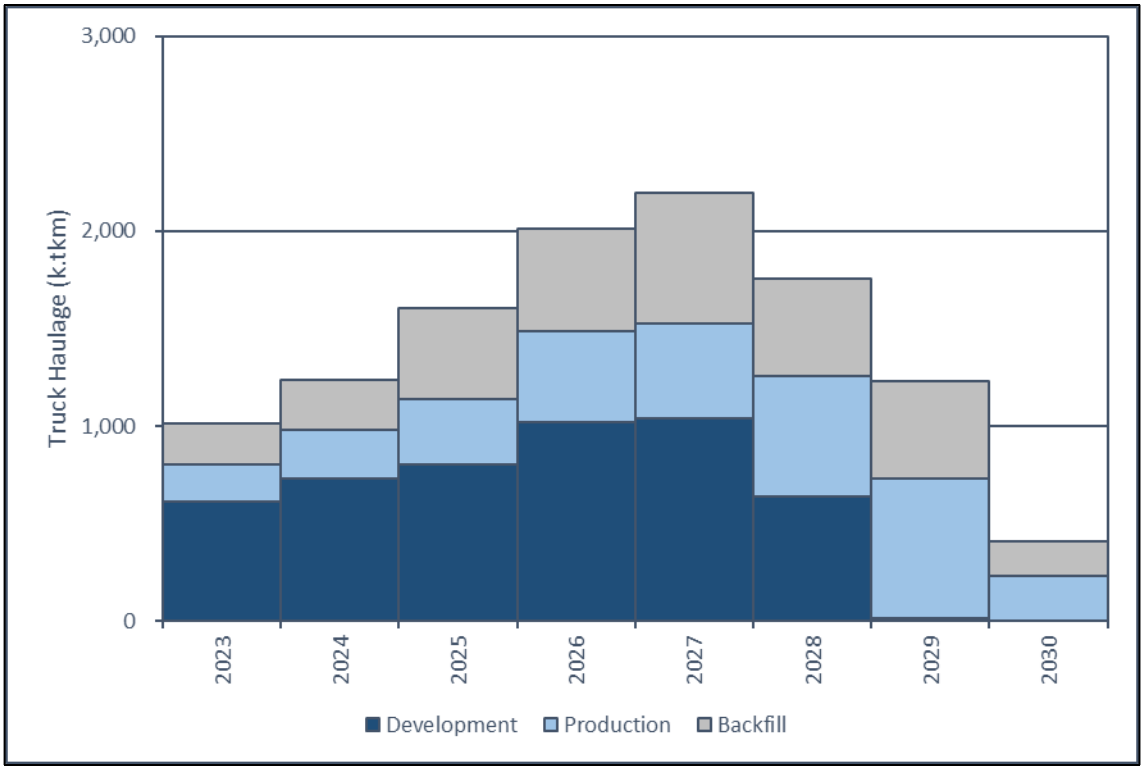
The annual material movement schedule is illustrated in Figure 16-25 and estimated trucking demand (tonne-kilometres) are illustrated in Figure 16-26. Total and annual material movement schedule is summarized in Table 16-11.

Figure 16-25: Annual Material Movement Schedule



Source: Entech, 2023.

Figure 16-26: Annual Trucking Demand



Source: Entech, 2023.

Table 16-11: Total and Annual Material Movement Summary

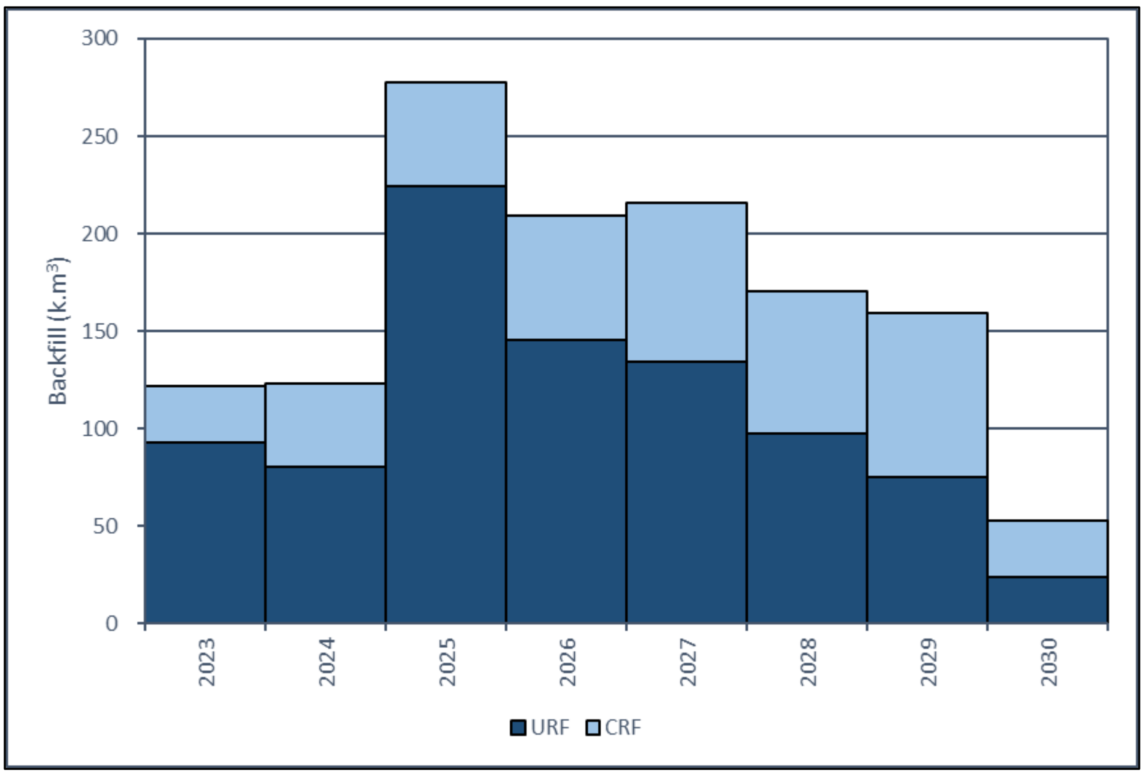
Period	Total Ore	Production Ore	Development Ore	Development Waste	Total Excavated Material	Backfill	Total
	kt	kt	kt	kt	kt	kt	kt
2023	**283**	200	83	476	**759**	238	**997**
2024	**367**	225	142	523	**890**	238	**1,128**
2025	**428**	297	131	512	**940**	536	**1,476**
2026	**442**	349	94	547	**989**	403	**1,393**
2027	**440**	329	111	470	**910**	417	**1,327**
2028	**456**	415	42	311	**767**	329	**1,096**
2029	**464**	457	7	3	**467**	307	**774**
2030	**131**	131	0.4	0	**131**	102	**234**
Total LOM	**3,011**	**2,402**	**609**	**2,843**	**5,854**	**2,570**	**8,424**

16.7.3 Backfill

Production voids will be filled by using cemented rockfill (CRF), uncemented rockfill (URF), and in some cases voids will be left empty. Cement content of the CRF will be determined to be high or low depending on the type of mining, the surrounding rock quality, and other production or mining activities taking place near the voids. Longhole voids with anticipated mining beneath them will have a high-binder CRF deposited from both the undercut (on remote) and overcut (using a stop block) until a minimum height of 3 m is achieved across the strike length of the stope floor. Low-binder CRF will then be deposited from the overcut until the sidewall (adjacent to a future stope) is fully covered. Finally, uncemented waste rockfill will be deposited from the overcut until the stope backfilling is complete.

The annual backfill material schedule is illustrated in Figure 16-27, while the total and annual backfill schedule is summarized in Table 16-12. Backfill requirements in 2025 exceed the average due to an increase of 32% in production tonnes from 2024 to 2025. Additional to the production ramp-up, the backfill increase is also driven by the commencement of production in the Las Chispas area as well as access to new Babicanora mining blocks, which allows more concurrent activities to take place.

Figure 16-27: Annual Backfill Schedule



Source: Entech, 2023.

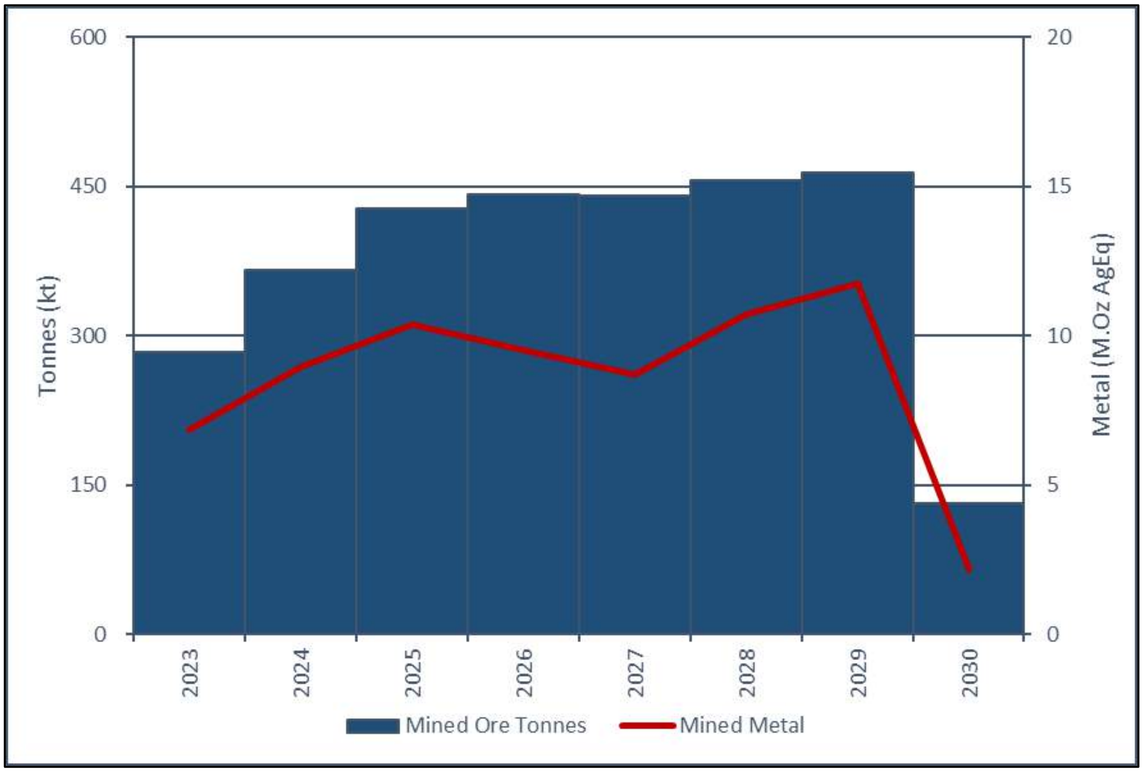
Table 16-12: Total and Annual Backfill Schedule

Period	CRF	RWF	Total
	k.m³	k.m³	k.m³
2023	29	93	**122**
2024	43	81	**123**
2025	54	224	**278**
2026	64	145	**209**
2027	82	134	**216**
2028	73	97	**170**
2029	84	75	**159**
2030	29	24	**53**
Total LOM	**456**	**874**	**1,330**

16.7.4 Underground Mine Production

Mined mineralisation will be delivered by the underground fleet to a surface stockpile (ROM) for processing. Annual mine production delivered to the ROM stockpile is illustrated in Figure 16-28 and summarized in Table 16-13. The proposed mine plan is estimated to deliver 8.7 – 11.8 Moz AgEq from 2025 – 2029 to the ROM stockpile, with a ramp up period in 2023 – 2024 and a ramp down period in 2030.

Figure 16-28: Annual Mine Production Schedule



Source: Entech, 2023.

Table 16-13: Annual Mine Production Schedule

Period	Ore Tonnes	Grade	AgEq Ounces
	kt	gpt	M.Oz
2023	284	735	6.9
2024	367	762	9.0
2025	428	756	10.4
2026	442	670	9.5
2027	440	615	8.7
2028	456	731	10.7
2029	464	788	11.8
2030	131	520	2.2
Total LOM	3,012	**714**	**69.1**

16.8 Underground Mine Services

16.8.1 Portals

Three portals will service the two mining areas at the Las Chispas Operation, the Santa Rosa and Babicanora Central portals for the Babicanora area, and the Las Chispas portal for the Las Chispas area. All three portals are capable of handling the trucking fleet proposed and will also be used as intake flows for the primary ventilation circuit.

16.8.2 Electrical Services

16.8.2.1 Babicanora Area

The Babicanora area underground power distribution follows a 4.16 kV power supply distributed through the three mine portals using 5 kV cables. Voltage drop in feeders and branch circuits is limited to 3% therefore 1 MVA mobile substations will be located approximately every 350 m. Standardized mobile substations are used, converting 4.16 kV distribution voltage to 480 V. There are 5 kV isolation fault interrupter switches installed for the maintenance of power feeder cables and mobile substations without interrupting downstream equipment operation.

For lateral distribution, the required power feeder cables (mine cable) are routed through the main ramp decline via permanently installed overhead messenger cables, or through borehole installation to reduce cable length and to maintain the overall voltage drop within 3%.

For the continued expansion of the Babicanora area, electrical loads will be fed from existing mobile substation Mine Load Centers (MLCs) for most of the new areas and two (2) MLCs will need to be relocated in future to serve the Babicanora South and Babicanora North areas.

16.8.2.2 Las Chispas Area

The Las Chispas area will have two sources of power from surface, one located at the Las Chispas portal, which will provide power for miscellaneous loads in the vicinity as well as for the development of the initial 800 m of the Las Chispas decline drive, and the other from the main substation located at Control Pozos Las Chispas.

The main substation will have one (1) 4.16 kV circuit routed through a borehole to the Nicho Substation (NS) NS737L located al level 737. At this location, the 4.16 kV feed will be series-connected to an MLC located at Nicho Substation (NS) NS752L.

The Las Chispas area electrical distribution system will follow the same distribution plan utilized within the Babicanora area. Power feeder cables (mine cable) will be routed through the main ramp decline via permanently installed overhead messenger cables, or through borehole installation to reduce cable length to maintain the overall voltage drop within 3%.

16.8.3 Fuel Storage and Distribution

Fuel for the underground operations in both the Babicanora area and the Las Chispas area is stored at the designated fuel storage location (Fuel Storage) described within the infrastructure section of this Report (Section 18.4).

There is no dedicated distribution system of piping or fueling stations within the underground mine of the Babicanora area, nor will there be in the Las Chispas area. All fuel delivery underground is and will be performed using a fuel truck. Equipment that frequently come to surface such as haul trucks, flat bed trucks, and light vehicles are fueled at the surface Fuel Storage area.

16.8.4 Mine Process Water Supply

Underground mine process water (non-potable, recycled process water) is currently supplied to the Babicanora area from a surface water decant structure next to the Santa Rosa portal. The decant structure is constructed from concrete and is fed from the underground mine dewatering system, where the water is clarified before being re-used within the underground workings. Make-up water, as required, is supplied from a pumping system at the Sonora River. The decant structure overflow is used to deliver water into the mine process water lines, flowing by gravity to the underground area via 4-inch HDPE pipe. The underground piping generally follows the main mine declines and ramps with sections installed as required to service production areas of the mine. Pressure reducing valves are installed approximately every 150 m to maintain static line pressures within the pipe operating pressure range.

Changes are to be implemented to the mine dewatering system to improve process water quality and clarity. Water from mine dewatering will proceed to the currently existing Thickener #8 and flocculant system located near the Process Plant, which will be used to clarify the water. The clarified water from the thickener overflow will be returned to storage tanks to provide water to the mine underground areas (both the Babicanora and Las Chispas Areas) for re-use as mine process water. Pipeline grading is to be completed such that water will flow by gravity to the portals and pipes will be installed on-ground along existing roadways. Water delivery within the underground areas will flow by gravity, using an equivalent system design to that which is currently in use. Process water system design parameters are shown in Table 16-14. All values were provided by SilverCrest.

Table 16-14: Process Water System Design Parameters

Design Parameter	Value	Unit
Flow Rate – Water to Babicanora	15	m^3/h
Flow Rate – Water to Las Chispas	5	m^3/h
Elevation – Existing Thickener #8	1,185	masl
Elevation – Babicanora Portal	1,158	masl
Elevation – Las Chispas Portal	1,151	masl
Distance – Thickener #8 to Babicanora	450	m
Distance – Thickener #8 to Las Chispas	750	m

16.8.5 Mine Dewatering

16.8.5.1 Existing Mine Dewatering Systems

The Babicanora area currently has a dewatering system installed and operational that utilizes a 4-inch HDPE piping network such that water reports to a decant structure located at the Santa Rosa Portal. Compressed air-driven diaphragm pumps are used to transfer service water from jumbos, drills, and bolters to the nearest level sump. The level sumps consist of excavated cut-outs with a submersible pump. Two (2) solids settling areas currently exist where solids, once settled, are removed from the settling tank by mucking the solids manually. The Las Chispas area historic workings currently utilize a dewatering system to pump the mine to 50 m below the 600 level (approximately 988 masl) to assist in the early stages of the mine development.

16.8.5.2 Design Overview

The dewatering systems to be installed at the Las Chispas Mine for both the expansion of the Babicanora area and the development of the Las Chispas area comprise the following:

- Level sumps used for the collection of groundwater and service water from the production areas. Gravity-drained and pumped level sumps are included in the design.
- Main collection sumps used at centralized locations for clear and dirty water collection or as a booster sump to pump water over long distances and/or up large elevation changes where the total dynamic head would exceed the allowable pipe pressure.
- Solids separation stations that receive dirty water from level sumps or main collection sumps and utilize geotextile weirs to remove suspended solids from the water prior to pumping.
- Thickener #8 with a flocculant system near the Process Plant on surface. Thickener #8 will receive water from the main de-watering sumps located within the Babicanora area and the Las Chispas area. Clarified thickener overflow water will be utilized as process water.

A hydrogeological analysis was conducted by HRI in 2019 that determined that the water table is located at 900 masl and the inflow in all the future mining areas for the Babicanora area is predicted to be negligible to non-existent. All mining levels below 900 masl in the Las Chispas area have been designed to handle the average groundwater inflow of 21.6 m^3/h.

Excess service water reporting to level sumps (shown in Table 16-15) was determined based on scaling of the current water usage at the Babicanora area (3.2 L/s) to meet the requirement of a maximum production rate of 1,200 tpd combined from both the Babcanora area and the Las Chispas area.

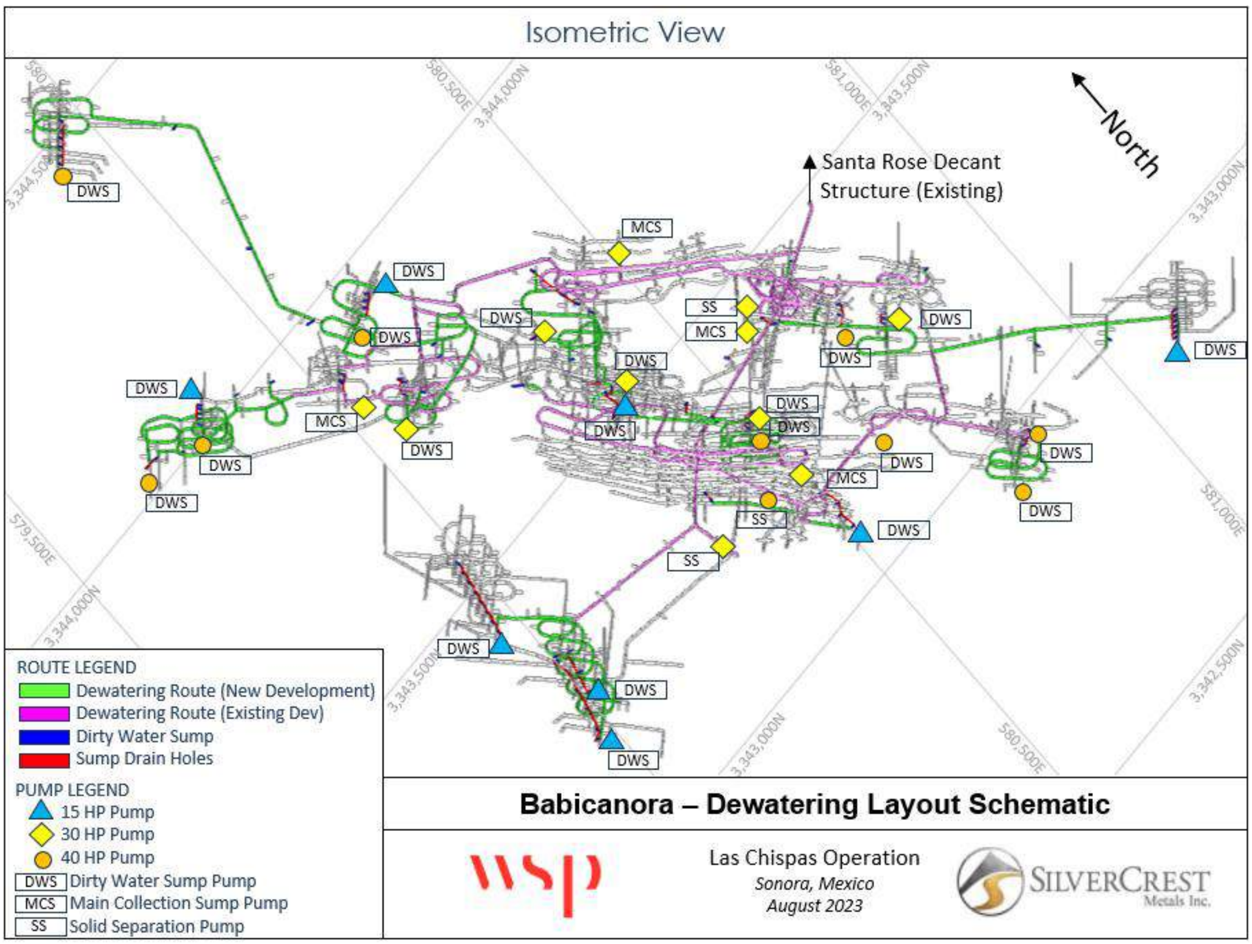
Table 16-15: Excess Service Water

Description	Value	Units	Source
Las Chispas Area	5.0	m^3/h	SIL (Calculated)
Babicanora Area	15.0	m^3/h	SIL (Calculated)

16.8.5.3 Mine Dewatering Layout

For the Babicanora area, water is mainly gravity-fed from level sumps via boreholes to pumped dirty water sumps and pumped to one of three (3) solid separation stations. The clear water is pumped from the solid separation stations to Thickener #8 located on surface using booster sumps as required. Several areas have temporary sump pumps that will be moved after the relatively small area of the mine that the pumps service is completed. The design ties into the existing dewatering system where possible, utilizing the existing sumps and piping also where possible. Figure 16-29 illustrates the dewatering design for the Babicanora area.

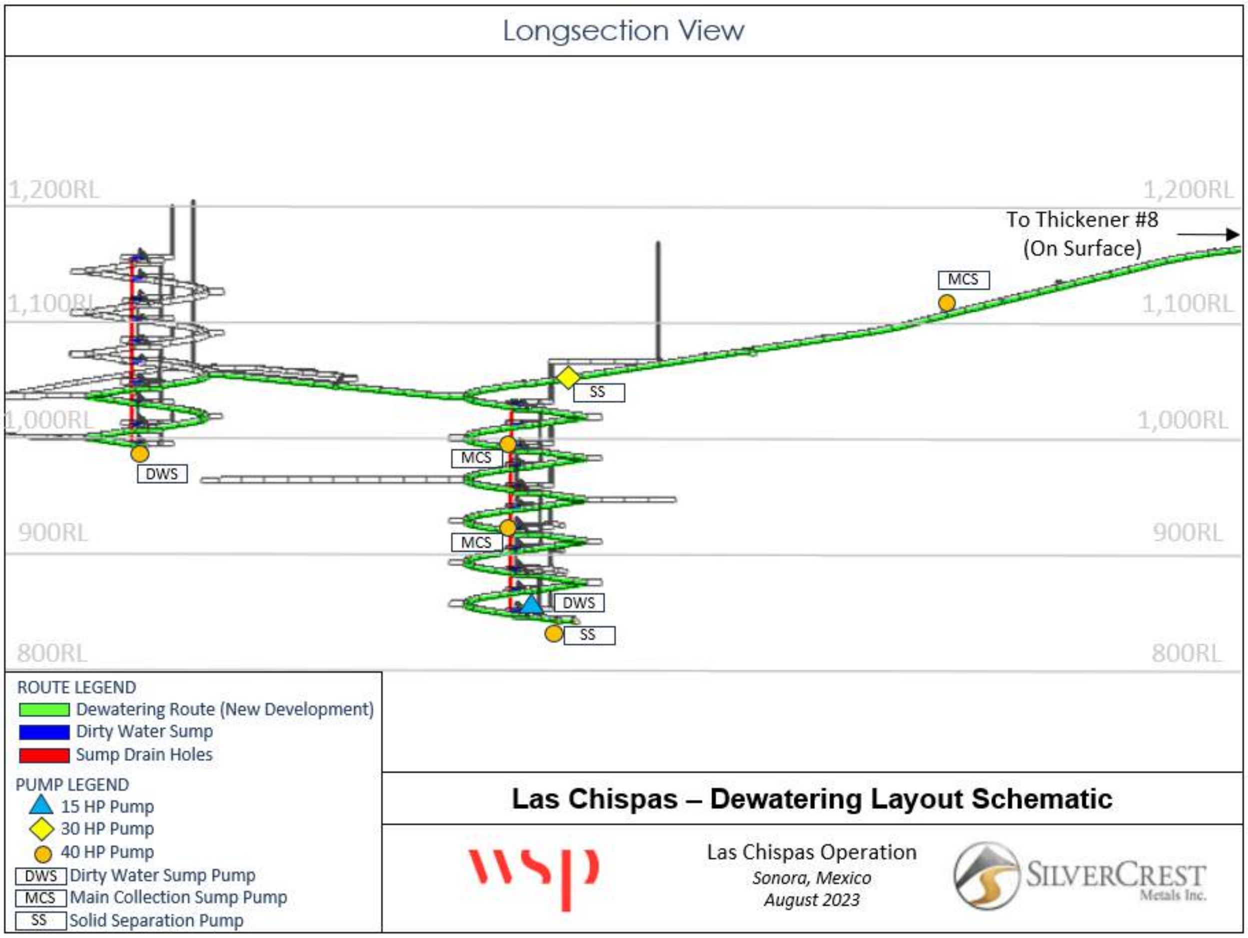
Figure 16-29: Dewatering Design for the Babicanora Area



Source: WSP, 2023.

For the Las Chispas area, water is mainly gravity-fed from level sumps via boreholes to the lowest level where the dirty water is pumped to one of two (2) solid separation stations. The clear water is pumped from the solid separation stations to Thickener #8 located on surface using booster sumps as required. Figure 16-30 illustrates the dewatering design for the Las Chispas area.

Figure 16-30: Dewatering Design for the Las Chispas Area



Source: WSP, 2023.

16.8.6 Cemented Rockfill

Cemented Rock Fill (CRF) is used for ground stability in the underground mine where ore extraction takes place. The CRF is produced with a Simem Bison Mobile Concrete Batching Plant located on surface. The batching plant has a production capacity of 500 tph (250 m^3/h). The plant comprises the elements illustrated in Figure 16-31, with numbered descriptions within this section for key elements. The main trailer (1) is equipped with a hopper, conveyor belt, piston gates, vibrators, and compressor. The service container (2) is equipped with the operator's cabin, the automation system, a 250 KVA electric generator, the clean water tank, and the tanks for the admixtures. The horizontal cement silo, with a storage capacity of 60 m^3, is equipped with a dust collector and cement dosage system. A three-hopper trailer with each hopper having a capacity of 11 m^3 (33 m^3 total) is equipped with load cells and conveyor belts. Not shown is the mixer, which is a Simem MDC 501 twin shaft mixer capable of handling a maximum aggregate size of 65 mm, equipped with 2 x 30 kW motors. The main material for the CRF is waste rock from the underground mine.

Figure 16-31: Batch Plant

Source: SilverCrest, 2023.

The material discharged from the mixer is transported by conveyor belt and deposited in a low-profile haul truck for transport inside the mine via the mine portal. Inside the mine, the CRF is hauled by truck, deposited in a remuck bay, and placed in the empty stope with the scoop tram. When CRF is used for horizontal pillar extraction, a mix design with 7% cement is used, otherwise a 3% cement mix is used. Cylinders of the CRF are collected for destructive testing to assess the unconfined compressive strength of the mix designs. Monthly CRF backfill requirements for 2023 are approximately 2,000 m^3, and average 5,000 m^3 per month over the remaining LOM.

16.8.7 Compressed Air

16.8.7.1 Babicanora Area

Babicanora is currently serviced by three 200-hp Atlas Copco GA 132 single stage screw compressors and associated receivers with a capacity of 834 acfm each at 125 psig. One is located at the Santa Rosa Portal and two are located inside the mine. The compressors are presently being operated as two lead and one standby, with a peak compressed air demand of approximately 1,600 acfm. The 4-inch HDPE compressed air main line is routed throughout the mine via the ramps, main drifts, and escapeways.

It is not expected that additional compressed air capacity will be required as the mine advances as equipment is moved from currently active areas to working in new areas. A pressure drop of 1.5 psi/100-feet of pipe at 1,600 scfm was used for design; therefore, the allowable pressure drop to the furthest expansion areas is 5 psi, requiring a 6-inch diameter pipe.

16.8.7.2 Las Chispas Area

Two 200-hp single stage screw compressors and associated receivers with a capacity of 834 acfm each at 125 psig will be located on surface. The compressed air main will be routed down to the portal via a borehole. Compressed air piping will be installed along the ramp, in the main drifts, and in the escapeways throughout the mine. Compressed air will provide power to the air operated dewatering pumps, drills, shotcrete machine, and provide an emergency air supply to the refuge station. Pressure drop over the system extent was calculated equivalently to that of the Babicanora area and used for pipe sizing and system design.

16.8.8 Communications

16.8.8.1 Babicanora Area

An underground network of leaky feeder radio communication cable is set up and functioning within the existing Babicanora area. Main distribution equipment is located near the Santa Rosa portal with cable distribution from there to the underground. A fiber optic cable network is also being installed within the existing Babicanora area with a similar main distribution equipment installation as is used for the leaky feeder system. The underground network will continue to expand the leaky feeder and fiber optic communications network to reach new mining areas as the areas are developed. Mobile equipment operators, light vehicles, and supervisors are equipped with handheld radios to communicate with personnel in the mine and on surface.

16.8.8.2 Las Chispas Area

The Las Chispas area underground network will have a similar set up to the Babicanora area for both leaky feeder and fiber optic communications. The underground network for fiber optic and leaky feeder will be installed and expanded to reach new mining area as the areas are developed. Mobile equipment operators, light vehicles, and supervisors are equipped with handheld radios to communicate with personnel in the mine and on surface.

16.8.9 Personnel and Underground Material Transportation

Materials, equipment, and personnel are delivered to the underground mine in the Babicanora area utilizing the Santa Rosa and the Babicanora Central Portals and will be delivered to the Las Chispas area utilizing the Las Chispas Portal.

A Kenworth T800 truck with a flat-bed and a service boom crane is used for materials and equipment delivery underground, and a modified 20-person personnel carrier vehicle is used to transport larger teams to work areas.

A fleet of 4x4 diesel-powered pickup trucks, Toyota Hilux and Tacoma trucks, are also used to transport smaller teams around the underground workings. Typically, supervisors, engineers, geologists, and other technical services team members will use the pickup truck fleet for underground access and mobility.

16.8.10 Surface Maintenance Shop for Underground Mobile Equipment

The design and construction of the main surface maintenance shop has been approved for the combined Babicanora and Las Chispas mining areas. The workshop is being constructed to support mobile fleet maintenance of all underground mining operations including Babicanora, Las Chispas and all related mining contractors. At full planned production of 1,200 tpd the combined fleets from both operations have been estimated at a maximum of 74 pieces of mobile equipment. This includes drilling equipment, scoops, haul trucks, auxiliary support vehicles, and light duty vehicles.

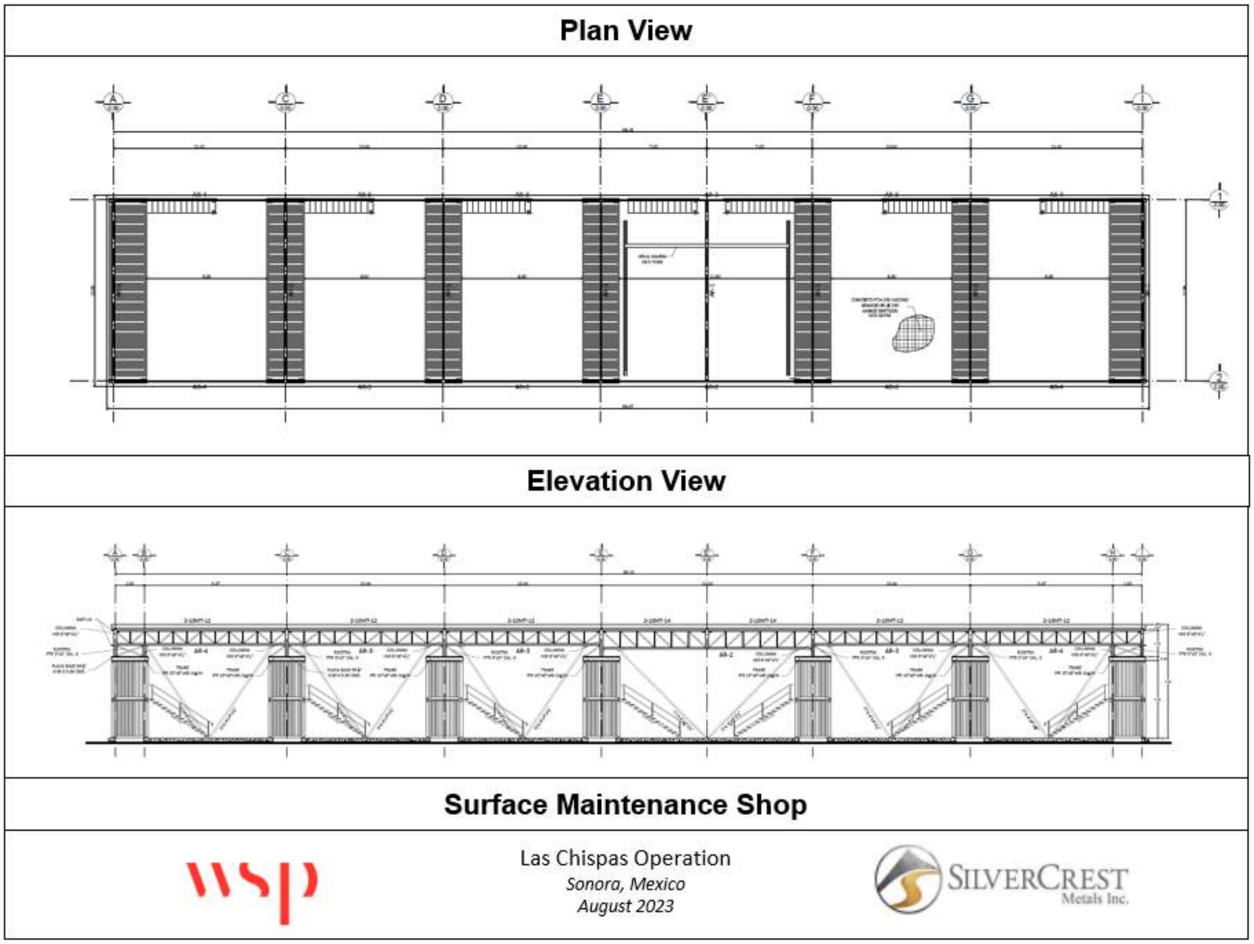
The workshop comprises 7 bays in total with 2 of the bays being a single double-wide space covered by a 5-ton overhead bridge crane. With an estimated combined fleet of up to 74 machines, there will be an effective ratio of 10 machines per bay with an estimated equipment time in servicing of 10% per unit. The construction design uses double-stacked shipping containers. A separate wash bay pad external to the workshop has been included in the design. Workshop support services include electrical (120 V/240 V/480 V), sewage, IT, compressed air, waste management, warehousing, lubrication, and fire suppression.

Figure 16-32 shows the maintenance shop under construction, and Figure 16-33 shows the planned maintenance shop design views.

Figure 16-32: Surface Maintenance Shop – Construction View

Source: SilverCrest, 2023.

Figure 16-33: Surface Maintenance Shop – Planned Views



Source: WSP, 2023.

16.8.11 Underground Mobile Equipment Maintenance Bays

The design and construction of three underground workshop service bays is being planned for Babicanora mining areas. The service bays are being constructed to provide maintenance support of all drilling equipment, face jumbos, bolters, and longhole drills. Service bay capacity underground near to production and development areas will provide a level, well-lit area to perform services and small repair work, while maximizing equipment effective utilization by limiting travel time.

Service activities performed in these service bays would include inspection, greasing, and checking oil levels. Additional work would include small repairs such as hydraulic hose replacement, wear components like drill feed beams and booms, small welding repairs, and electrical work. More substantial work would require the equipment be sent up to the main workshop on surface. The underground service bays will not be equipped with oil and lube storage and handling to avoid the need for associated fire suppression infrastructure.

16.8.12 Ventilation

The design basis of the ventilation network is to provide sufficient ventilation to dilute diesel emissions from mobile equipment operating in each mining area. Mine heat was not considered to be a key design parameter for the Las Chispas Operation, owing to the relatively shallow depth of the mine. Diesel dilution is the limiting variable for ventilation flow calculations. The legislative minimums are described in the Mexican Regulation NOM-023-STPS-2012:

1. Per 8.4.4 a): The minimum volume flow rate required to dilute emissions from diesel equipment is 2.13 m^3/min of fresh air per horsepower (75 cfm/hp or 0.048 m^3/s·kW).

2. Per 8.4.4 b): The minimum velocity in headings with diesel equipment operating is 15.24 m/min (50 fpm or 0.25 m/s).

The ventilation design for the Las Chispas Operation is intended to exceed the Mexican regulatory minimum and instead conform to industry best practice:

1. The minimum volume flow rate required to dilute emissions from diesel equipment is 0.063 m^3/s·kW (100 cfm/hp).

2. The minimum velocity in the legislation of 0.25 m/s is generally adequate. To provide effective cooling to personnel in hot conditions, a minimum of 0.5 m/s is recommended. In a 4.5 m x 4.5 m arched tunnel, this velocity corresponds to 10 m^3/s. This is less than the minimum volume flow rate required to accommodate a single prime mover of either type, so the design was not constrained by this limit.

16.8.12.1 Diesel Prime Movers

There are two types of prime mover required to operate the production areas of the mine (see: Table 16-14). The scoop handles material on the production level and the truck removes material from the mine via the haulage ramps to the portal. Ramps and connecting tunnels are ventilated at a minimum of 20 m^3/s to accommodate haul trucks.

Table 16-16: Ventilation Requirements for Production Prime Movers

Equipment type	Make	Model	Power		Air Requirement/Unit	
			(kW)	(HP)	(m^3/s)	(cfm)
30-tonne truck	Sandvik	TH430	310	415	19.5	41,400
10-tonne scoop/LHD	Sandvik	LH410	220	295	13.9	29,400

16.8.12.2 Diesel Dilution Quantities

The mining areas were categorized into three groups for the purpose of calculating required flow rates: small, regular, and large. These were based on the production rate and haulage distances that would determine the prime mover count which in turn determines the airflow rate requirement for diesel dilution. Secondary equipment ventilation demand was estimated at 40% of the prime mover requirement and leakage was estimated at 10% of the total ventilation requirement (Table 16-17). The totals are not modified by an equipment utilization factor, but instead reflect the amount of air necessary to simultaneously operate the listed equipment within a mining area. These quantities were subsequently rounded down to the nearest 10 m^3/s. The remainder of the air requirement is assumed to be accounted for in the haulage ramps and interconnections linking the areas to one another and to the portals to surface.

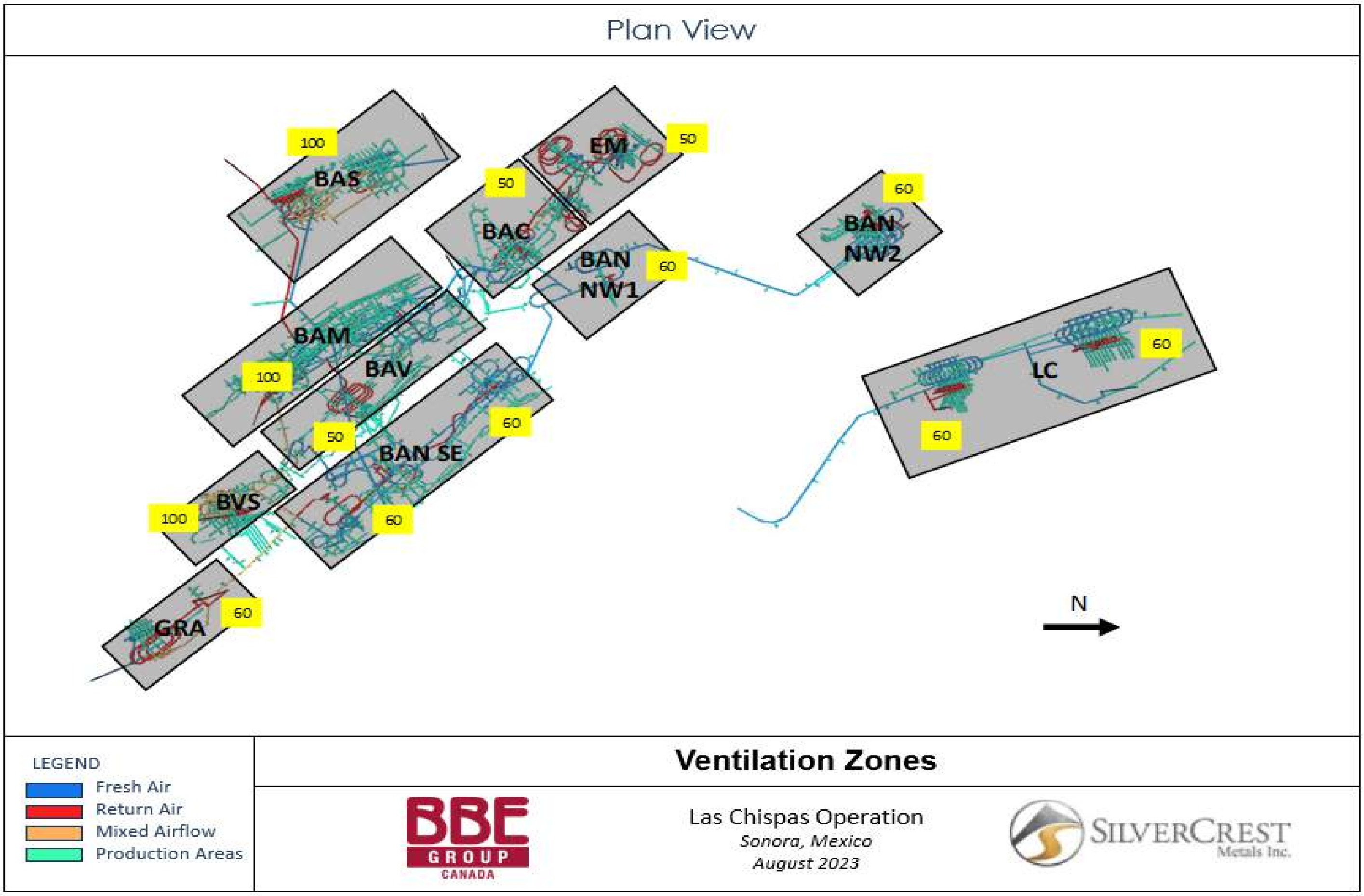
Table 16-17: Air Flow Requirement for Mining Areas by Category

Equipment Type	Small			Regular			Large		
	Qty	(m^3/s)	(cfm)	Qty	(m^3/s)	(cfm)	Qty	(m^3/s)	(cfm)
Scoop/LHD	1	13.9	29,400	1	13.9	29,400	2	27.7	58,800
Truck	1	19.5	41,400	1.5	29.3	62,100	2	39.1	82,800
Secondary	40%	13.4	28,300	40%	17.3	36,600	40%	26.7	56,600
Leakage	10%	4.7	9,900	10%	6.0	12,800	10%	9.4	19,800
Totals	**-**	**51.4**	**109,000**	**-**	**66.5**	**140,800**	**-**	**102.9**	**217,900**
Modeled	**-**	**50**	**106,000**	**-**	**60**	**127,000**	**-**	**100**	**212,000**

16.8.12.3 Production Zones

The mine was divided into production zones for the purpose of calculating ventilation requirements in each area. These zones correspond to the production orebody names, except the Las Chispas (LC) mining area has been combined into a single named zone and Babicanora Norte (BAN) has been broken into three named zones (Figure 16-34).

Figure 16-34: Ventilation Zones with Design Flow Rates Included in Yellow Boxes



Source: BBE Group, 2023.

16.8.12.4 Main Fans

The mine ventilation modelling was performed using Ventsim™ software to verify that the ventilation zone demand was fulfilled and practical to ventilate, and to calculate the fan operating points. Table 16-16 lists the fans and their modelled duty points required to operate the ventilation network. Configurations with multiple fans are all in parallel. The fan pressure duty point is listed in terms of the modelled fan total pressure (FTP). Motor rating is the size of a standard motor to meet the fan power requirement. Two motor ratings have been provided for each fan: (i) the motor rating to meet the shaft power requirement for the fan at its operating point, inflated by 20%, and (ii) the motor rating required to meet the maximum shaft power for the fan in its listed configuration.

The fans listed as model “Howden 180JH71-6-12 HEVA” are placeholders of a high flow, load head fan to be selected at a later date. The fan listed as model “HVT 60-30-1800” is the fan already in place on site, currently installed at the BAM surface exhaust location. The fan listed as model “Spendrup 140-60-1800-A” is already in place on site, currently installed underground as a booster fan.

Table 16-18: List of Main Ventilation Network Fans

Fan model	Fan Qty	Location	Flow (m^3/s)	FTP (Pa)	Motor rating (hp)		Electrical Power (kW)
					Op. point	Max.	
Howden 180JH71-6-12 HEVA @ curve H	2	BAC/EM surface exhaust	120	316	60	100	93
Howden 180JH71-6-12 HEVA @ curve P	1	EM underground intake	97	293	100	200	78
Howden 180JH71-6-12 HEVA @ curve H	1	BAN NW1 surface intake	61	271	60	100	44
Howden 180JH71-6-12 HEVA @ curve H	1	BAN NW2 surface exhaust	60	317	60	100	47
Spendrup 160-070-1800-A @ 10°	2	BAN SE surface exhaust	115	1,716	250	300	325
Howden 180JH71-6-12 HEVA @ curve L	2	BAM surface intake	166	119	100	150	124
HVT 60-30-1800 @ 26°	1	BAM surface exhaust	98	1,139	400	450	302
Spendrup 160-070-1800-A @ 20°	1	BVS surface exhaust	100	981	300	500	212
Howden 180JH71-6-12 HEVA @ curve P	1	GRA underground exhaust	94	435	125	200	97
Howden 180JH71-6-12 HEVA @ curve L	1	BAS surface intake	80	272	50	150	34
Howden 180JH71-6-12 HEVA @ curve L	2	BAS surface exhaust	118	1,056	150	150	204
Spendrup 140-060-1800-A @ 20°	1	LC surface exhaust	65	418	100	200	76
Howden 180JH71-6-12 HEVA @ curve H	1	LC surface exhaust	60	296	60	100	46
					Total		**1,682**

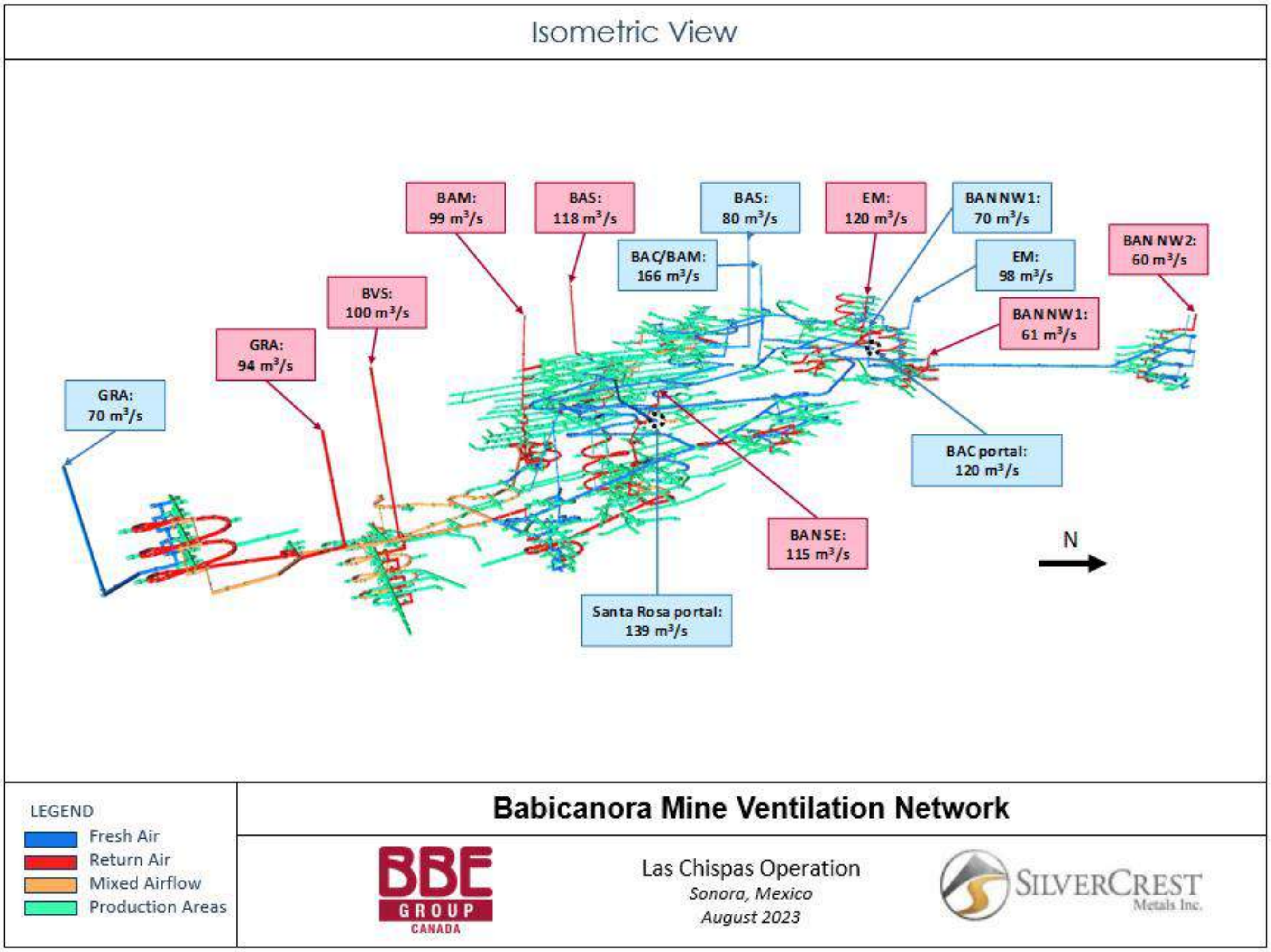
16.8.12.5 Ventilation Flow Detail

The mine is principally ventilated using exhaust fans, so the static pressure throughout the mine is negative. Therefore, connections to surface that are not equipped with fans, such as portals, draw in fresh air. The typical ventilation raise diameter was increased from 3.0 m to 3.6 m to reduce the fan power required to operate the ventilation system and to make the ventilation network more robust to the potential for future expansion.

The flow detail figures below are colour coded. Fresh air is in blue and return air is in red, including text boxes. Yellow is used to indicate partially used or mixed airflow and green is used for production areas.

Figure 16-35 shows how the Babicanora area is ventilated at full production. Only primary ventilation raises and portals are indicated here. The balance of the fresh air is passively supplied via other openings to surface, which consist of escapeways and an old portal.

Figure 16-35: Babicanora Area Ventilation Network



Source: BBE Group, 2023.

The northern part of Babicanora, consisting of BAN NW1, BAN NW2, BAC, and EM, is accessed most directly through the Babicanora Central (BAC) portal. The fresh air raise in BAC is shared with BAM and BAV zones and some of the air entering the BAC portal is directed into BAN SE.

The eastern zone within Babicanora, consisting of BAN SE, is ventilated from the outside to the center, supplied with fresh air from the BAC and Santa Rosa portals and exhausted primarily through an existing raise to surface positioned near the Santa Rosa portal.

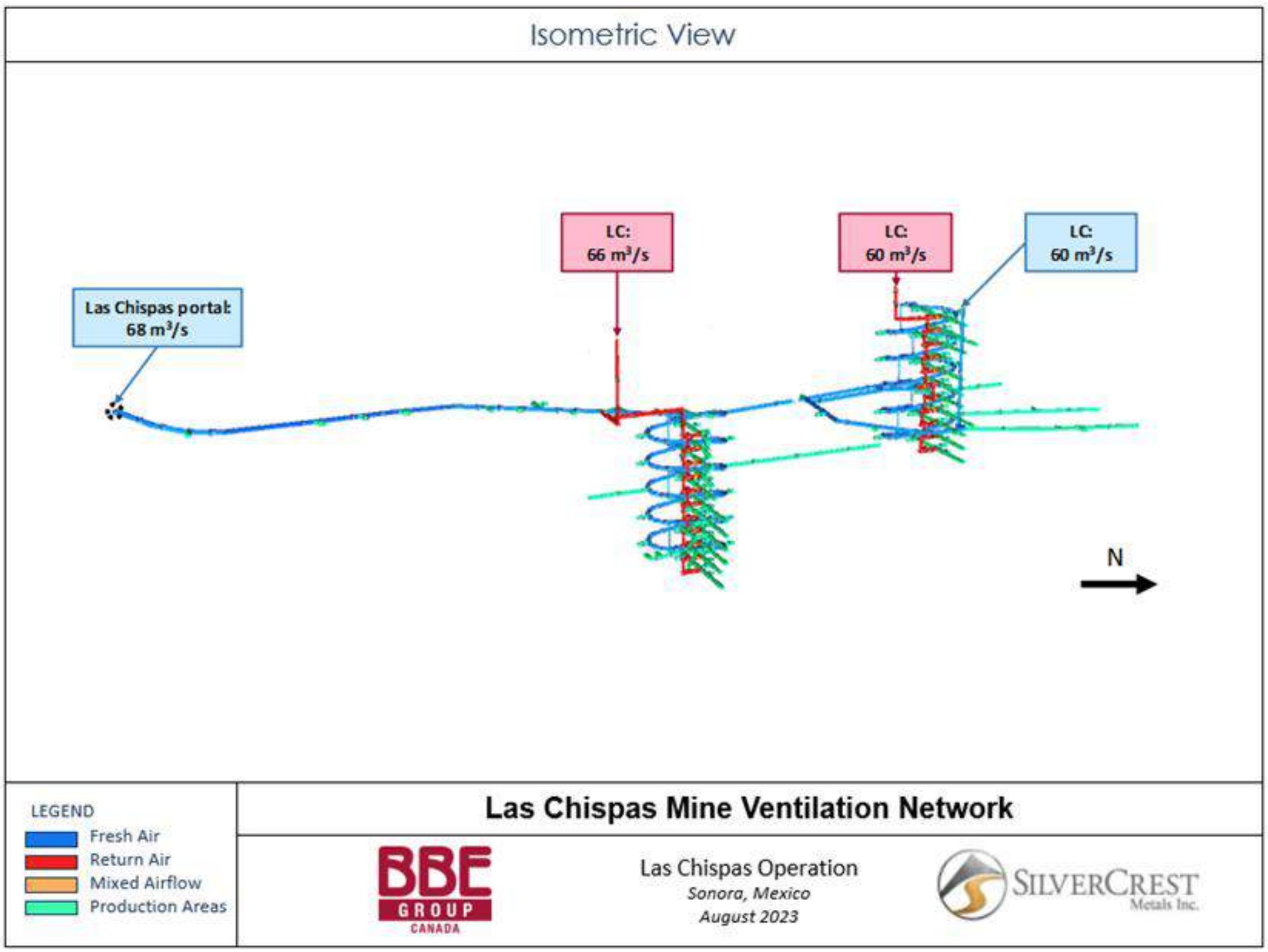
The main zone within Babicanora, consisting of BAM and BAV, is supplied with fresh air primarily from BAC to the north and from the Santa Rosa portal. It exhausts from an existing raise on the south side. Partially used air is routed to BVS in the south and is nearly the sole source of air for that zone. There is an imbalance in the ventilation of BAS to the west, which is intended solely to draw sufficient air flow from BAM to ventilate the haulage ramps connecting the two zones.

The southern area of Babicanora, consisting of BVS and GRA, is supplied with air from BAM and through a fresh air raise in GRA. BVS has no independent supply of fresh air. Both zones have independent exhaust raises.

The western area of Babicanora, consisting of BAS, is ventilated from north to south, with approximately 20% of the fresh air requirement coming from the Santa Rosa portal via BAM into the southern half of the zone.

The Las Chispas area consists of two main zones accessed by independent ramps. Each zone has its own supply of air and return air raise, as shown in Figure 16-36. Interconnections between the new and old workings of Las Chispas have not been modelled here. Creating such interconnections would reduce the necessary fan power required to ventilate this mine, and this will require detailed planning. Inadvertent or unplanned interconnections could create a short circuit and may need to be sealed off to prevent the ventilation flow rates in the mining areas falling below the necessary minimum for diesel emission dilution.

Figure 16-36: Las Chispas Ventilation Network



Source: BBE Group, 2023.

16.8.12.6 Ventilation Phases

The ventilation network is principally designed to meet the whole mine demand simultaneously. The ventilation model was phased to verify that it can meet the design constraints and to quantify the expected power consumption at each major phase of development and production. The zones listed as active in Table 16-19 are based on which fans are required to operate to ventilate the mine, rather than ore production.

Table 16-19: List of Ventilation Phases and Total Operating Fan Power by Phase

Phase	Power (kW)	Start Date	Active Zones
Phase 1	460	May 2023	BAC, BAM, BAN NW1, BAN NW2, BAV
Phase 2	740	Q3 2024	BAC, BAM, BAS, BAN NW1, BAN NW2, BAV
Phase 3	870	Q4 2024	BAC, BAM, BAS, BAN NW1, BAN NW2, BAV, LC
Phase 4	1,680	2027	BAC, BAM, BAS, BAN NW1, BAN NW2, BAN SE, BAV, EM, LC
Phase 5	1,570	2029	BAC, BAM, BAS, BAN NW1, BAN NW2, BAN SE, BAV, EM, LC
Phase 6	1,310	2030	BAM, BAS, BAN NW1, BAN NW2, BAN SE, BAV, LC

16.8.12.7 Level Ventilation

Where possible, level ventilation is achieved with flow through ventilation, where the production level bridges the fresh and return air systems. In most cases, this connection is between the ramp and a nearby ventilation raise, though which side is fresh air, and which is return air depends on the location in the mine. At each breakthrough into a ventilation raise on a production level, a ventilation control regulator is installed to control the flow through the production areas where it is needed and to prevent short circuiting as more connections are established.

In BAM, the production levels have a long strike distance and many link between a fresh air raise on the north side and a return air raise on the south side. Additional ventilation control structures, including ventilation doors at ramp access points, are required in this mining zone to properly control the air flow in this and nearby zones.

Levels that do not have the possibility of being ventilated using a flow-through system, such as cut and fill mining areas, must be ventilated using auxiliary ventilation.

16.8.12.8 Auxiliary Ventilation

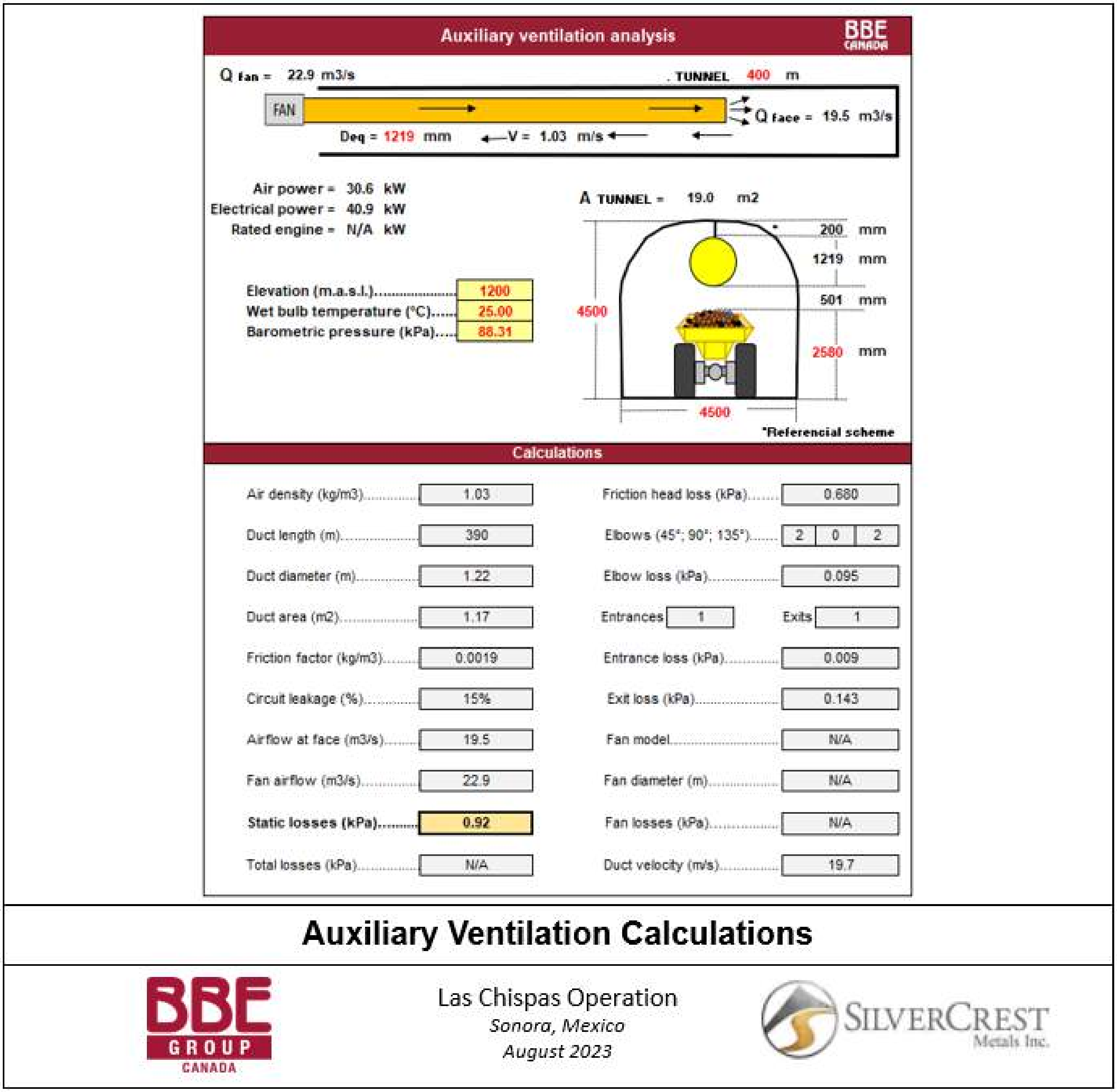
This section describes the auxiliary ventilation system for horizontal excavations: ramps, accesses, and production levels. In each zone of the mine, the following active headings are to be ventilated simultaneously:

- 1 ramp development face
- 1 access to production level
- 3 production faces (2 active faces in one level, 1 active face in another level).

The greatest length of auxiliary ventilation was anticipated to be 400 m during ramp development. The largest single piece of diesel equipment expected to operate on auxiliary ventilation is the 10-tonne LH410 production scoop/LHD, which requires 13.9 m^3/s of air to dilute its emissions. With 40% allowance for secondary equipment operating in the same area, the target flow rate at the end of the duct is 19.5 m^3/s. With a 17% allowance for auxiliary ventilation leakage, the ventilation flow rate faced by the fan is 22.9 m^3/s.

The auxiliary ventilation duct for the ramp is 48” Mechanicad rigid ducting. The complete simulation parameters and results are shown in Figure 16-37. The fan duty point is 22.9 m^3/s with a static pressure of 0.92 kPa at 1.03 kg/m^3 air density. Assuming a combined fan and motor efficiency of 75%, the electrical consumption is 40.9 kW. The auxiliary fan vendor can confirm the fan efficiency, which is required to refine the fan motor rating and electrical consumption.

Figure 16-37: Auxiliary Ventilation Calculator Results



Source: BBE Group, 2023.

16.8.13 Safety Measures

Safety measures at the Las Chispas Operation meet or exceed regulations described in the Mexican Regulation NOM-023-STPS-2012 for Mines and Regulation NOM-002-STPS-2010 specifically for fires.

In case of emergency, personnel at the Las Chispas operations are trained to report to the nearest refuge station. From there, personnel are kept informed of the situation and can receive instructions.

Mine personnel are informed of an emergency via radio communication and through the release of stench gas into the mine.

A mine stench gas warning system has been installed in both operating portals and will be expanded through the LOM (temporary and permanent system). When activated, these release stench into the main source of fresh air brought into the mine. Another mine stench gas warning system will be installed at the mine compressed air system as a second means to alert underground workers in the event of an emergency.

16.8.13.1 Escapeways

A second means of egress must be provided within 500 m walking distance for all production areas. These escapeways can be lateral development or vertical raises with ladderways installed.

The Las Chispas operations currently have lateral development and vertical raises which provide secondary egress.

The network of secondary egresses will be maintained as the Babicanora area expands and when a raise is required it will be 2 m diameter equipped with a Safescape (or equivalent) ladderway. Similarly, at the Las Chispas area, secondary egress will be provided by a series of lateral development and vertical raises with ladderways providing escape from all production areas within 500 m walking distance. The Las Chispas area benefits from being able to connect with the existing rehabbed historic workings, providing close by secondary egress.

16.8.13.2 Refuge Stations

Engineered mobile refuge stations are currently in use at Babicanora and positioned throughout the area in a way that an employee will need 30 minutes or less, or 500 m walking distance to access the refuge from the moment they leave the workplace. At Las Chispas, engineered mobile refuge stations will also be used. Each refuge station is equipped with the following:

- Telephone or radio to surface, independent of mine power supply
- Compressed air, water lines and water supply
- Emergency lightning
- Hand tools and sealing material
- Plan of underground work showing all exits and the ventilation plans.

The anticipated installation locations are listed by mining zone in Table 16-20. Refuge station chambers are relocatable. They may be occasionally moved to more active locations as mining progresses. As such, the number of installations listed in the table reflects the total number of installations or removals expected to occur over the LOM rather than the number of simultaneously installed stations.

Table 16-20: List of Refuge Station Locations

Mine Zone	Quantity
BVS	2
BAM	2
BAS	2
BAC & EM	3
GRA	2
BAN	2
LC	2
Total	**15**

16.8.13.3 Fire Protection

All mobile equipment that enters the mine is equipped with a hand-held fire extinguisher. All equipment larger than a pick-up truck is equipped with a mobile equipment fire suppression system. All personnel are trained in the use of hand-held fire extinguishers. Those that operate mobile equipment fire suppression systems are trained in its use.

Hand-held fire extinguishers are strategically located throughout the mine at electrical, fixed equipment, declines and storage areas.

Personnel that perform hot-works are trained and follow a hot-work permit system which is meant to limit the risk of setting fires while burning and welding.

16.8.13.4 Mine Rescue

The Las Chispas operation has an established, fully equipped Mine Rescue team with ongoing recruitment and training. The Mine Rescue equipment list includes items such as a mobile emergency vehicle, 17 BG-4 self-rescuers, foam generator, gas monitors, assorted firefighting equipment, an assortment of small tools and medical equipment.

The site maintains a minimum mine rescue team of 45 trained members: 15 on day shift, 15 on night shift and 15 on rotation off site at any time.

16.9 Underground Equipment

All mining activities are being completed by the mining contractor using contractor equipment, apart from light vehicles used by the LLA support staff. A total of 74 units of mobile equipment will be required over the mine life, as listed in Table 16-21. The maximum listed equipment for 2024-2030 assumes industry accepted availability and utilization. While more units may be onsite, this list identifies the required number of active units.

Table 16-21: Underground Mine Equipment

<table>
<tr><th rowspan="2">Mining Equipment</th><th rowspan="2">Make and Model</th><th>2023</th><th>2024-2030</th></tr>
<tr><th>Current Fleet</th><th>Max Units</th></tr>
<tr><td colspan="4">Production/Development Equipment</td></tr>
<tr><td>Jumbo Drill (Single Boom)</td><td>Sandvik DD311</td><td>4</td><td>4</td></tr>
<tr><td>Jumbo Drill (Double Boom)</td><td>Sandvik DD320</td><td>1</td><td>1</td></tr>
<tr><td rowspan="2">Bolter</td><td>Sandvik DS311</td><td>7</td><td>4</td></tr>
<tr><td>Resemin Muki</td><td>3</td><td>3</td></tr>
<tr><td>Explosives Truck</td><td>Polvorera Ford F-450</td><td>2</td><td>3</td></tr>
<tr><td>Stope Loader - 2.5yd3</td><td>Sandvik LH203</td><td>2</td><td>3</td></tr>
<tr><td>Stope Loader - 4.0yd3</td><td>Sandvik LH307</td><td>3</td><td>3</td></tr>
<tr><td>Truck Loader - 6.0yd3</td><td>Sandvik LH410</td><td>3</td><td>4</td></tr>
<tr><td rowspan="3">Haul Truck</td><td>Sandvik TH430</td><td>2</td><td rowspan="3">10</td></tr>
<tr><td>Sandvik TH315</td><td>1</td></tr>
<tr><td>Epiroc MT436B</td><td>3</td></tr>
<tr><td rowspan="3">Production Drill (Longhole)</td><td>Resemin Jumbo Raptor</td><td>3</td><td rowspan="3">3</td></tr>
<tr><td>Resemin Jumbo Troidon 55</td><td>1</td></tr>
<tr><td>Resemin Jumbo Muki LHBP-2R</td><td>2</td></tr>
<tr><td>Production Drill (C&F & Resue)</td><td>Resemin Jumbo FF</td><td>2</td><td>2</td></tr>
<tr><td colspan="2">Total Prod/Dev Units</td><td>39</td><td>40</td></tr>
<tr><td colspan="4">Service Equipment</td></tr>
<tr><td>Scissor Lift</td><td>Maclean</td><td>1</td><td>2</td></tr>
<tr><td>Dump Truck</td><td>Kenworth T800</td><td>3</td><td>3</td></tr>
<tr><td>Bulldozer</td><td>Caterpillar D4</td><td>1</td><td>2</td></tr>
<tr><td>Backhoe</td><td>Retroexcavadora 580N</td><td>4</td><td>4</td></tr>
<tr><td>Shotcrete Sprayer</td><td>Normet Alpha 20</td><td>1</td><td>2</td></tr>
<tr><td>Concrete Mixer (1m^3 and 4m^3)</td><td>Mixed Fleet</td><td>2</td><td>3</td></tr>
<tr><td>Light Vehicle</td><td>Mixed Fleet</td><td>15</td><td>15</td></tr>
<tr><td>Personnel Carrier</td><td>Pasajeros International</td><td>3</td><td>3</td></tr>
<tr><td colspan="2">Total Service Units</td><td>30</td><td>34</td></tr>
<tr><td colspan="2">Total Units</td><td>69</td><td>74</td></tr>
</table>

16.10 Mine Personnel

The Las Chispas Operation operates seven (7) days a week with two (2) 12-h shifts each day of the year. Operations and staff work on a variety of rosters and accommodations on site or in local communities.

SIL is responsible for providing management and technical services support for the site. Current manpower levels in Mine Operations and Technical Services total 71 people. This number will reduce over time through attrition.

The majority of the personnel working in the underground fall under the development and production contract. Currently 279 people work under this contract with an additional 48 people at full production totalling 327.

17 RECOVERY METHODS

17.1 Process Design

The Las Chispas Operation is designed to process 1,250 tpd to produce Ag-Au doré via cyanide leaching and Merrill-Crowe recovery.

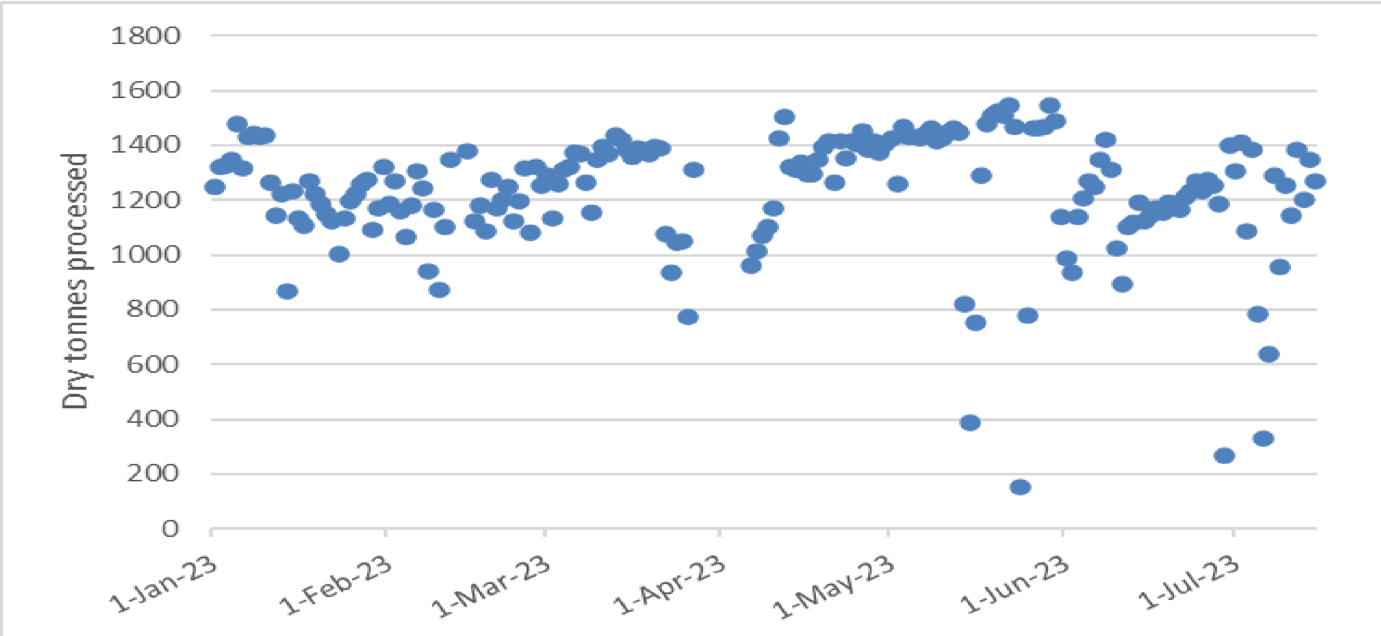
- Major equipment is achieving a nominal throughput of 1,250 tpd, with the ability to accommodate increased throughput up to 1,750 tpd via an expansion to the comminution circuit, if desired.
- Crushing circuit availability of 70% or higher is being achieved, supported by using a surge bin, a dedicated feeder and an emergency stockpile to provide continuous feed to the balance of the Process Plant.
- The Process Plant facility, including semi-autogenous grinding (SAG), cyanide leaching circuit, Merrill Crowe circuit, and tailings handling facilities, is achieving an overall availability of 91.3% or greater:
  - SAG design values (Axb) of 41 and BWI of 19.4 kWh/t are sufficient to process future material
  - Design head grades of 8 gpt Au and 800 gpt Ag with the ability to handle peak head grades of 13 gpt Au and 1,300 gpt Ag are higher than required to process future material.
  - Overall process recovery of 98.0% gold and 97.0% silver, given the LOM average grades.

The total power consumption for the Process Plant has averaged 56 kWh/t between January and April 2023.

The Process Plant is located at the mine site and receives blended feed material from numerous mineralized veins. Due to anticipated grade and clay content variability within the deposit, operational periods exist where blending of mineralized materials from selected mining areas is preferred to mitigate potentially adverse effects on Process Plant operability or process recoveries.

Figure 17-1 presents the daily dry tonnes processed since January 1, 2023, excluding scheduled down days.

Figure 17-1: Daily Tonnes Processed since January 1, 2023



Source: Ausenco, 2023.

17.2 Selected Process Flowsheet

The Operation includes:

- Primary crushing
- Single stage SAG mill circuit closed with cyclones for classification
- Bulk rougher flotation
- Flotation concentrate cyanide leaching
- Flotation concentrate post-leach thickening;
- Flotation tails pre-leach thickening
- Bulk cyanide leaching
- Countercurrent decantation (CCD) washing and pre-clarification of pregnant solution
- Clarification, de-aeration and zinc precipitation of Au and Ag (Merrill-Crowe)
- Mercury removal using a retort
- Smelting to produce doré
- Cyanide Detoxification by Air-SO2
- Tailings thickening and filtration
- Transferring filtered tails to the FTSF.

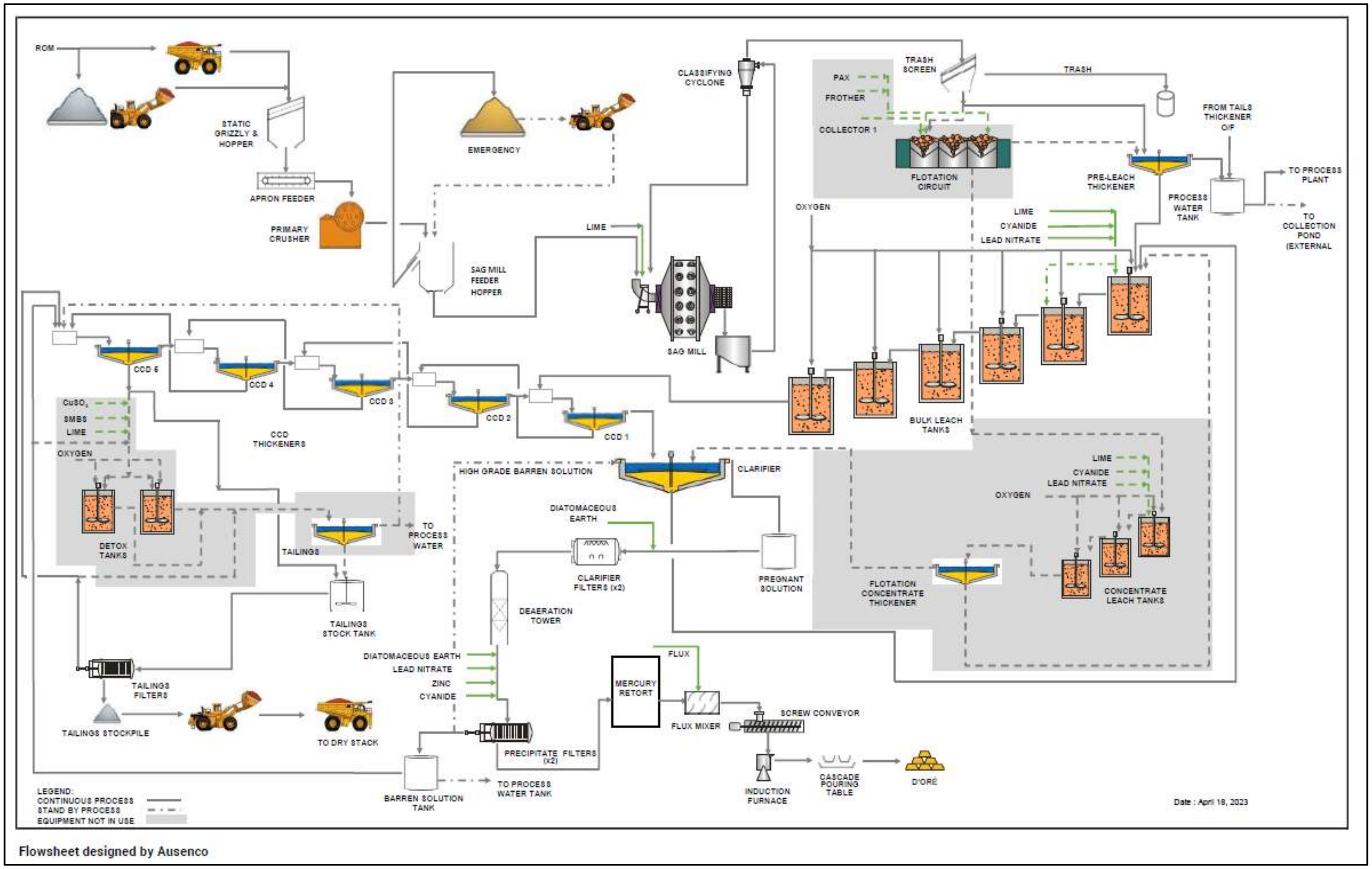
The Operation is currently bypassing the bulk flotation and concentrate leaching circuits, with all leaching occurring in the bulk leaching circuit with free cyanide concentrations maintained above 1,500 mg/L. This configuration provides greater economics than the base case flowsheet due to the extremely high cost of SMBS and cyanide at this time. The current strategy allows the Operation to maintain high metal recoveries while separating the grinding water loop from the leaching and metal recovery solution loop.

Separating the two solution loops allows the Operation to:

- bypass the detox circuit thereby saving on reagents costs and increasing cyanide recycle to leaching circuit while maintaining low cyanide concentrations in the filtered tailings seepage ponds.
- reduce metal loss in filtered tailing solution by eliminating the use of grinding water in the CCD that has higher Au and Ag concentrations than the Merril-Crowe Barren solution.

Figure 17-2 presents an overall process flow diagram of the facility. The sections with grey shade are not currently operating except the Detox tanks that are operating intermittently on either solution or slurry depending on North Pond seepage solution volume and CN concentration.

Figure 17-2: Overall Process Flow Diagram



Source: Ausenco, 2023.

The Process Plant uses a conventional comminution circuit, including a primary jaw crusher and a SAG mill, to reduce the feed material to the target particle size distribution for processing. The SAG mill operates in closed circuit with a cyclone cluster with the cyclone underflow returned to the SAG mill and cyclone overflow forwarded to a trash screen. Cyclone overflow is thickened in a pre-leach thickener prior to transferring to the bulk leach circuit. In the bulk leach circuit, gold and silver are recovered by conventional cyanide leaching in stirred tanks.

The Process Plant has the option to direct the cyclone overflow to a bulk flotation circuit if the economics of operating the detoxification circuit and leaching a concentrate and tails separately are more favourable than the current strategy. Concentrate would be leached in a separate, higher intensity leach circuit equipped with a concentrate post-leach thickener. The overflow of this thickener would be forwarded to the Merrill Crowe process with solids returned to the first bulk leach tank. Flotation tails would be thickened in the pre-leach thickener prior to entering the first bulk leach tank.

Discharge solids from the bulk leach are washed in a five-stage CCD circuit and the CCD#1 overflow is clarified to remove fine solids. The resulting clarified solution is deaerated and treated in a Merrill-Crowe process, which employs addition of zinc powder to precipitate gold and silver. The precious metals precipitate is filtered and treated in a retort furnace for mercury removal and then smelted on site to produce gold–silver doré bars. The captured mercury is collected and disposed of safely off site. Since start-up, no mercury has been collected from the retort.

Underflow slurry from the fifth wash thickener is filtered and the filter cakes are transferred to the FTSF for impoundment.

Recent modifications to the Process Plant allow FTSF seepage water to be sent to the detox circuit for treatment if desired.

The Process Plant has the option to treat underflow from the fifth CCD thickener with sulphur dioxide and oxygen to destroy residual cyanide. The detoxed slurry would be thickened prior to filtration and transfer to the FTSF.

17.3 Key Process Design Criteria

The key process design criteria listed in Table 17-1 form the basis of the process flowsheet design and installed mechanical equipment.

Table 17-1: Process Design Criteria

Parameter	Unit	Value
Plant Throughput	tpd	1,250
Head Grade–nominal	gpt Au	8
	gpt Ag	800
Head Grade–design	gpt Au	11
	gpt Ag	1,100
Head Grade- peak	gpt Au	13
	gpt Ag	1,300
Overall Recovery (From mineralized material to doré)–Au	%	98.0
Overall Recovery (From mineralized material to doré)–Ag	%	97.0
Plant Availability	%	91.3

Parameter	Unit	Value
SMC- Axb-design (75th percentile)	kWh/t	41
Bond Ball Mill Work Index–design (75th percentile)	kWh/t	19.4
Flotation Concentrate Mass Pull	%	2
Flotation Concentrate Leach Residence Time	h	96
Concentrate Leach Slurry Density	% solids (w/w)	15
Concentrate Thickener Solid Loading	$t/m^2.h$	0.1
Pre-Leach Thickener Solid Loading	$t/m^2.h$	0.6
Bulk Leach Residence Time	h	96
Bulk Leach Slurry Density	% solids (w/w)	48
Total Sodium Cyanide Consumption Rate (design)	kgpt	3.5
Total Quick lime Consumption Rate (design)	kgpt	1.76
Number of CCD Wash Stages		5
CCD Wash Efficiency	%	99.7
Metal Recovery Method		Merrill Crowe
Cyanide Detoxification Method		SO_2/Air
Tailings Thickener Solid Loading	$t/m^2.h$	0.6
Tails Filter Cake Moisture	%	18
Tailings Management	—	Dry stacking

Source: Ausenco, 2023.

17.3.1.1 Comminution

Operations to date have been aligned with the design, verifying the robustness of the circuit design. Material wear rates in practice have been lower than estimated during the 2021 FS Report. This may be a result of higher clay content than samples used during the lab tests.

17.3.1.2 Flotation Circuit

The flotation circuit was installed to generate a high-grade concentrate, which would be leached under aggressive conditions. The circuit is being bypassed for improved economics associated.

The flotation circuit consists of four TankCells with internal launders, the first TankCell cell is used as the conditioning tank for the nominal throughput at 57 tph.

17.3.1.3 Cyanide Leach and Pregnant Leach Solution Recovery

Concentrate leach circuit consists of 3 leach tanks with 96-h residence time and the bulk leach circuit consists of 6 tanks with a 96-h residence time.

Solids are washed in a 5 stage CCD consisting of five 14 m thickeners.

17.3.1.4 Thickening and Filtration

Pre-leach thickener, CCD thickeners, tails thickener and filtration are operating as designed.

17.3.1.5 Merrill Crowe Circuit

The Merrill Crowe circuit is designed for a pregnant solution feed rate up to 366 m^3/h and peak head grades of 1,300 gpt Ag and 13 gpt Au.

17.3.1.6 Cyanide Detox

The Cyanide detoxification circuit can operate on either slurry (as initially designed) or on solution from the North Pond. Typically, this circuit is by-passed and operate on as needed basis to maintain the North Pond with a low volume and CN concentration below the ICMC levels.

17.4 Unit Process Description

17.4.1 Crushing Area

A conventional jaw crusher reduces the feed material particle size to P80 of 63 mm, suitable for feeding a single stage SAG mill. The nominal feed throughput of the crushing circuit is approximately 74 tph, at 70% availability.

The crushing circuit major equipment includes:

- Static grizzly and hopper
- Apron feeder
- Jaw crusher (75 kW);
- Surge bin
- Belt feeder to reclaim crushed material to feed the SAG mill
- Emergency stockpile and reclaim
- Associated material handling systems (conveyors, weightometers and tramp magnet).

Run-of-mine (ROM) mineralized material is trucked from the underground mine either to the ROM pad stockpile or directly onto the static grizzly hopper. ROM mineralized material from the stockpile is reclaimed using front-end loaders and dumped into the static grizzly hopper. The jaw crusher is a Metso C80 with a closed side setting (CSS) of 80 mm and crushes the ROM mineralized material from F80 of 159 mm to P80 of 63 mm. The crushed mineralized material is conveyed to the surge bin via the primary crusher product conveyor. A tramp metal magnet is installed at the head end of this conveyor to remove tramp. The tramp metal is manually removed as needed.

The surge bin has a live capacity of 10 minutes for 9.5 t of storage.

Surge bin overflow is transferred to an emergency stockpile via the emergency stockpile conveyor and reclaimed from the stockpile using a front-end loader when required. The emergency stockpile provides 16 hr of storage given a plant feed rate of 57 tph.

Crushed mineralized material is reclaimed via a belt feeder beneath the surge bin and conveyed to the SAG mill feed chute by the SAG mill feed conveyor.

A freshwater line is available for dust suppression in the crushing area if required.

17.4.2 Grinding Circuit

A conventional SAG mill, arranged in closed circuit with a cyclone cluster, reduces the mineralized material from a F80 of 63 mm to P80 of 100 µm. The nominal feed throughput of the grinding circuit is approximately 57 tph, based on 91.3% availability.

The grinding circuit includes:

- One SAG mill, 6.1 m (20 ft) in diameter by 3.66 m (12 ft) in length, powered by a 2,000-kW variable speed drive motor
- Two 55 kW slurry pumps to pump SAG mill discharge to cyclones, with one pump in operation and one in standby
- One cyclone cluster with ten 250 mm cyclones, six to eight in operation and two to four in standby
- Associated material handling and storage systems (sump pumps, pump boxes, bins).

Crushed mineralized material is reclaimed from the surge bin onto the SAG mill feed conveyor and discharged into the feed chute of the SAG mill. The SAG mill is a grate discharge type mill. The grate aperture is 15 mm and has no pebble ports, so there is no recycle of pebbles. Provisions were made in the plant layout to allow the installation of a ball-mill, the retrofit of conveyors and a pebble crusher in a potential expansion case.

The SAG mill product is discharged onto a trommel screen. Trommel screen undersize reports to a cyclone feed pump box and the oversize to a scats bunker. Process water is added to the SAG mill feed chute and cyclone feed pump box to maintain a target mill discharge slurry solids density of 70%. The cyclone cluster is fed at a nominal rate of 228 tph to separate the coarse and fine particles in the SAG mill trommel screen undersize. The cyclone underflow returns to the SAG mill feed. The nominal circulating load is 400%. The cyclone overflow with a particle size of P80 of 100 µm reports to the bulk leaching circuit after flowing through a trash screen to remove foreign material. Trash reports to the trash bunker which is periodically removed for emptying.

A vertical cantilevered centrifugal sump pump services the area. Grinding media for the SAG mill is introduced by use of a dedicated kibble and a grinding building jib crane.

17.4.3 Bulk Rougher Flotation

The bulk flotation circuit is not currently being operated. The following description outlines how the equipment will be operated when more economic than current strategy.

The bulk rougher flotation circuit is installed to generate a small amount of concentrate, 2% mass pull, that would contain a significant portion of the gold and silver from the ore. The high-grade flotation concentrate would be leached in a concentrate leach circuit with high-intensity cyanide conditions to dissolve the gold and silver from the flotation concentrate into a small stream of high-grade pregnant solution. The produced pregnant solution would be further processed in the Merrill Crowe circuit in conjunction with the pregnant solution recovered from the flotation tails (bulk) leach circuit.

The flotation circuit as built includes:

- One trash screen, currently in use to clean the grinding cyclone overflow
- Four 5 m^3 forced-air tank cells, arranged in series.

Cyclone overflow would gravitate over the vibrating trash screen, to remove foreign material prior to flotation. Screen undersize would gravitate to the first flotation cell which is used as conditioning tank at current throughput (57 tph).

Pax and Aeroflot 208 would be added as preferred collectors, respectively in the first and third flotation cells using dedicated pumps. Frother would also be dosed into the first and third flotation cells using dedicated pumps.

Fine gold and silver associated with sulphides would be floated in the bulk rougher circuit and flow by gravity to the concentrate leach feed pump box via overflow launder. The 2019 testwork showed that the flotation concentrate would have typical particle size of 30 µm and no regrinding step would be required prior to concentrate leaching.

The flotation tailings would flow by gravity to the flotation tails pump box and would be thickened in a pre-leach thickener prior to leaching in the bulk leach circuit.

On average recovery of 62% and 64% of gold and silver respectively was estimated to the flotation concentrate.

17.4.4 Cyanide Leach

Leaching of separate flotation products is not currently in use at the Operation. The following description outlines how the equipment would operate when needed.

The concentrate leaching circuit would leach precious metal values from the flotation concentrate in a series of stirred tanks and the corresponding leach residue would be thickened in a concentrate thickener. Thickener overflow, a pregnant solution containing high concentrations of dissolved precious metals, would be pumped to a pre-clarifier for removal of fine suspended solids before being introduced to the Merrill Crowe circuit. Thickener underflow pumps would transfer the concentrate leach residue to bulk leach circuit for further extraction of the gold and silver, and for recovery of the unconsumed cyanide.

Gold and silver contained in the flotation tailings or whole ore is be extracted in the bulk leaching circuit. Residue from the bulk circuit flows to the CCD thickeners for washing.

17.4.4.1 Flotation Concentrate Cyanide Leaching

This circuit is not currently operating. The flotation concentrate would be leached in three mechanically-agitated leach tanks operating in series.

The nominal feed rate of flotation concentrate to the corresponding cyanide leaching circuit was designed to be 1.2 tph.

The flotation concentrate leaching circuit as built includes:

- Three 6.8 m diameter x 6.8 m high leach tanks
- One 5 m diameter high-rate concentrate thickener
- Associated material handling and storage systems (agitators, pumps, sump pumps, pump boxes).

The concentrate leaching circuit would operate continuously; leaching reagents, including sodium cyanide and lead nitrate would be added to facilitate gold and silver extractions. The operating pH of the leach circuit would be maintained between 10.5 and 11.0 with additions of milk of lime to drive leach kinetics, to limit corrosion and to prevent the loss of cyanide to gaseous hydrogen cyanide. Milk of lime is actively produced in a lime slaking plant located on site for use in the bulk leaching circuit.

Gold and silver leaching would occur in a series of three tanks, providing over 96 hours of total residence time. Each leach tank is designed to have a live volume of 229 m³, providing 32 hours retention. The target solids concentration for the leach circuit would be15% w/w; barren solution would be added to the concentrate leach feed pump box to achieve the desired leach density.

Leach discharge slurry would gravitate to a thickener where it would be mixed with diluted flocculant to increase particle settling rate. The concentrate leach thickener is a 5 m diameter high-rate thickener, which would increase the solids density to a target of 30% w/w. Thickener underflow slurry would be pumped to the feed box ahead of the bulk leach circuit using a concentrate leach thickener underflow pump. Thickener overflow, containing the bulk of the precious metal values, would be pumped to a pre-clarifier.

Oxygen is produced at site using vacuum swing adsorption (VSA) technology, with a supply of liquid oxygen available as a backup when necessary. Oxygen would be supplied from the oxygen plant, as required, and delivered to the concentrate leaching circuit via the tank agitator shafts. The dissolved oxygen would be maintained at the range of 20–30 mg/L in the circuit.

To allow for maintenance of individual concentrate leach tanks, the circuit is configured with a provision which allows for slurry to bypass any single leach tank and report directly to the subsequent leach tank, allowing one tank to be removed for service without requiring the entire circuit to be stopped.

17.4.4.2 Bulk Cyanide Leaching

Whole ore or bulk flotation tails is thickened and subsequently leached in the bulk leaching circuit, which consists of six, mechanically-agitated leach tanks operating in series. The nominal feed rate to the bulk cyanide leaching circuit is 57 tph.

The bulk cyanide leaching circuit includes:

- One 14 m diameter high rate thickener
- One leach feed box
- Six 12 m diameter x 12.7 m high leaching tanks
- Associated material handling and storage systems (agitators, pumps, sump pumps, pump boxes).

The whole ore or flotation tails at 30% w/w solids density are fed to the pre-leach thickener to increase the solids density to 46% w/w target density prior to feed to the bulk leach circuit.

Sodium cyanide, for gold and silver dissolution, is added to the leach circuit via cyanide ring main and dosing valves and maintained ~1,500 mg/L. The primary cyanide dosing point is the leach feed distribution box, with a further addition point located in each leach tank. Lead nitrate is added to the leach circuit to reduce the detrimental effect of metallic sulphides and decrease cyanide consumption. Milk of lime is used to maintain the operating pH of the leach circuit between 10.5 and 11.0.

Oxygen is introduced into the circuit via the leach tank agitator shafts, to maintain the desired oxygen level at 20 mg/L in the circuit. The bulk leach circuit has a 96 hr retention time, equally distributed across the six tanks. Slurry exiting the leach circuit flows by gravity to the CCD circuit to recover pregnant solution from leached slurry.

The leach circuit is serviced by a vertical cantilevered centrifugal sump pump, which will return spillage to a nearby leach tank.

17.4.5 CCD Circuit and Pre-Clarifier

A five-stage CCD washing circuit and a pre-clarifier is used to recover pregnant solution from the cyanide leached slurry. The nominal throughput of the circuit is approximately 57 tph.

The washing circuit includes:

- Five 14 m diameter high rate thickeners
- One 23 m diameter pre-clarifier
- One pregnant solution storage tank, with a live volume of 460 m^3
- Associated material handling and storage systems (feed boxes, pumps, sump pumps, pump boxes).

The leached slurry gravitates to the first CCD thickener and underflow from the first thickener is fed to the subsequent CCD thickener. The process repeats until the solids flow reports to the last CCD thickener (CCD No. 5). The underflow of CCD No. 5 is pumped to the tailings stock tank prior to filtration or to the cyanide detoxification circuit if the process flowsheet in operation requires it. The barren solution from the Merrill Crowe circuit is added to CCD No. 5 as wash solution. Overflow solution from the final CCD thickener flows in a counter current mode to the preceding thickener. The overflow from the first CCD thickener flows to a pre-clarifier feed box. The recovered pregnant solution from the concentrate leach circuit would combine with the pregnant solution recovered from CCD circuit. Pregnant solution is clarified in the pre-clarifier prior to storage in the pregnant solution tank which feeds the Merrill Crowe circuit. The pre-clarifier underflow is pumped to bulk cyanide leach feed box.

The washing ratio, washing solution volume to feed solution volume, is designed at 3.5:1 to achieve an overall CCD washing performance efficiency of higher than 99%.

Settling of solids is aided by the addition of diluted flocculant at each stage of CCD and diluted coagulant to the pre-clarifier.

Antiscalant is added to the pregnant solution tank as required to inhibit scale formation in the Merrill Crowe circuit.

One vertical cantilevered centrifugal sump pump is provided in the CCD area to return spillage to the circuit.

17.4.6 Merrill Crowe Circuit

Pregnant liquor from the pre-clarifier is stored in the pregnant solution tank. Clarified pregnant solution is treated by the Merrill Crowe process which employs zinc-dust cementation to recover the contained precious metals. The barren solution is recycled to the CCD wash circuit as wash solution. The nominal solution feed rate to the Merrill Crowe precipitation circuit is approximately 300 m^3/h, although the circuit was designed to treat up to 366 m^3/h of pregnant liquor.

The Merrill Crowe circuit was provided as a vendor package, and includes:

- Two rotating disk filters as clarifier filters, each having a 139 m^2 filtration area
- One de-aeration tower
- One air/water separator
- One de-aeration tower vacuum pump
- One zinc mixing cone, including a hopper and a feeder
- Two precipitation filter press units, each having a 185 m^2 filtration area
- One pre-coat preparation tank
- One body feed preparation tank
- Associated material handling and storage systems (pumps, sump pumps, pump boxes, feed conveyors).

Pregnant solution from the pre-clarifier is discharged to the pregnant solution tank which provides 1.5 hr of surge capacity to cater to the semi-continuous nature of the clarification and precipitation stages in the Merrill Crowe circuit.

A further stage of clarification is required to reduce the suspended solids content to <5 mg/L for efficient zinc precipitation. The clarifying filter feed pumps forward the pregnant solution from the pregnant solution tank to clarifying disk filters to remove any residual solids. Two filters are provided in a duty/standby arrangement. Pre-coat is required to enhance capture of the fine solids at the start of each cycle. At the end of the filtration cycle, the clarifying filter sludge is pumped back to the CCD circuit via the clarifying filter sump pump, to minimize any losses of precious metals in the entrained solution.

Filtrate from the clarifying filters feeds the de-aeration tower. Dissolved oxygen is removed under vacuum by splashing the pregnant solution over tower packings to increase the exposed surface area. De-aeration of the solution prevents excessive zinc consumption by minimizing side reactions that oxidize zinc.

De-aerated pregnant solution is contacted with the zinc dust slurry and pumped to the precipitate filters using precipitate filter feed pumps. Zinc dust is slurried with barren solution in a zinc mixing cone. Cyanide is added to the process as required, to maintain adequate free cyanide for the precipitation reaction. A small flow of lead nitrate solution is also injected to the pregnant solution pipe prior being contacted with zinc dust to improve the precipitation efficiency. The precipitate filter feed pumps are horizontal centrifugal pumps with mechanical seals such that air cannot enter the system.

The precipitate filters are recessed plate filter presses furnished with filter cloths. Pre-coat is used at the beginning of the filter cycle to prevent cloth blinding and body feed is required to provide acceptable filtration rates. The filters will typically be operated in a duty/standby configuration and operated until the pressure reaches a predetermined value. Filtrate reports to the barren solution tank to be reused mainly as CCD wash solution. The original flowsheet allowed any excess barren solution to report to the cyanide detoxification circuit to be recycled to Process Plant as process water or could be bled from the plant as required which is not currently necessary. The facility to recycle barren solution to the pre-clarifier feed box was included in the design in case high-grade barren solution occurs.

At the end of the precipitation filtration cycle, feed pumps are shut down, filters drained, and compressed air may be used to further dewater the cake. The filter cake, containing approximately 50% w/w precious metals, is dropped onto precipitate carts for transfer to the doré room for smelting. The precipitate filters are located in a secured, closed room within the doré room building.

17.4.7 Doré Room

Zinc precipitates from the Merrill Crowe circuit is loaded into a mercury retort for removal of mercury and further treated by smelting into gold–silver doré. The smelting process is performed in batch mode. The circuit is in a secure enclosed area with closed circuit television (CCTV) cameras and restricted access. The doré room was designed to be able to manage the volume of doré to be produced at design grades for gold and silver.

The smelting circuit was provided as a vendor package, and the main equipment includes:

- One 54 kW, (40 ft^3) electric retort and adsorption skid
- One 400 kW, (10 ft^3) induction furnace
- Flux dosing and flux mixer system
- One gold–silver doré safe
- Mechanized slag handling
- Associated material handling and other systems (molds, dryers, dust collection system).

There is a provision in doré room layout to install a second mercury retort if the plant receives higher grade material and the inclusion is justified. A second gas fire furnace is planned for installation in 2023.

The wet precipitate filter cakes from the Merrill Crowe circuit are loaded into the mercury retort for removal of mercury. The mercury retort, as part of the vendor package, includes the retort oven, condenser, mercury trap, sulphur-impregnated carbon adsorber, and a vacuum pump with seal water separator. If present, mercury is collected in a mercury trap and decanted into a mercury flask.

Once the mercury free material has cooled following the retort process, it is mixed with fluxes and loaded into the electric furnace for smelting. The fluxes react with base metal oxides to form a slag, whilst the gold and silver remains as molten metal. The molten metal is poured into 55kg moulds, to form doré ingots at nominal composition of 0.5-1.5% Au and 85-95% Ag, and other impurities including copper and zinc. The doré bars are cleaned, assayed, stamped, and if needed, stored in a secure vault ready for periodic transfer to market.

Once solidified, slag is tipped from the slag pot onto spikes and broken slag is collected in a bin underneath and stored.

Sufficient ventilation and off-gas handling is provided in the doré room for a healthy work environment. Fume and dust exposure for the melting furnace and material handling is controlled through a ventilation system installed in the doré room, including hoods, enclosures, and fans to follow local regulations/guidelines.

A sump pump, complete with precious metals trap, is installed in the doré room to remove mercury retort condenser return water, scrubber liquid and any hose-down or spillage, and return it to pre-clarifier feed box.

17.4.8 Cyanide Detoxification

The cyanide detoxification circuit is operated on an as-needed basis. It is used as required on slurry (leach residue) or on solution depending on the volume contained in the North Pond and the residual CN level of the seepage solution.

The following description outlines how the circuit operates when desired.

The washed leach residue slurry from the CCD circuit is treated using a sulphur dioxide (SO_2)-O_2 process to reduce the CN_{WAD} cyanide concentration.

The cyanide detoxification circuit includes:

- Two cyanide detoxification reaction tanks of 4.7 m in diameter x 7 m high, operating in parallel
- Associated material handling systems (pumps, pump boxes, sump pumps).

Thickened, washed tailings slurry from the final CCD thickener, with solids concentration of approximately 50%, is pumped to the cyanide detoxification tanks. Barren solution is used for slurry density control. In the SO_2–O_2 process, sodium metabisulphite, oxygen, copper sulphate (catalyst) and milk of lime is added to oxidize residual free and CN_{WAD} to cyanate, thereby reducing the CN_{WAD} concentration to the target level prior to filtration and long-term storage of the tailings solids. The cyanide detoxification circuit as built consists of two mechanically agitated tanks, each providing a residence time of 1 hr.

Oxygen is provided from the oxygen plant as required and would be added to the tanks via agitator shafts. CN_{WAD} levels of the cyanide detoxification discharge is being measured by analysis of regularly collected samples.

The detoxified tailings is pumped to a thickener to thicken the slurry prior to filtration and dry stacking of the final solids.

The cyanide detoxification circuit is serviced by a dedicated sump pump.

17.4.9 Final Tailings Dewatering and Disposal

Underflow from CCD No.5 is filtered, and the filtered solids are impounded in an on-site storage facility. A tailings thickener is provided for dewatering of the detoxified tailings and is bypassed with the cyanide detoxification circuit (on slurry). The nominal throughput of the final tailings circuit is approximately 57 tph.

The tailings circuit includes:

- One 14.0 m diameter high-rate thickener
- One 8.6 m diameter x 8.6 m high agitated tails filter feed tank
- Two 2.1 m x 2.1 m, 120 chamber plate and frame pressure filters
- One 3.5 m diameter x 3.5 m high tails filter filtrate tank
- One 3.5 m diameter x 3.5 m high cloth wash water tank

- Associated material handling systems (pumps, pump boxes, sump pumps).

Thickener underflow slurry, at approximately 50% solids w/w, is pumped to an agitated filter feed tank, prior to being pumped to a filtration circuit for further dewatering. This tank provides 6 hr of surge capacity between the thickener and filter. Two vertical plate pressure filters were selected for this purpose to increase the solid density of the tailings from approximately 50% w/w to 82% w/w, after which the tailings are hauled to the FSTF.

Filtered solids are impounded at the designated FTSF, located northeast of the Process Plant. Filtrate can be recycled back to the tailings thickener, where it would be combined with tailings thickener overflow solution and ultimately report to the process water tank for distribution throughout the process facilities or in current operations, filtrate is recycled back to the CCD thickeners to be used as wash solution.

Any spillage within this area is returned to the sump pump in the cyanide detoxification area, and in turn is pumped to the tailings stock tank.

17.4.10 Reagent Handling and Storage

The mixing and storage area for each reagent is located proximate to various addition points throughout the plant. Some reagents are delivered in 25 kg bags, and manually handled from a pallet to the bag breaker for mixing and further storage. Reagents delivered in bulk bags are moved from storage to the mixing area by forklift. Electric hoists servicing in the reagent area lift the reagents to the respective reagent bag breaker that is located above the reagent mixing area.

The reagent handling system includes unloading and storage facilities, mixing tanks, stock tanks, transfer pumps, and feeding equipment.

Hydrated lime is delivered to the Process Plant in regular 20 t bulk shipments and received in a 30 t storage silo, which, at design operating rates, provides for 13 days of storage. Lime is subsequently slurried in a package slaking circuit, sized for 183 kg/hr. The resulting milk of lime slurry, at approximately 20% CaO solids %w/v, is stored in an agitated tank and distributed to the various addition points by way of a ring-main. At the design production rate, the process facility consumes 800 t of lime annually.

Sodium cyanide, supplied in solid (briquette) form, is received in regular bulk shipments from regional suppliers in 1 t bulk bags. Sodium cyanide stock solution of 20 vol% (200 g/L NaCN) is generated on site using a solid to liquid system (SLS) to minimize potential releases and employee exposure. The stock solution storage tank provides for 12 hrs of cyanide supply at the nominal production rates. From the stock solution storage tank, sodium cyanide solution is provided to the leaching circuits and Merrill Crowe circuit as required via a ring-main. The SLS storage and make up, as well as the cyanide solution storage tank are fully contained in a bunded area and separated from the plant site. The solid sodium cyanide is stored in a fenced and locked area before being used to prepare stock solution. At the design production rate, the process facility consumes 1,600 t of sodium cyanide annually.

Table 17-2 shows the reagents for the process.

Table 17-2: Summary of Reagent Used in the Process Plant

Reagent	Preparation Method	Use	Consumption (t/a)
Lime	Received as hydrated lime from a 20 t pneumatic tanker truck and transferred to a silo; mixed to 20% strength; pumped to a storage tank. Dosed to concentrate leaching, bulk leaching and cyanide detoxification circuits as required	pH control added as required	1,750
Sodium Cyanide	Received in 1 t bulk bags; mixed to 20% strength; transferred to a storage tank. Dosed using the cyanide circulation pump and a ringmain system to the concentrate and bulk cyanide leaching circuits, as well as Merrill Crowe circuit if required	Leaching agent	1,300
Flocculant	Received as powder in 25 kg bags; mixed to 0.25% storing strength; transferred to a storage tank. Dosed directly to concentrate thickener, pre-leach thickener and CCD washing thickeners with dilution as required	Flocculation of thickener feed solids	40
Coagulant	Received as powder in 25 kg bags; mixed to 0.25% storing strength; transferred to a storage tank, and dosed directly to pre-clarifier	Clarification of the pregnant solution	36
Oxygen	Produced by oxygen plant, gasified, and sent to the concentrate and bulk cyanide leaching circuits and cyanide detoxification circuit	Cyanidation reagent, Cyanide detoxification reagent	1,400
Diatomaceous Earth	Received as powder in 25 kg bags; mixed to 5% solution strength. Dosed to the clarifier and precipitate filters in Merrill-Crowe circuit	Precoat and body feed in Merrill-Crowe circuit	410
Zinc Powder	Received as powder in 20 kg drums. Dosed to Zn mixing cone through a feeder at specific rate in Merrill-Crowe circuit	Precipitation reagent	200
Lead Nitrate	Received as powder in 1 t bulk bags, mixed to 10% strength; transferred to a storage tank. Dosed directly to the concentrate and bulk cyanide leaching circuits, as well as Merrill-Crowe circuit	Leaching aid in cyanidation and a co-precipitation regent in Merrill-Crowe	20
Copper Sulphate	Received as powder in 25 kg bags; mixed to 10% strength; transferred to a storage tank. Dosed to the cyanide detoxification circuit	Catalyst in the cyanide detoxification process	500
Sodium Metabisulfite	Received as powder in 1 t bulk bags; mixed to 20% strength; transferred to a storage tank. Dosed to the cyanide detoxification circuit.	Reactant in the cyanide detoxification process	500
Antiscalant	Delivered in liquid form in IBC totes. Dosed neat without dilution to pregnant solution tank and process water tank	To minimize scale build-up	25
Flux	Received as powder in bulk; mixed with calcined charges for smelting	Fusion agent	200

17.5 Plant Services

17.5.1 Fresh Water, Raw Water, Fire Water and Potable Water

Provisions are made for the raw water to be supplied from the underground mine, the fresh water (storm) pond, the Sonora Valley, or any combination thereof pending availability and requirement. Raw water is supplied to settling tanks for bulk removal of solids. The sediment-free water is transferred from the raw water tanks to a fresh/fire water storage tank.

Fresh water is used for the following duties:

- Reagent mixing and preparation
- General process uses in crushing area and emergency stockpile
- Gland water.

Wherever possible in the Process Plant, process water or barren solution is used to minimize fresh water consumption. The total fresh water requirement for the Process Plant is approximately 3.6 L/s.

Potable water is also sourced from the sediment-free water in the raw water tanks. The raw water is treated in a water treatment plant prior to transferring to the potable water tank for distribution where needed.

17.5.2 Process Water and Barren Solution

Process water consists of reclaimed water from the pre-leach thickener overflow and tailings thickener overflow. Barren solution is used as make-up for the process water supply as required. Process water is stored in a process water tank and pumped to the grinding circuit, lime preparation, and cloth wash water for tailings filters. Any excess process water is transferred to the collection pond. If impurities build-up in the Process Plant, a flow of process water to a collection pond allows for the required bleeding from the system. No water is expected to be discharged to the environment.

Barren solution from the Merrill Crowe circuit is stored in a barren solution tank, recycled to the CCD washing circuit as wash water and used for flocculant dilution. The residual barren solution is used wherever possible, to minimize the fresh water consumption. Barren solution is used for concentrate leach feed and cyanide detoxification feed dilution to achieve target density, and in stock cyanide solution preparation. The barren solution within the Merrill Crowe circuit is used for pre-clarifier coagulant dilution, sluicing water for clarifier filters, pre-coat and body feed preparation, zinc dust slurry preparation, and vacuum pump gland seal water to minimize the fresh water usage. Any solution will report to a collection pond.

17.5.3 Oxygen Plant

The oxygen plant generates oxygen using vacuum swing adsorption (VSA) technology. The oxygen plant consists of five units each with oxygen production capacity of 954 kg/day with 38 kW installed power requirement for each unit. Oxygen is produced at 93% purity at 100 psig (6.8 barg).

Oxygen is used in the bulk leaching circuit. Oxygen is also available for use in the concentrate leach circuit and the cyanide detoxification circuit. The total oxygen required for the plant is 3.8 tpd. 60 MT liquid oxygen tank is available as a back-up oxygen supply.

17.5.4 Electrical Power

The total power line capacity for the Operation is 7.6 MW with a normal operating load of approximately 5.1 MW. The plant currently operates at approximate draw of 3.0 MW.

Power is supplied to site from the regional grid, as described in Section 18.

17.5.5 High Pressure and Low Pressure Air

17.5.5.1 High-Pressure Air for Tailings Area

High-pressure air at 1,000 kPa(g) is provided by two high-pressure air compressors, operating in a lead-lag configuration for tailings filters. The portion that is required for instrument air at 700 kPa(g) for this area is dried and filtered and distributed via the tailing area instrument air receiver.

17.5.5.2 Plant and Instrument Air for the Balance of the Process Plant

Plant and instrument air for the balance of the Process Plant at 700 kPa(g) is provided by two Process Plant air compressors, operating in a lead-lag configuration. The entire high-pressure air produced is dried and filtered and is used to satisfy both plant and instrument air demand. Dried air is distributed via the Process Plant air receiver, with additional receivers for precipitate filter in Merrill Crowe circuit and dust collector in the refinery area.

17.5.5.3 Low-Pressure Air for Flotation Circuit

Low-pressure air to flotation cells is supplied by one dedicated blower.

17.5.6 Instrumentation and Process Control

A distributed control system (DCS) is installed in the Process Plant. The process control system consists of individual, locally mounted, control panels located near the equipment and a PC-based operator interface station (OIS) located in a centralized control room. The local control panels act as a local point for monitoring and control of the nearby equipment and instrumentation. They also act as the distribution point of power for instrumentation. Major process performances, including process rates, mill power draw, and motor variable speeds, are displayed in the centralized control room. The DCS and OIS perform process control and data management through equipment and processing interlocking, control, alarming, trending, event logging, and report generation. In this manner, the Process Plant is monitored and operated automatically from operator workstations in conjunction with control systems.

17.5.7 Sampling and Quality Control

A metallurgical and assay laboratory is provided to conduct daily assays for quality control and optimize process performance. The assay laboratory is equipped with the necessary analytical instruments to provide all the routine assays for mine samples, geological samples, Process Plant samples, and samples taken for environmental monitoring. The metallurgical laboratory undertakes all basic test work to monitor metallurgical performance and to improve the process flowsheet and efficiencies.

17.6 QP Comments on Recovery Methods

The QP had access to the Las Chispas Process Plant during the site visit.

The Process Plant was operating well and targeting ~65 tph. Operations were being affected by the amount of metal coming from the mine and the pausing of crusher feed in order to manually clean the magnet. A self-cleaning magnet has been installed since the visit. The use of the emergency stockpile was limiting the effect of the pauses in crushing on the mass rate to the rest of the Process Plant.

The grinding circuit was operating very well, and mill liner inspections and measurements are indicating lower wear rates than expected in the 2021 FS Report.

The bulk leach circuit, processing whole ore, was operating well and achieving expected extractions while the CCD and Merrill Crowe circuits were both operating efficiently.

Tailing filtration is not limiting Process Plant capacity but filtration is slower and the cycle times are longer than anticipated in the 2021 FS Report which requires the 2 filters to operate duty/ duty instead of duty/ standby as originally designed.

The Process Plant is operating well and the QP has not seen anything to indicate that the Process Plant will not be able to achieve the designed mass rate of 1,250 tpd.

18 PROJECT INFRASTRUCTURE

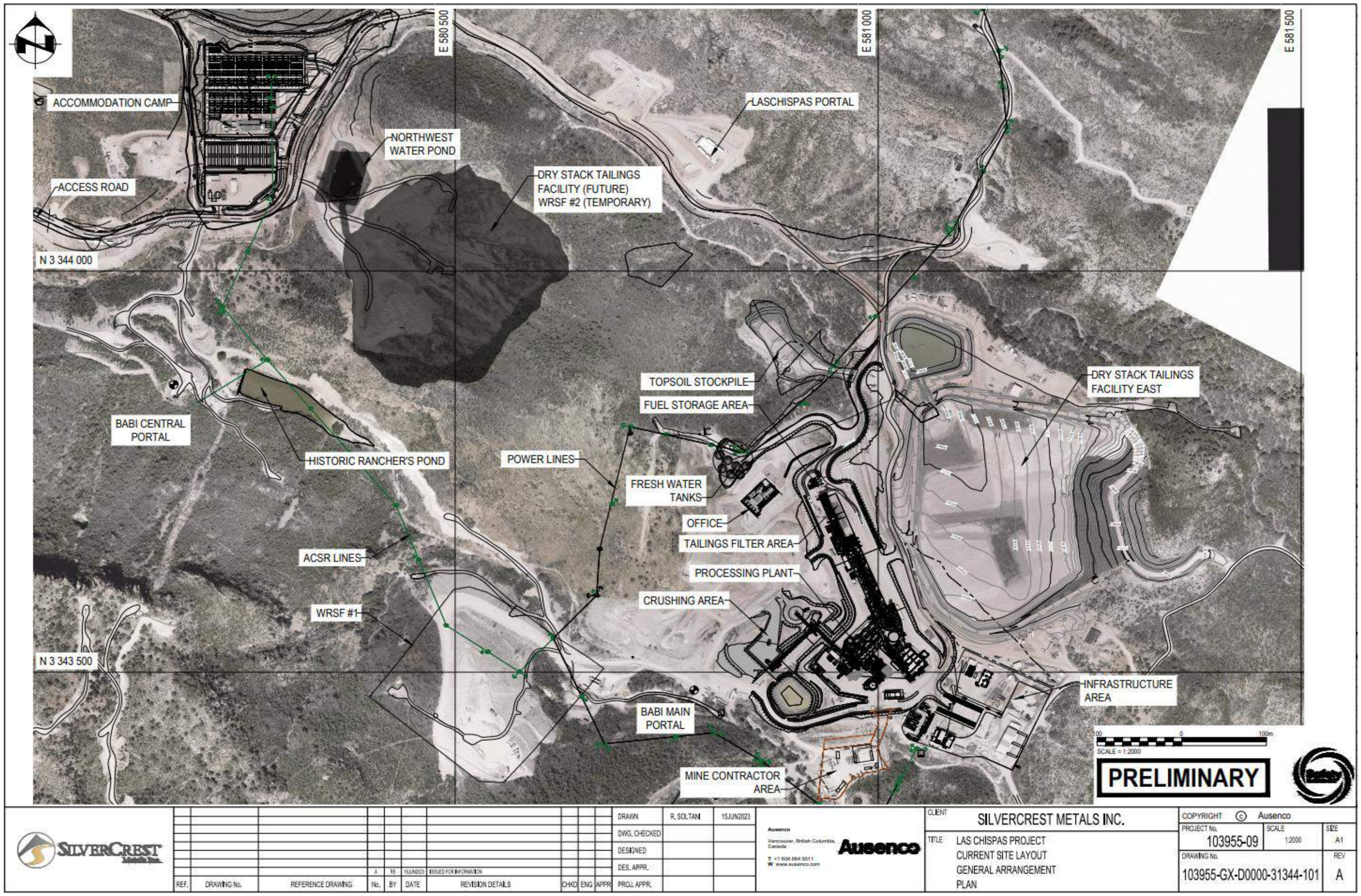
18.1 Introduction

Infrastructure existing for the mining and processing operations include:

- Underground mine, including portals, ramps and vents
- Roads: main access road, site access road, bridge crossing, borrow pit haul road, filtered tailings storage facility (FTSF) haul road, waster rock storage facility (WRSF) haul road, and explosives access road
- Diversion and collection channels, culverts, and containment structures
- Site main gate and guard house (2)
- Accommodation camp
- Power and water distribution
- Warehouse and truck shop, offices, medical clinic, and nursery
- Explosives magazines
- Process Plant
- Control room
- Doré room
- Assay laboratory (off-site facility)
- Reagent storage facilities
- Water treatment plant
- Mineralized stockpiles and waste rock storage facilities (WRSFs)
- Filtered Tailings Storage Facility (FTSF)
- Nuclear devices storage facility
- Hazardous waste interim storage facility
- Exploration core shacks.

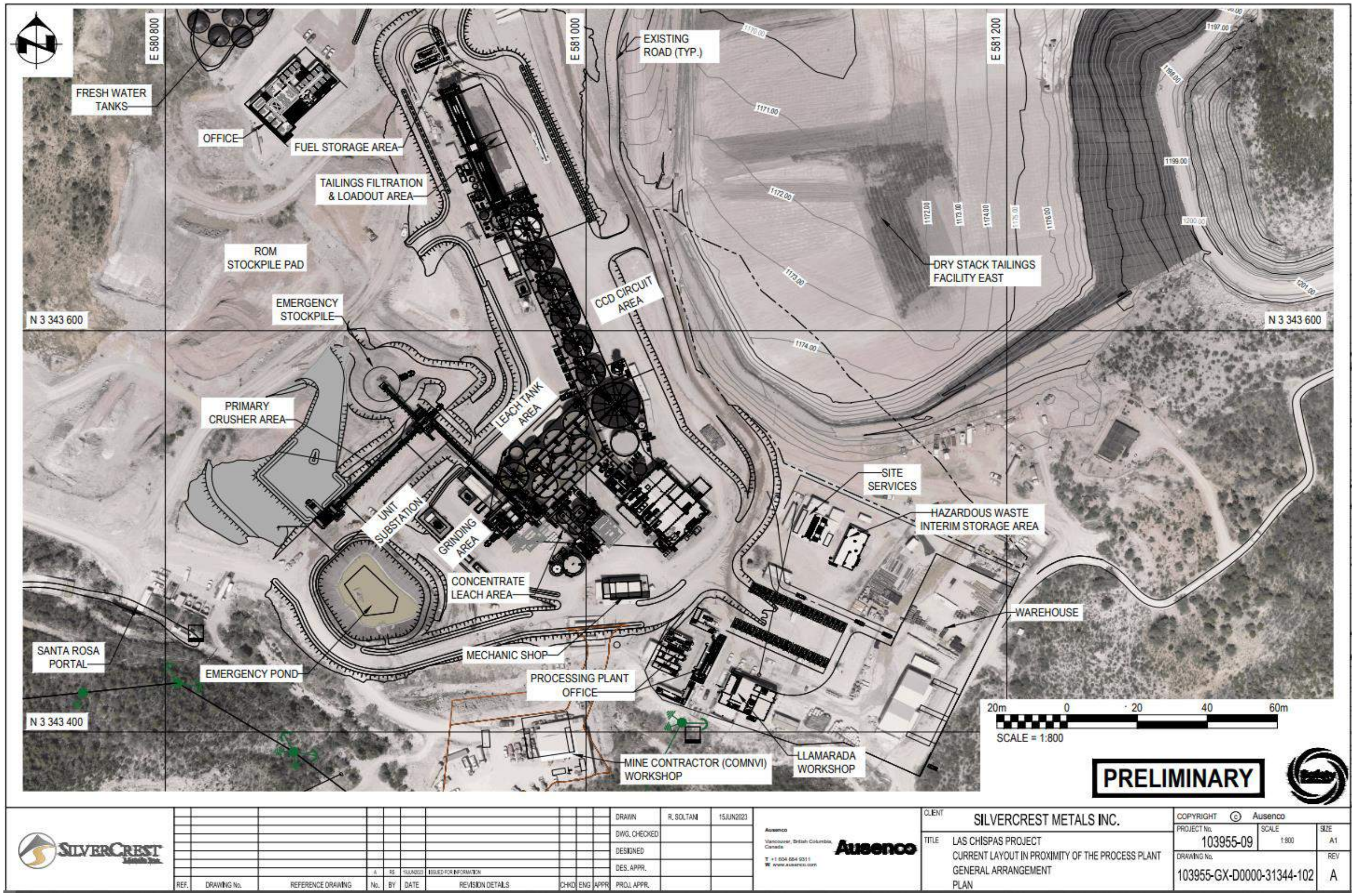
Figure 18-1 shows the site layout and Figure 18-2 shows the locations of the Process Plant, warehouse and shop, and administration buildings.

Figure 18-1: Current Site Layout



Source: SilverCrest, 2023.

Figure 18-2: Current Layout in Proximity of the Process Plant



Source: SilverCrest, 2023.

18.2 Roads

The Las Chispas Operation can be accessed from Highway 89 via the 10 km existing access road (Figure 18-3). The net elevation gain along the main access road is approximately 440 m (from Rio Sonora crossing to Santa Rosa Portal).

Figure 18-3: Access Road between Highway 89 and Las Chispas Operation

Source: SilverCrest, 2023.

Access to the site is controlled by two security gates located on the 10 km gravel road. A first security gate (Figure 18-4) is located on the gravel road approximately 100 m from Highway 89 and the second security gate (Figure 18-5) is located just before the accommodation camp. The second security gate is the main control point to the Las Chispas Operation.

Figure 18-4: Security Gate #1 (100 metres from Highway 89)

Source: SilverCrest, 2023.

Figure 18-5: Security Gate #2 (Main access point)

Source: SilverCrest, 2023.

A single lane bridge (Figure 18-6) located approximately 250 m east of Highway 89, has been built over the Rio Sonora with a length of 171m and a capacity of 72.5 t. This capacity is sufficient to support the operation.

Figure 18-6: Single-Lane Bridge

Source: SilverCrest, 2023.

Additions and upgrades to existing access roads around the Las Chispas Operation site have been completed to access mine infrastructure including mine portals, Process Plant, explosive magazines, potable water well, FTSF, WRSF, seepage ponds, and all other ancillary infrastructures.

18.3 Camps

18.3.1 Accommodation Camp

The Las Chispas Operation is equipped with an accommodation camp with a capacity of 500 beds (Figure 18-7). The accommodation camp is connected to the national electricity grid and is also equipped with an emergency genset capable of handling the entire camp electrical load. The camp is serviced by the potable water treatment plant and sewage treatment plant. Garbage is collected on site and disposed at the Arizpe municipality waste disposal facility.

The accommodation camp was initially built to manage the constraint imposed by the pandemic and been proven to be a great asset. While the camp is available for all staff, the company approach has been to allow staff to chose between on-site accommodation or living in the surrounding communities. To date approximately 20% of all employees and contractors have elected to live in the surrounding communities.

All rooms are single occupancy and include a bed, toilet, air conditioning and shower. A total of 30 rooms have been designed slightly larger and include sufficient space for a small desk. The camp is equipped with kitchen and dining facilities to support the 24 hours operation, laundry and maintenance camp shop and snack area. The camp also includes a gym, a multifunctional sports field, a recreation facility, barbecue area and a chapel.

Figure 18-7: Accommodation Camp

Source: SilverCrest, 2023.

18.4 Fuel Storage

Fuel and gasoline requirements are temporarily being distributed by Energex. This service provider has authorized permits for distribution.

Diesel fuel requirements for the mining equipment, process and ancillary facilities will eventually be supplied from two modular above-ground diesel fuel storage tanks located near the Process Plant. The fuel storage has a capacity of 50,000 L of diesel and 20,000 L of gasoline, sufficient for approximately nine days of operation. The above-ground tanks include containment, and dispensing equipment conforming to all applicable regulations.

The diesel and gasoline facilities have been completed (Figure 18-8) but are not operational as LLA has yet to obtain the permit required by the Mexican Authorities.

Figure 18-8: Fuel Storage

Source: SilverCrest, 2023.

18.5 Power Line

The electrical power is provided to site via a 33 kV connected to the national grid, by way of 81 km of overhead power line, divided in two sections.

Figure 18-9: Electrical Power Line

Source: SilverCrest, 2023.

Figure 18-10: Electrical Power Line

Source: SilverCrest, 2023.

The first section, from Nacozari de Garcia Substation to Los Hoyos is 26 km long and owned by Comisión Federal de Electricidad (Federal Electricity Commission – CFE). This section was an older overhead power line, which was upgraded by CFE (conductor size and poles) to support the additional power required at the Las Chispas Operation.

The second section of the power line is new and has a length of 55 km. This section goes from Los Hoyos to Las Chispas Operation and it is owned by LLA. Right-of-way agreements are in place. Utility power was connected to the Las Chispas Operation in April 2022. Example of structures are displayed in Figure 18-9 and Figure 18-10).

Power factor correction equipment has been installed on both the 33 kV line and at the 4.16kV distribution bus (Figure 18-11 and Figure 18-12, respectively) of the Process Plant to ensure a lagging load power factor of 0.99. The 2,000 kW SAG mill motor is the largest motor on the mine controlled by a Variable Speed Drive.

The actual total normal operating load for the entire operation has been averaging between 4.1 and 4.5 MW (normalized at 100% load factor) including the Process Plant, ancillary facilities, camps, and mine portals, however as the underground mine continue to ramp-up and expand, this operating load is expected to increase slightly over the next few years. The contracted power demand with CFE is 7.65 MW which is expected to be sufficient for the LOM.

Figure 18-11: Power Equipment for 33 kV Line

Source: SilverCrest, 2023.

Figure 18-12: Power Equipment for 4.16 kV Distribution Bus

Source: SilverCrest, 2023.

18.6 Power Distribution and Emergency Power

Power is distributed internally through the mine site at 33 kV. At the Process Plant a 10 MVA transformer stepdown the voltage to 4.16 kV to serve the grinding and CCD areas of the Process Plant. Backup power is provided by a 1.25 MW generator to CCD's equipment like agitators in case of utility failure. An Automatic transfer switch is installed in the CCD electrical room to automatically switch between grid and generator power in the event of utility power failure.

For the Babicanora area, a 3.5 MVA stepdown transformer to 4.16 kV installed at the Santa Rosa portal provide power to the underground mine distribution system. A 1 MW standby generator is also installed at the portal and provide power to essential loads, in the event of utility failure.

The Cemented Rock Fill (CRF) Plant is not connected to utility power yet. There is a plan to install a transformer and power it from the internal 33kV overhead line. For the moment, the CRF plant is energized via a 250 kW diesel generator.

Three more small generators of different sizes also provide backup power to the camp, offices, maintenance shop and the water potable treatment plant.

18.7 Site Communications

On-site communication systems include a voice over internet protocol (VoIP) telephone system, a local area network (LAN) with wired and wireless access points, hand-held very high frequency (VHF) radios, and a leaky feeder network for the underground mine. Internet service is provided through a series of communication towers from Hermosillo to the Las Chispas Operation. A point-to-point link from the general offices in Hermosillo to the operation, exploration and administration offices is operational via towers such at those shown in Figure 18-13. The system is providing redundant communication equipment with two services in Hermosillo: a 200 Mbps fiber dedicated internet and a 200 Mbps symmetric fiber internet, and three other satellite internet services in: administration office, exploration office and construction offices.

A redundant communication system is being developed via a different set of towers to reduce the exposure of the current system to weather elements. This redundant system is expected to be operational in 2023. It will use the fiber optic lines currently available on the 33 kV Power Line. This addition will allow greater bandwidth and expected to stabilize IT communication services.

Figure 18-13: Communication Tower located at Babicanora Hill

Source: SilverCrest, 2023.

Additionally, a satellite communication by StarLink has been added for an emergency situation.

Communication at site is being handled by approximately 7 km surface fiber optic ring network which connect every operational site including the UG mine.

18.8 Fire Protection

A complete fire protection system is operational at site. It includes a detection and alarm system, a fire water supply and distribution system (Figure 18-14), a water-based fire protection system, and special hazard fire protection system (as per applicable regulations). Fire detectors, alarms, extinguishers, and towers (Figure 18-15). have be installed where required. The firewater distribution network is maintained under a constant pressure with a jockey pump and has been sectionalized to minimize loss of fire protection.

Yard hydrants are limited to the fuel storage tank area. Wall hydrants are used in lieu of yard hydrants, and these are located on the outside walls of the buildings.

Figure 18-14: Fire Water Supply and Distribution Systems

Source: SilverCrest, 2023.

Figure 18-15: Fire Tower

Source: SilverCrest, 2023.

Fire protection within buildings include sprinkler systems and portable fire extinguishers.

18.9 Sewage System

Sewage collected from the camp and ancillary buildings is pumped to the two rotating-biological-contactor type sewage treatment modules for treatment (Figure 18-16). Treated effluent is accumulated in tanks prior to being recycled on site roads as dust suppressant.

Figure 18-16: Sewage Treatment Module

Source: SilverCrest, 2023.

18.10 Hazardous Waste Interim Storage Facility

A storage facility for hazardous waste has been built at site to allow for temporary storage of ancillary wastes, such as used oils and greases, before they are transported off-site for disposal by third-party (Figure 18-17).

Figure 18-17: Hazardous Waste Interim Storage Facility

Source: SilverCrest, 2023.

18.11 Plant Nursery

A nursery has been built to conserve the flora rescued from the areas where infrastructure, Process Plant, roads, bridges and power lines have been built. The nursery is also used to grow additional flora as per the requirements of the permits (Figure 18-18).

Figure 18-18: Plant Nursery

Source: SilverCrest, 2023.

18.12 Nuclear Devices Storage Facility

The Las Chispas Operation has a radioactive source storage (Figure 18-19) facility authorized by the Comisión Nacional de Seguridad Nuclear. The use of this storage facility is exclusively for safeguarding radioactive sources that are not in use in order to ensure the safety of personnel and avoid unnecessary exposure. The construction of this facility was carried out in compliance with the radiological and physical safety requirements. Access to the warehouse is limited to persons authorized by the Commission to attend to emergencies. This warehouse is currently empty because the six radioactive sources are in operation.

Figure 18-19: Nuclear Devices Storage Facility

Source: SilverCrest, 2023.

18.13 Mine Related Infrastructure

18.13.1 Waste Rock Storage Facilities

WRSF 1 is located between Santa Rosa Portal and Babi Central Portal (Figure 18-20). The maximum capacity of the WRSF 1 has been estimated at 899,500 t. This stockpile is being used to temporarily store the development waste before returning it to rockfill the mined-out stope. WRSF 2 is located east of the accommodation camp (Figure 18-21). WRSF 2 is located where the expansion of the FTSF is expected to be located. It is expected that WRSF 2 will be reclaimed ahead of WRSF 1.

Figure 18-20: WRSF #1

Source: SilverCrest, 2023.

Figure 18-21: WRSF #2

Source: SilverCrest, 2023.

18.13.2 Ore Stockpiles

Ore stockpiles are located nearby the crusher (Figure 18-22). The stockpiles have been segregated in several different piles typically by grade: marginal grade, low grade, medium grade and high grade. A stockpile with higher level of clays has also been used.

The historic stockpiles are located through the property and being hauled to the crusher by a local contractor.

Figure 18-22: Ore Stockpiles (looking toward the Process Plant)

Source: SilverCrest, 2023.

18.13.3 Blend Fingers

Blend fingers (BF) is the term being used to describe the temporary stockpiles built to control the grade to the Process Plant. They typically contain between 2,000 and 3,000 tonnes and are located on the crusher pad. They are being built in 3 to 5 layers of ore and dozed between each layer. Once completed, the BF is being reclaimed by a 5 yards loader and fed into the crusher.

18.14 Site Roads

The site roads provide access to the on-site facilities. All roads have been designed for a speed of 30 km/hr and a slope limit of 12%. The majority of site roads have two lanes.

All new facilities and surrounding areas have been graded to ensure stormwater drains away from the facilities during rainfall. Drainage ditches are typically 0.6 m bottom channels with a minimum longitudinal grade of 0.5%. At the intersection of drainage paths and access roads, water is conveyed across the road via culvert crossings. Culverts have been installed with rip-rap erosion protection at inlets and outlets and require regular maintenance to keep them sediment free and free-flowing during rainfall events.

18.15 Warehouse

The warehouse facility was built as part of the Early Works program. It consists of a pre-engineered steel structure with a roof and low walls and limited interior support steel structures. The building is supported on concrete spread footings and concrete grade walls along its perimeters. Sumps and trenches were constructed to collect wastewater in the maintenance bays. Floor hardener was applied to concrete surfaces in high-traffic areas.

The warehouse also includes several other buildings and containers. It also uses a large outside area, and it is surrounded by a fence to prevent undesired access. The attached pictures provide an overview of the warehousing facilities (Figure 18-23).

Figure 18-23: Warehousing Facilities with the Main Warehouse (lower left corner)

Source: SilverCrest, 2023.

18.16 Offices

18.16.1 Main Offices

The main office (Figure 18-24) is located west of the Process Plant and just below the water tanks. The main offices house the mining team (operation, geology and engineering) as well as some G & A departments such as environment, management, finances, procurement, and human resources. The main office includes a 20-person conference room.

Figure 18-24: Main Office

Source: SilverCrest, 2023.

18.16.2 Process Plant Offices

The Process Plant office is located within the fenced area of the plant and house the management team and some of the metallurgical staff. It consists of several 40-foot trailers (Figure 18-25).

Figure 18-25: Process Plant Office

Source: SilverCrest, 2023.

The Process Plant maintenance management team is located within the maintenance shop (Figure 18-26).

Figure 18-26: Process Plant Maintenance Shop

Source: SilverCrest, 2023.

18.16.3 Metallurgical Lab

The metallurgical lab consists of several trailers connected together. It houses the metallurgical team and the metallurgical testing facilities (Figure 18-27).

Figure 18-27: Metallurgical Lab

Source: SilverCrest, 2023.

18.16.4 Other Offices

Other offices are located in different parts of the Las Chispas Operation, which are used by safety, site services, warehouse, contractors, and IT personnel.

18.16.5 Site Clinic

The medical service is located east side of the Process Plant (Figure 18-28), made up of two medical offices and a module for the immediate attention of workers, as well as a rescue unit to carry out transfers in cases requiring hospital attention.

Figure 18-28: Site Clinic

Source: SilverCrest, 2023.

18.17 Process Plant

18.17.1 Primary Crushing

The primary crushing area features a concrete foundation, steel structures for supporting process equipment, platforms, and walkways (Figure 18-29).

Figure 18-29: Structures for Primary Crushing Area

Source: SilverCrest, 2023.

18.17.2 Process Plant

The Process Plant area is not fully roofed and principal construction are on concrete foundations, with steel structures for supporting process equipment, platforms, and walkways. Where required, some areas of the Process Plant have been roofed.

Process Plant cranage is provided by a mobile crane for most areas. Exception to this is the filter area, where a gantry type crane is available for operation and maintenance.

The Process Plant is equipped with elevated steel platforms in the grinding area and over the leach tanks and other large tanks for maintenance access.

The Process Plant foundation consists of concrete spread footings and containment bunds forming the secondary containment area, along the building perimeters and a slab-on-grade floor. The floor surfaces have localized areas that are sloped toward sumps for clean-up operations.

The Process Plant is also surrounded by a tertiary containment area built on compacted soil and connected via concrete drainage point to the Emergency Pond.

18.17.3 Doré Room

The Merrill Crowe facility is housed outside and at proximity to the Doré Room.

The doré room has been constructed to restrict access. The facility is monitored 24 hr/d by the security personnel. Access to the doré room is restricted to authorized personnel only.

The gold and silver recovery and smelting areas have been provided with sufficient ventilation to mitigate the potential impact of off-gas produced from the melting furnace and dust generated from flux mixing.

Gold–silver doré products are not being stored at site. Doré product transportation is undertaken on a frequent basis by contractors using armour trucks.

18.17.4 Reagent Storage Facilities

Reagents storage facilities are available in different locations around the Process Plant. This approach limits travelling distance with chemicals, reduce potential for spill, reduces the risk of incompatible reagents, and provides overall productivity. Examples are provided in Figure 18-30 and Figure 18-31 below.

Figure 18-30: Cyanide (NaCN) Reagent Storage

Source: SilverCrest, 2023.

Figure 18-31: Chemical Reagent Storage

Source: SilverCrest, 2023.

18.18 Water Management

18.18.1 Key Facilities

- The key facilities for water management include:
- Underground mine dewatering, predominantly from backfilling operations
- Process Plant (including fresh and process water tanks)
- Filtered tailings storage facility (FTSF)
- Surface water diversion and water management structures
- Fresh water supply system, including pumps and piping; and,
- Sediment and erosion control measures for the facilities.

The water management strategy uses water within the Operation area to the maximum practical extent. This involves collecting and managing site runoff from disturbed areas and maximizing the recycle of process water. The water supply sources are as follows:

- Precipitation runoff from the mine site facilities
- Water recycled from the tailings dewatering system
- Groundwater from the underground mine dewatering system for fresh water supply and potable water
- Treated black and grey water, in small quantities, from the buildings
- If needed, water withdrawn from the Sonora Valley for fresh water supply and potable water.

18.18.2 Water Balance

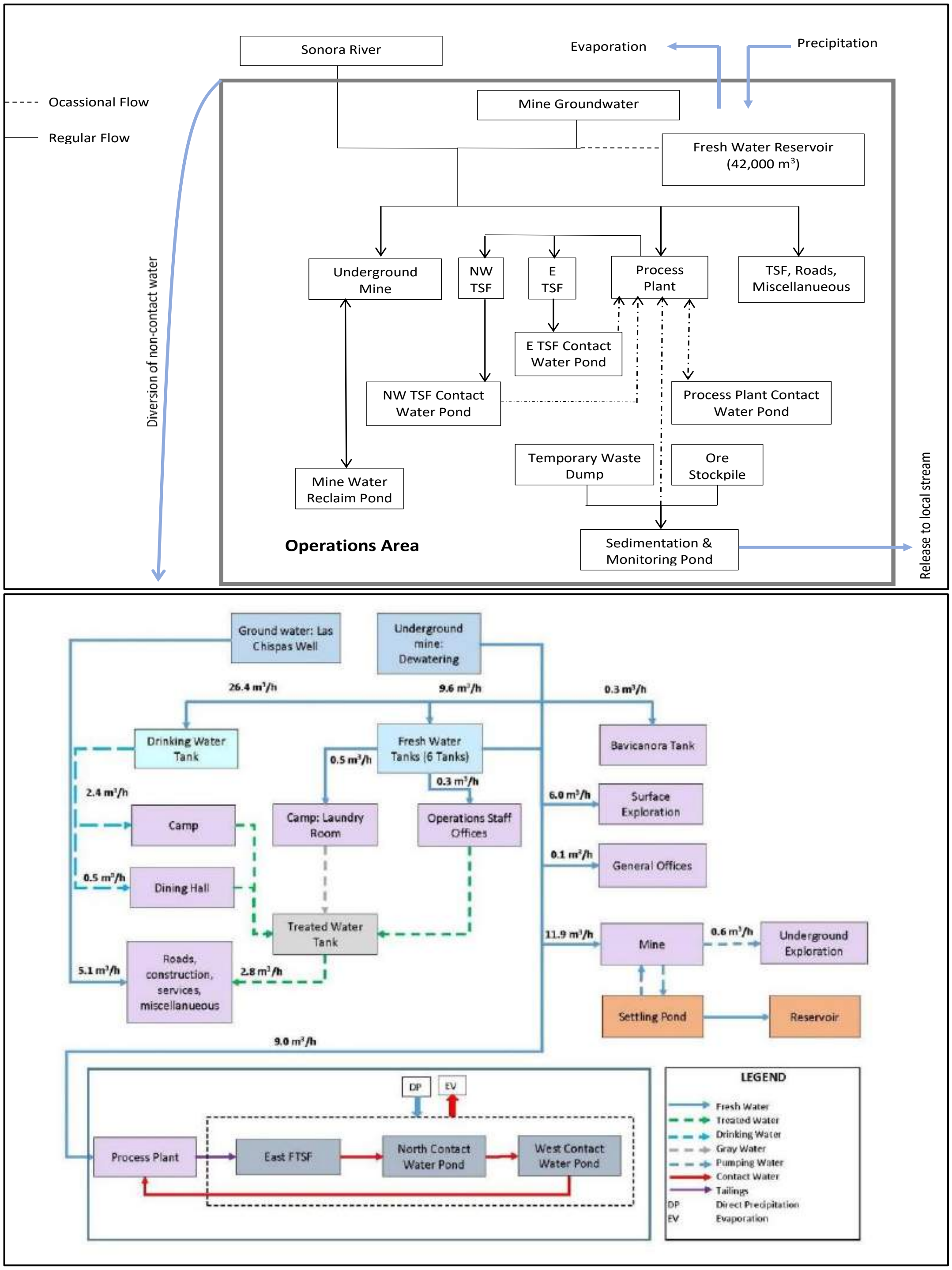
A deterministic annual water balance model was developed for the site using the site data, which included the characterization of climate, hydrometric, hydrogeologic and surface water conditions in the mine development area.

For the purpose of developing the water balance, the following components were considered:

- Water entering the operations area from precipitation and surface or groundwater sources
- Water exiting the operations area through evaporation or infiltration
- Water entrained in the filtered tailings and exiting the system.

A conceptual water balance diagram is shown in Figure 18-32.

Figure 18-32: Conceptual Water Balance Diagram of Water Sources, Pathways and Discharges for the Las Chispas Operations Area



Source: WSP, 2023.

18.18.2.1 System Inflows

The main water sources identified for the Las Chispas Operation consist of 1) groundwater from the underground pumping system; 2) fresh water from the Sonora Valley; and 3) surface water resulting from precipitation in contact areas and retained in contact water ponds. Based on a hydrogeological characterization of the site as well as recent pumping tests conducted in the Las Chispas underground mining area (Hydro-Ressources, 2020), the groundwater source located in the historic Las Chispas workings can consistently supplement 9.6 m^3/h. However, based on information provided by SilverCrest and HRI, future studies will focus on fault areas within Las Chispas mine area that could produce up to 22 m^3/h of groundwater, potentially becoming the main source of fresh water for the Las Chispas Operation.

SilverCrest has negotiated water rights with the local national regulators to use up to 34.2 m^3/h of water from the Sonora Valley. The mine groundwater and the Sonora Valley sources provide 43.8 m^3/h, which is more than the required 29 to 36 m^3/h of fresh water for the LOM.

Additional sources of water include an existing historic water reservoir on site, which has an effective capacity of 42,000 m^3, that can function as an emergency supply of water for up to two months (at a total mine demand of 29 m^3/h) depending on the season.

Occasional inflows to the system will come from the FTSF contact water pond during the rainy season, which can supplement inflows from the valley and underground dewatering system to satisfy water demands.

18.18.2.2 System Outflows

Water demands include: the Process Plant, the underground mine, water entrained in the tailings and going to the FTSF, water for construction and dust suppression, and evaporative losses (Wood, 2021).

Based on the Process Plant water balance (with occasional bleed scenario) the water demand for the Process Plant is approximately 11.9 m^3/h (Ausenco, 2023).

Current estimates of water loss as pore water in the filtered tailings is approximately 10 m^3/h. This amount exceeds optimum water for tailings compaction but evaporation loss (which exceeds average precipitation all year round) allows for tailings placement and compaction on most days. On days when there is more precipitation and the tailings exceed the optimum moisture content, tailings that have not been graded and compacted are dumped in designated areas until the climatic conditions allow again for moisture loss due to evaporation. Alternatively, although thus far it has not been necessary, tailings can be covered with plastic sheeting (or raincoats) until the rain subsides and tailings placement and compaction is resumed.

The demand from the underground mine is approximately 12.5 m^3/h. However, most of this water is reused, therefore a 4.7 m^3/h constant demand has been estimated in balance calculations.

Water will also be required for dust suppression in the FTSF, roads and miscellaneous structures. A, 2.2 m^3/h demand has been estimated based on current consumption and similar projects in semi-desert regions of Mexico.

18.18.2.3 Reclaim Water System

Reclaim water for use in the mill processes is pumped from the tailings filtrate water tank to the process water storage tank. The six process water storage tanks store a 24-hour supply of mill process water, which is gravity fed to the Process Plant site. Additional process water is obtained from other sources described in Section 18.18.2.4.

18.18.2.4 Additional Water Management Facilities

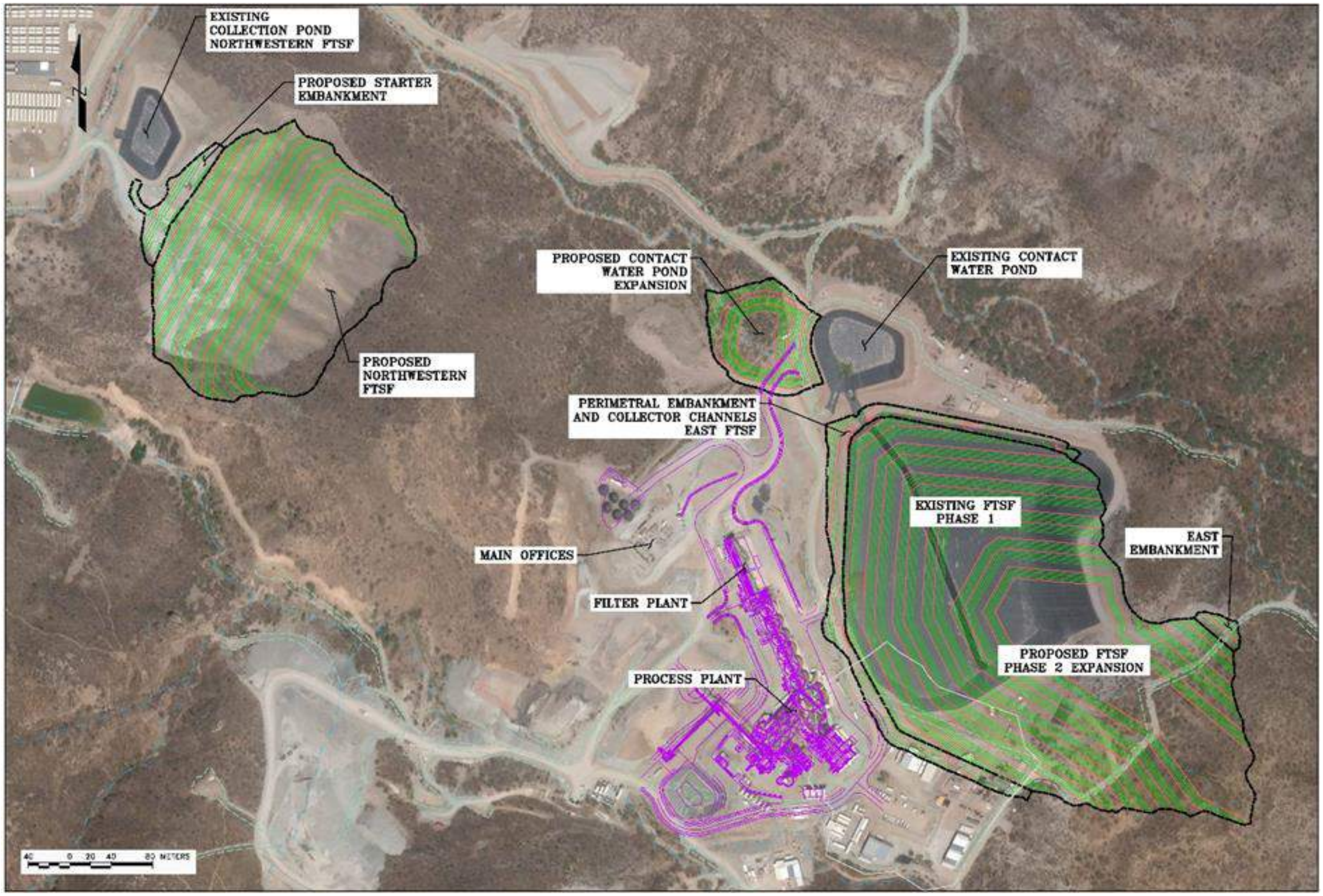
Additional facilities include contact water ponds for each FTSF, a contact water pond in the Process Plant area, settling and monitoring ponds for the temporary waste dump and mineralized material stockpile and a mine water reclaim pond in the proximity of the main portal.

18.19 Filtered Tailings Storage Facility

18.19.1 Overview

A FTSF concept was developed based on the mine plan, the limited available construction materials, and to avoid risks associated with storage of conventional slurried tailings behind a dam. The tailings being stored on surface are thickened, filtered, and delivered by trucks to the FTSF. Two facilities have been designed to store up to 4 Mt. The proposed geometry and key features of the FTSFs are shown in Figure 18-33.

Figure 18-33: Existing FTSF Phase 1, Existing Contact Water Pond, Proposed Phase 2 Expansion and Proposed Northwestern FTSF



Source: WSP, 2023.

Due to their unsaturated condition and predominantly dilatant geotechnical behaviour, filter-pressed dry-stacked or filtered tailings, do not need large retention structures (dams) and allow for the mitigation of physical stability risks. Additionally, once placed and compacted, filtered tailings tend to be very low permeability materials, which in combination with adequate surface water management systems results in a structure that significantly reduces the quantity of water that can migrate into the natural environment. Another advantage of filtered tailings is that water recovered in the filtration step can be recycled into the metallurgical process. Moreover, in comparison with conventional slurry tailings facilities, filtered tailings stacks generally require a smaller footprint for tailings storage, are easier to progressively reclaim, and can have lower long-term (closure) liability in terms of potential environmental impacts.

The FTSFs locations were selected according to the criteria established by the Mexican authorities through the NOM-141-SEMARNAT-2003 standard, with a focus on the integrity and stability of the FTSFs. Accordingly, hydraulic aspects related to the catchment area and large return-period precipitation events as well as geotechnical aspects related to location and properties of the soil and rock material underlying the Las Chispas Operation area were considered.

Phase 1 of the East FTSF has already been constructed and currently stores approximately 350,000 tonnes of tailings (Figure 18-34). Phase 2 construction of the East FTSF is planned to start in 2024 and together, Phases 1 and 2 will provide up to 3.1 Mt of projected storage.

Figure 18-34: Aerial view of the existing East FTSF - Phase 1 and associated Contact Water Pond

Source: WSP, 2023.

In addition, the selected FTSF sites have the following advantages:

- Proximity to the Process Plant and mine portal
- Closest population centre (Sinoquipe) located 20 km downstream of the proposed FTSF structures
- Areas with minor human activity both in the catchment basin as well as downstream of both proposed FTSFs structures
- The selected FTSF sites are not within the footprint of what would be considered federal surface water bodies according to the Comisión Nacional del Agua (CONAGUA)
- Absence of aquifer and groundwater production wells in the FTSF areas
- Underlying bedrock with low permeability at shallow depths (5 m or less) that limits the vertical infiltration of water.

The FTSFs have a projected maximum elevation of 1,219 masl in the East FTSF and 1,187 masl in the NW FTSF. The East FTSF is in the eastern vicinity of the Process Plant and when completed will cover an area of approximately 102,000 m^2. The NW FTSF, when constructed, will be 300 m northwest of the Process Plant and cover an area of 48,000 m^2. At this time, it is anticipated that the East FTSF will store up to 3.1 Mt of the tailings production, while the remainder (150-200 kt) of the filtered tailings production will be stored at the NW FTSF.

18.19.2 Geotechnical Characterization of Tailings

Filtered tailings have been stacked in the Phase 1 FTSF area since the middle of 2022. Based on the Unified Soil Classification System (SUCS), the tailings classify predominantly as Sandy SILT (ML) with a smaller portion of tailings classifying as low plasticity Silty CLAY (CL).

The tailings placed in the FTSF range from 70% to 85% by weight of its particles passing the No. 200 mesh (0.075 mm) and a Specific Gravity of 2.69. Based on the standard Proctor compaction test, these tailings have a maximum dry density ranging from 17.7 to 19.6 kN/m^3 and an optimum geotechnical moisture content (weight of water over the weight of solids) of 13.0 to 16.5%.

Direct shear tests and triaxial tests from representative samples of placed tailings have returned internal effective friction angles φ´ of 32 to 35 degrees and cohesion “c” values of zero to 80 KPa. The average saturated hydraulic conductivity in reconstituted samples as measured in a flexible wall permeameter in the laboratory ranged from 2.3E-05 to 4.3E-06 cm/s.

Swell/collapse tests on tailings samples at the proposed compaction conditions of 95% maximum dry density and minus 2.0% of optimum moisture content have resulted in collapse of approximately 0.5%, which translates into a low collapse potential.

Also, unsaturated soil mechanics capillary humidity retention tests have been conducted under similar remolded conditions to define infiltration from precipitation and runoff in the filtered tailings once placed and compacted. These tests covered ranges of zero suction (saturation) up to a 0.6% humidity that reached a maximum suction of 1,550 bar (15,810 m of water column).

18.19.3 Geotechnical Analyses

Geotechnical characterization of the filtered tailings that are being placed in the Phase 1 FTSF is conducted on a regular basis to monitor changes in the gradation, plasticity and strength properties to reflect these potential changes in the current and projected stability of the tailings facility. Thus far, the friction angles have had a narrow range of values between 32 and 35 degrees, and a cohesion range between zero and 80 kPa. Therefore, for geotechnical evaluation purposes, an angle of internal friction φ = 33 degrees and cohesion C=0 have been used for limit equilibrium stability analyses.

18.19.4 Infiltration Analyses

A series of infiltration modelling analyses have been updated to estimate the infiltration during construction and through the lifetime of the FTSF (WSP, 2023). These analyses have been performed using the commercially available finite element 2D software SEEP/W, which is capable to perform both steady-state and transient flow analyses in porous media. Infiltration modelling indicated that under the anticipated filtered tailings placement and compaction conditions, and the site-specific climatological conditions, little to no infiltration from the filtered TSF into the native ground would be expected. Despite the infiltration modelling results, the FTSF was designed and constructed with a 2 mil HDPE liner as well as a subsurface water collection system (subdrain) to capture potential infiltration during the early construction stages.

18.19.5 Geotechnical Stability Analyses

Geotechnical stability analyses have been conducted for the design and are updated on a yearly basis using the commercially available computer program Slide v.8 (Rocscience, 2019), which enables the user to perform limit equilibrium slope stability calculations using a variety of methods and failure surface search routines. This software allows analysis of either individual slip surfaces or application of search algorithms to calculate the critical failure surface (i.e., lowest deterministic factor of safety) for a given set of soil shear strength properties, geometry, pore-water pressure, and loading conditions.

The stability of the FTSF is regularly evaluated,at least annually or as appropriate based on performance or construction conditions, for two loading conditions:

1. Static loading
2. Seismic loading conditions using pseudo-static analyses.

The existing configuration of the East FTSF meets the design criteria for stability under static and seismic loading based on the site conditions and the characterization of the materials that currently compose the tailings structure. Additionally, the projected geometry of subsequent filtered tailings stacking would meet the specified factors of safety for stability, provided the placement specifications for compacted tailings density and moisture continue to be implemented.

18.19.6 Key FTSF Design Elements

The FTSF structures were designed to store together an approximate capacity of up to 4.5 Mt of tailings (current Mineral Reserve is 3.3 Mt) with an overall slope of 2.8:1 (H:V), slope between benches of 2.2:1 (H:V), and maximum approximate heights of 50–56 m (measured from the lowest portion of the starting buttress to the maximum elevation of the dry stacks).

18.19.7 Non-Contact Surface Water Diversion Systems

Non-contact surface water diversion structures consist of ditches that divert the surface water uphill from the footprint of the FTSF and prevent it from encountering the tailings placed downstream. These diversion channels have been excavated prior to construction of the FTSF to minimize contact water generation and reduce the required size of the contact water ponds.

18.19.8 FTSF Foundation

A competent foundation is fundamental for the stability and adequate performance of the FTSF. Most of the existing East FTSF foundation material consisted of the shallow underlying rock. In those areas where the foundation soil did not have to be removed, the foundation soil was scarified, moistened, and compacted prior to geomembrane installation or placement of any structural element.

18.19.9 Contact Water Subdrain System Installation

This system was designed to capture water from possible infiltrations into the FTSF structure. Numerical modelling to simulate the natural processes of precipitation, infiltration and evaporation on the surface of the compacted filtered tailings indicated that infiltration into the filtered tailings would be negligible. However, as an additional environmental and geotechnical risk mitigation measure and to drain potential infiltrations in the FTSF, the installation of a subdrain system at the bottom of the facility was constructed that could direct contact water to the pond downstream for storage, monitoring and reuse in the Process Plant. This subdrain system consists of 12” and 18” perforated HDPE pipe and a gravel drain cover. Subdrain details and drawings are provided in the Detailed Design Drawings and As-Built Report (WSP, 2022).

18.19.10 Contact Water Collection Ponds

Based on information from environmental testing on representative samples, the filtered tailings show little potential for acid generation or metal leaching. However, the metallurgical process will use cyanide leaching. Therefore, contact water resulting from the filtered tailings runoff will need to be collected and stored in this pond for its subsequent reuse in the Process Plant.

The contact water ponds have been proposed downstream of each of the FTSF starting buttresses to capture surface contact water runoff from active tailings placement areas, where there will be solids removal in a sedimentation pond prior to storage, monitoring, potential treatment or pumping back of this water to the Process Plant.

The existing contact water pond for the currently operating Eastern FTSF has a capacity of approximately 16,800 m^3. This pond capacity will be expanded in 2024 to a storage capacity of approximately 37,000 m^3, which will be able to handle a precipitation event with a return period of up to 1,000 years and its resulting contact water runoff from the active tailings placement areas of the FTSF.

18.19.11 Starter Buttress

The starter buttress was built at the toe of the East FTSF to provide stability and erosion protection. This buttress was designed and constructed with 3H:1V and 2H:1V for downstream and upstream slopes, respectively. The structure has a 6 m wide crest, and a maximum height of approximately 6 m. The starter buttress was constructed with native material excavated from the FTSF foundation and approved borrow soils.

18.19.12 Filtered Tailings

The tailings are dewatered in the filter plant to a gravimetric moisture content (ww/ws) of approximately 18–20%. The optimum moisture contents for the filtered tailings, based on standard proctor compaction tests, range from 13–16.5% and the tailings can reach 95% compaction of the standard Proctor test with approximately ±3% of the optimum moisture content. Given the semi-arid conditions of the site, evaporation typically takes place between loading, transport by trucks from the filter plant to the FTSF and placement in the FTSF. Therefore, the tailings are placed and compacted with the moisture they have directly when coming from the filter plant even on light rainy days. On days when there is more precipitation and the tailings exceed the optimum humidity, tailings are dumped in designated areas until the weather again allows for moisture loss due to evaporation and the tailings finally are extended and compacted. The geotechnical design calls for the filtered tailings to be compacted at 95% of the maximum Proctor density value ±3% of the optimum moisture content, and in lifts no greater than 0.3 m.

18.19.13 Coarse Graded Filtered Tailings Cover

After placing and compacting the filtered tailings and having built at least one bench, the surface slopes and those areas that have reached the proposed final grading will be covered with a coarse graded cover of approximately 0.5 m in thickness. The objective of this cover is to protect against erosion, mitigate tailings dust resuspension by wind action or the suspension of solids by surface water runoff and allow for revegetation of the surface as part of reclamation and progressive closure of those areas of the FTSF that have reached its target storage capacity.

18.19.14 FTSF Construction

Some of the key elements of the FTSF can be constructed in parallel or the order change slightly but, in general, the construction sequence of key elements of the FTSF design is as follows:

- Clearing grubbing and grading of the area that the FTSF will occupy
- Foundation preparation of the FTSF area, subdrain system and structural elements such as starter buttress and contact water pond embankments
- Construction of the water diversion systems to manage non-contact surface water upstream of the tailings dry stack
- Installation of a subdrain system to funnel the surface contact water of the FTSF footprint and to collect contact water resulting from infiltration into the FTSF
- Construction of the contact water ponds for sedimentation, temporary storage and monitoring of contact water prior to reuse in the Process Plant
- Construction of the starter buttress at the toe of the FTSF
- Filtered tailings placement, grading and compaction
- Progressive placement of a coarse material cover on the filtered tailings as it reaches its proposed final grade at each bench to prevent water erosion and dust resuspension and implement its progressive closure.

18.19.15 Contact Water Collector Channels and Collection/Storage Ponds

Each FTSF will have a contact water collection system, consisting of collecting channels that will direct contact water into collection ponds. This contact water management system will be maintained in the first year of closure, with the intention of continuing to capture water runoff from still to be reclaimed areas of FTSFs. The contact water runoff may contain suspended solids and associated metals and residual cyanide. Therefore, the collection system must be maintained if there are exposed tailings areas that can generate contact water or seeps of contact water coming off the subdrain system. However, at the end of the first year if there is no runoff or seepage, the ponds could be removed, and the area regraded and rehabilitated.

18.19.16 Surface Water Monitoring

Surface water monitoring was conducted by SilverCrest environmental personnel to establish an environmental baseline of the site conditions prior to Las Chispas Operation development. During operations as well as closure and post-closure SilverCrest must continue to collect water samples upstream and downstream of the mine site. The purpose of this sampling and testing will be to show that water quality is comparable outside and inside the Las Chispas Operation area and that the Las Chispas Operation is not negatively impacting water quality in the Las Chispas, Babicanora and La Culebra streams. Should the impacts on water quality be noticeable (above the baseline water quality) or significant (above the permissible maximum limits), mitigative measures through engineering controls or treatment should be implemented to comply with local regulatory guidelines and operation objectives.

18.19.17 Groundwater Monitoring

Prior to the commencement of the Feasibility Study, SilverCrest had installed seven groundwater monitoring wells to monitor baseline groundwater conditions both inside and outside the Las Chispas Operation area. During the geotechnical investigation campaign for the FTSF design, WSP USA Inc. installed two groundwater monitoring wells upstream and downstream from the proposed FTSF locations. The NOM-141-SERMANAT-2003, Section 5.8.1, states that it is necessary to keep at least one upstream monitoring well and another downstream well to monitor groundwater quality before entering the FTSF area and when leaving the FTSF area. The installation of the groundwater monitoring wells is required per SERMANAT (2003) to the depth where the groundwater table is encountered or down to 50 m below existing grade (whichever is encountered first).

18.20 Off-Site Facilities

18.20.1 Assay Laboratory

The assay laboratory is located in the town of Arizpe. The decision to locate the laboratory in Arizpe was based on a number of factors, including supporting SilverCrest's environmental, social and governance (ESG) efforts by establishing a business in Arizpe that could potentially outlive the Las Chispas Operation and even grow with the addition of other clients.

The facility has been built within an existing warehouse and currently employs 16 employees. The facility handles all the assaying needs for the mine and Process Plant. The facility is also designed to handle some environmental assays.

Discussions are also on-going for the certification of the assay facility, so that it could meet exploration assaying needs for other SilverCrest exploration projects in Mexico. Considerations are being given to provide water assay services to the municipality, Arizpe citizens, and/or to local ranchers, because water assaying is not always readily available.

Figure 18-35: Assay Laboratory

Source: SilverCrest, 2023.

19 MARKET STUDIES AND CONTRACTS

19.1 Market Studies

Gold and silver doré can be readily sold on many markets throughout the world and the market price ascertained on demand, eliminating the need for market studies. The doré bars produced at the Las Chispas Operation have variable gold and silver contents and a variable gold to silver ratio.

19.2 Refining Terms and Conditions

Gold and silver doré produced at the Las Chispas Operation is refined by a third party before being provided to the market.

The refining terms used as the basis of the economic analysis in Section 22 are based on the average historic payment terms and refining costs provided by SilverCrest, which are typical in the industry.

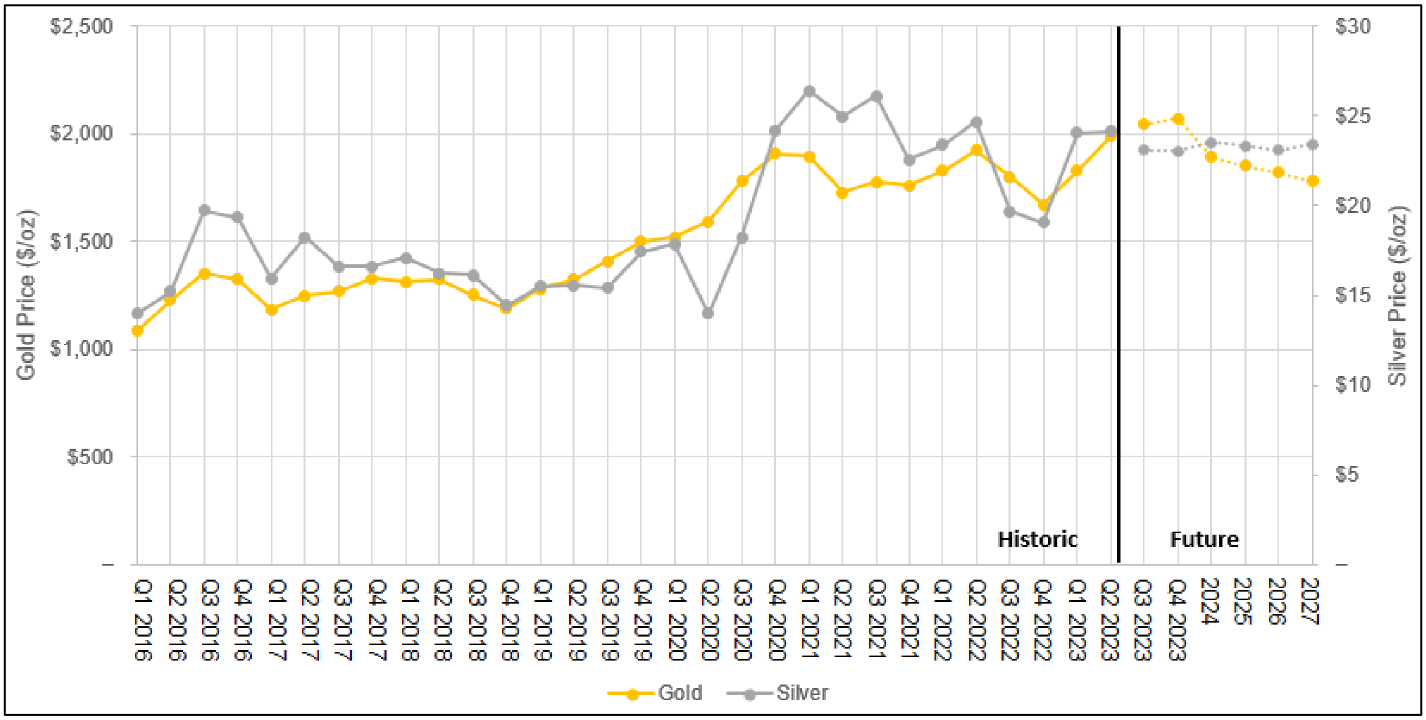
Gold and silver doré can be readily sold on many markets throughout the world and the market price ascertained on demand. The Company sells on prices based on current spot prices when the metal is available or on forward prices with certain pre-approved financial institutions. Title of the metal is transferred to the customer upon receipt of payment.

19.3 Metal Pricing

Metal pricing used for the economic analysis in Section 22 was agreed upon based on considering various metal price sources. These sources included review of consensus price forecasts from banks and financial institutions, three-year trailing average of spot prices, and current spot prices.

A summary of five-year historic gold and silver prices and the forecast prices for 2023 – 2027 is provided in Figure 19-1.

Figure 19-1: Gold and Silver Prices – Historic and Forecast



Source: S&P Capital IQ, 2022.

Based on a review of forecast and current pricing, the metal pricing for the base case economic model in the economic analysis is:

- Gold price of $1,800/troy oz payable
- Silver price of $23.00/troy oz payable.

19.4 Contracts

At the Report Effective Date, the Company has entered into contracts necessary for the Las Chispas Operation. These contracts and agreement include, but are not limited to, contracts for drilling, underground mining, explosives, power, supply of consumables, catering and camp management, security, personnel transportation, and refining. These contracts are reviewed and negotiated periodically to ensure they remain competitive and aligned within industry norms for projects in similar settings in Mexico.

19.5 Deleterious Elements

Based on operational performance to date and estimated projections, the metal content is expected to be 0.5%-1.5% gold and 85%-95% silver with the balance impurities. There are no known concerns with the predicted deportment of impurity or deleterious elements, which would adversely affect the refining terms and costs.

19.6 Comments on Market Studies and Contracts

Doré produced from the Las Chispas Operation is readily marketable, and there are no known concerns with the predicted deportment of impurity or deleterious elements, which would adversely affect the refining terms and costs. Terms, rates and charges for contracts in place are within industry norms.

The QP is also of the opinion that the doré marketing and commodity price information is suitable to be used in the economic analysis in Section 22.

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 Environmental Review

20.1.1 Baseline and Supporting Studies

Environmental studies related to permit applications to describe the physical and biological environments such as climate, flora, fauna, air quality, noise, and surface and groundwater quality surrounding the study area for Las Chispas Operation have been completed and continue to be updated by Compañía Llamarada (LLA). This information has previously been submitted to the Secretariat of Environment and Natural Resources (SEMARNAT) and continues to be updated and reported to the environmental authorities on an annual basis. This information was also included in the environmental baseline study submitted by LLA to SEMARNAT in 2020. Details of the studies are summarized in the 2021 FS Report and the general descriptions are presented in Table 20-1.

Table 20-1: Baseline and Supporting Studies

Study Type	Comments
Climate	Three types of climates typically occur around the study area of the Las Chispas Operation, described as dry semi-warm, semi temperate and semi-dry warm. The mean annual temperature is 21.1°C. The warmest months occur in the period from June to September (>25°C); the mean maximum temperature is recorded in June with 42.8°C, while the minimum is recorded in January, with -3.6°C.
Flora	LLA has identified the predominant vegetation as subtropical scrubland type (MST) according to data from sampling and floristic studies that were conducted in the Las Chispas Operation area (2017, 2019 and 2020), which are characterized by the presence of shrubs or low trees. There were 53 vascular plant species identified (six trees, 29 shrubs, seven cacti, 11 herbaceous); none of them are figure in any special protection category according to NOM-059-SEMARNAT-2001.
Fauna	LLA conducted field and bibliographic studies to document the presence of fauna at the site, of which 39 species have been identified (21 birds, 11 mammals, five reptiles and two amphibians). Based on the definitions of NOM-059-SEMARNAT-2001, none of the fauna species identified in the Las Chispas Operation area figure in any special protection category that requires specific protection actions.
Air quality	Biannual ambient air quality sampling is conducted for total suspended particulate matter (TSP) and particulate matter <10 µm (PM10) to determine baseline compliance with NOM-035-SEMARNAT-1993. The results of these studies are submitted to SEMARNAT on an annual basis in LLA's environmental permit compliance reports. The most recent results show that the emission values of both were found to be below the maximum permissible limits (PST = 21 µg/m^3; PM10 = 11 µg/m^3). LLA proposed to the environmental authority that from 2023 onwards this particulate monitoring would be carried out every three months.
Noise	LLA conducts annual perimeter noise emission measurements to determine baseline compliance with NOM-091-SEMARNAT-1994. The most recent results show noise levels are within the maximum permissible limit established by the Mexican standard (51.2 dB daytime and 48.33 dB nighttime).

Study Type	Comments
	The results of these measurements are reported to SEMARNAT in the annual environmental compliance reports.
Surface water	Since 2019, LLA has consistently conducted surface water quality monitoring within the study area of the Las Chispas Operation. This work was completed to analyze the physicochemical characteristics of the water as referenced in the NOM-127-SSA1-SEMARNAT-1994 standard. Initially, sampling was performed every six months and as of 2023, this work is being done on a quarterly basis. Surface water quality regularly meets current guidelines, with occasional exceedances of fecal coliform and total suspended solids, which appear to be related to grazing and livestock activities upstream and downstream of the Las Chispas Operation. These waters average a pH of 7.5.
Groundwater	Groundwater is being sampled quarterly from 8 wells located on the property. The most recent results are from Q1-2023. The pH of groundwater averages 6.9. Of the 29 parameters analyzed, the total coliforms was the only category to exceed the maximum allowable limits, which may be associated with other activities upstream of the Las Chispas Operation area, such as grazing and cattle ranching. Fluorides are also present, but this element occurs as a natural condition in the baseline study. Results are reported to SEMARNAT in the annual environmental permit compliance reports submitted by LLA.
Archaeology	The National Catalog of Historic Monuments, architectural or with cultural value by the National Institute of Anthropology and History (INAH) contains no records for the Las Chispas Operation property in the municipality of Arizpe, Sonora.

The Company also completed a Task Force on Climate-Related Financial Disclosure (TCFD) assessment aligned with physical climate risk assessment in 2021. The assessment aimed to identify and quantify the impact on the Las Chispas Operation of climate risks over multiple different climate scenarios and time horizons. Of the climate hazards assessed, it was determined that extreme heat, flooding, and drought would have the most significant impact on the Las Chispas Operation.

20.1.2 Geochemistry

LLA is currently developing a geochemical characterization study based on drill core samples from the area of the Las Chispas Operation. The objective of this study is to generate information that will allow the company to understand and determine the potential for acid rock drainage (ARD) and metal leaching (ML) in the surface waste rock. The results of this on-going study are expected to support the management team if further controls were proven to be necessary. The spectrum of samples being analyzed were selected considering the lithological characteristics of the deposit. The samples are being processed by an independent laboratory (SGS Lakefield Canada) and the analysis of the results is performed by a consultant specialized in the field.

This exercise will complement and update the geochemical information previously collected by LLA in compliance with NOM-157-SEMARNAT-2009. This study consisted of waste rock samples taken from exploration drill holes and from the footprint area of the deposit. This material was analyzed by ALS in Monterrey, NL, Mexico. Results indicated the following:

- Exploration drill core: Potentially leachable metals included barium and lead, but in concentrations that were well below the maximum allowable limits of 100 and 5 mg/L, respectively. Neutralization potential measured in $CaCO_3$ kgpt of waste was >20. The acid generation potential was zero. All pH measurements were greater than nine.

- Test pits: Barium was the only potentially leachable metal, but in concentrations well below the maximum allowable limits. All pH determinations were >8. Neutralization potential measured in $CaCO_3$ kgpt of waste ranged from 0.51-1.51. One sample yielded a high neutralization potential/acid potential ratio of 0.025; however, this value is below the minimum ratio of three established in NOM-157-SEMARNAT-2009.

Metallurgical tests were performed by SGS Lakefield Canada and ALS in Monterrey Mexico on tailings samples that underwent acid base accounting (ABA) and net acid generation (NAG) tests based on NOM-141-SEMARNAT-2003. The results showed no evidence of acid formation or leachable metals of interest, and the results showed a high neutralization potential

20.1.3 Environmental Liabilities

There are no known environmental liabilities at the Las Chispas Operation study arising from historic mining and processing operations. Since 2019, LLA has been conducting environmental characterization studies on soil and water, first in the baseline study reported to SEMARNAT and subsequently periodically as part of the monitoring program implemented at the Las Chispas Operation. No environmental liabilities have been identified.

20.2 Permitting

20.2.1 Overview

SEMARNAT requires that a series of studies be completed to support the granting of environmental permits to explore or construct and operate a mine. To comply with the above, LLA has obtained from the different levels of government each of these key environmental impact permits for its exploration, construction and operation stages, including for water use, change of land use, waste generation, emissions and finally for the operation of the Process Plant through the operating license of the Las Chispas Operation.

20.2.2 Permits to Support Construction and Operations

At its Las Chispas Operation, LLA operates under environmental permits granted by regulatory authorities at different levels of government for the development of its mining operations in exploration, operation, and mineral processing activities.

A summary of the key permits issued that are currently in effect is shown in Table 20-2.

Table 20-2: Key Permit List

Permit	Current Status	Agency
Mining Exploration Permit in 5th exploration stage	Completed	SEMARNAT
Manifestación de impacto ambiental (MIA) titled, “Mina Las Chispas” or “Las Chispas Mine”	Completed	SEMARNAT
MIA titled, “Ampliación de camino de acceso a Las Chispas” or “Access Road Expansion to Las Chispas”	Completed	SEMARNAT
MIA titled, “Ampliación de Mina Las Chispas” or “Las Chispas Mine Expansion”	Completed	SEMARNAT

Permit	Current Status	Agency
Change of land use document titled, “Ampliación de Mina Las Chispas” or “Las Chispas Mine Expansion”	Completed	SEMARNAT
MIA titled, “Ampliación 2 Las Chispas” or “Las Chispas Expansion 2”	Completed	SEMARNAT
MIA titled, “Acceso a mina Las Chispas Project” or “Access to the Las Chispas Mine Project”	Completed	SEMARNAT
Change of land use document titled, “Ampliación 2 Las Chispas” or “Las Chispas Expansion 2”	Completed	SEMARNAT
MIA and land use change document titled, “LT Los Hoyos – Mina las Chispas”	Completed	SEMARNAT
Permit to allow bridge construction	Completed	CONAGUA
Title on water rights grant (300,000 m^3)	Completed	CONAGUA
Federal registration as a hazardous waste generator	Completed	SEMARNAT
State registration as a No-hazardous waste generator (special handling waste)	Completed	CEDES
Municipal permit for garbage disposal	Completed	Local Municipality
Hazardous waste management plan	Completed	SEMARNAT
Special handling waste management plan	Completed	CEDES
General permit for the purchase, storage and use of explosives (and modifications)	Completed	SEDENA
Environmental operating License (LAU)	Completed	SEMARNAT

Table 20-3 summarizes the duration and purposes of the granted permits.

Table 20-3: Current Permits and Validity

Permit Name	Permit No.	Issuing Authority	Issue Date	Validity	Comment
MIA for the Las Chispas Operation	DS-SG-UGA-IA-0669-16	SEMARNAT	September 2016	10 years (Expandable for a similar period at least once)	Mineral exploration and extraction activities associated with underground mining. Originally allowed for usage of 3.1 ha for stockpiles and waste rock storage. Subject to four modifications approved by SEMARNAT. Disturbed area allowance expanded to 22.95 ha, to allow for portal and decline expansion, laydown area and explosives magazine.
MIA for access road and bridge	DS-SG-UGA-IA-0268-19	SEMARNAT	June 2019	14 years (Expandable for a similar period at least once)	Construction of a road from Km 86 of the Mazocahui–Cananea highway to the mine site. Approval also covers any required turn-out and rest areas. Allowed disturbance area of 14.3 ha. Agreements reached with six surface rights owners impacted by the easement.
Updated MIA for planned expansion of area that will be affected by development of Las Chispas Operation	DS-SG-UGA-IA-0341-19	SEMARNAT	July 2019	14 years (Expandable for a similar period at least once)	Covers the area required for Process Plant, FTSF, support and administrative facilities, internal roads, environmental monitoring equipment, and fencing/berms. Allowed disturbance area of 96.7 ha.
Updated MIA for planned expansion of area that will be affected by development of Las Chispas Operation	DS-SG-UGA-IA-0204/20	SEMARNAT	August 2020	14 years (Expandable for a similar period at least once)	Covers additional area required for internal roads, water pipelines, ventilation raises and fans, laydown areas, WRSF areas, and topsoil storage. Allowed disturbance area of 1,414.7 ha.
Updated MIA for access road and bridge	DS.SG-UGA-IA-0244/20	SEMARNAT	August 2020	14 years (Expandable for a similar period at least once)	Covers final road design, and vehicular and pedestrian bridge to be constructed over the Sonora River. Allowed disturbance area of 26.9 ha.

Permit Name	Permit No.	Issuing Authority	Issue Date	Validity	Comment
Land use change permit in support of Las Chispas Operation development	DFS/SGPA/UARRN/59 /2020	SEMARNAT	June 2020	3 years (Expires in Q2-2023) A new permit would be requested if the Las Chispas Operation requires additional land use changes (not expected at the time of writing this report)	Authorizes removal and clearing of vegetation. Requires appropriate environmental offset activities, including rescue and relocation of affected species, mitigation of effects on surface and groundwater, and soil conservation. Work is being supervised by a forestry expert from SEMARNAT.
Water usage permit	No. 826243	CONAGUA	October 2020	10 years (Expandable for a similar period at least once)	Allows for use of water, at the rate of 300,000 m^3/year.
Disposal of hazardous waste	No. MLA2600600003	SEMARNAT	May 2019	Unlimited	Regulates the generation, handling, storage, and disposal of hazardous waste.
Disposal of waste requiring special handling	No. CEDES-RGRME-19-121 (2020)	CEDES	October 2020	Annual renewal	Renewed every year. It covers recyclable waste.
General permit for the purchase, storage, and use of explosive materials for 2020	No. 5131-SON	SEDENA	January 2020	This permit is renewed every year. It is currently valid until December 31, 2023.	The permit covers the use of explosives in 24 mining concessions.

Permit Name	Permit No.	Issuing Authority	Issue Date	Validity	Comment
Single Environmental License (LAU)	LAU-26/118/2022	SEMARNAT	September 2022	Unlimited	This license allows the operation of the process plant. It covers the finished products (Dore) and production capacity installed in the processing plan and for all equipment, including crushing, flotation, leaching, Merrill-Crowe, refinery, and tailings disposal. It also covers all ancillary and maintenance services and infrastructure. Please refer to section 20.2.7.
Allow Construction of Power Line	DS-SG-UGA-0066/03/2021	SEMARNAT	April 2021	50 years	Design, construction, and commissioning of a 33 KV overhead medium voltage power transmission line connected to the federal line operated by the Federal Electricity Commission (CFE). This power line went into operation in April 2022. The project consisted of the construction of 83 km of line that crosses 13 properties through rights of way.
Allow Bridge Construction	F 01/2021	CONAGUA	February 2021	October 2021	Access to the Las Chispas Operation involves crossing the Sonora River, which, during the rainy season (July-September), has considerable runoff. For this reason, in 2021 LLA designed and built a bridge called "Tetuachi," which is 171.2 metres in length. This bridge ensures the safe crossing of personnel and supplies to the Las Chispas operation. The work for the construction of the bridge was approved by CONAGUA in February 2021 and was built in 8 months.

Permit Name	Permit No.	Issuing Authority	Issue Date	Validity	Comment
Water Rights Transfers	826243	CONAGUA	October 2020	10 years	LLA has a concession title to use national groundwater up to an authorized volume of 300,000 m^3 /year for industrial mining use. The extraction well is located adjacent to the Sonora River and the water is channeled through a pipeline approximately 9 km long to a system of storage tanks of up to 1,400 m^3 that distribute the water to the various operations such as mining, the Process Plant, drilling, camp, and other services. The authorization is registered in the Public Registry of Water Rights.
Hazardous and Mining Waste Management Plan	26-PMG-I-4572-2022	SEMARNAT	November 2022	Unlimited	LLA applies a hazardous waste management plan that considers all classifications of hazardous waste generated by the operation of the Process Plant and maintenance services for machinery and equipment, including contractors, providing certainty as to the destination assigned to each waste. In November 2022, LLA obtained the registration of the hazardous waste management plan from SEMARNAT under number 26-PMG-I-4572-2022.

20.3 Mining Waste and Water Management

20.3.1 Waste Rock and Tailings Management

Waste rock and filtered tailings are stored in designated facilities that have been designed to store the anticipated waste tonnage to be produced during the LOM. These facilities include contact and non-contact water management structures, where the non-contact water is temporarily stored and used in the Process Plant. More information regarding the design basis, engineering analyses and key design elements of these mine waste management facilities is referred to Section 18.

20.3.2 Water Management

The key facilities for water management include:

- Underground mine dewatering, predominantly from backfilling operations
- Mill (including fresh and process water tanks)
- Filtered tailings storage facility (FTSF)
- Surface water diversion and water management structures
- Fresh water supply system, including pumps and piping
- Sediment and erosion control measures for the facilities.

The water management strategy uses water within the operation area to the maximum practical extent. This involves collecting and managing site runoff from disturbed areas and maximizing the recycle of process water. All the gray water generated at Las Chispas operation from services at the camp and office facilities is channeled to a wastewater treatment plant system to improve its quality. In the first quarter of 2023, 9,500 m^3 of gray water was treated; In one year, this represents 12.5% of the total amount of water granted. This water is being recycled to irrigate roads, to suppress dust, and is also being used to irrigate areas where reforestation has been carried out.

A more detailed account of the site water management, including the site-wide water balance, is provided in Section 18.

20.4 Social and Community Requirements

20.4.1 Population and Demographics

Arizpe has a population of 3,037, of which 1,571 are male and 1,466 are female. According to the 2020 INEGI Census, this represents 1% of the population of the state of Sonora. The average household size in the municipality is 3.3 members, while in the state the average size is 3.7. The population of Arizpe is divided into 971 minors and 1,988 adults, of which 523 are over 60 years old.

The Sonora Valley includes several isolated municipalities set in a region of rugged topography. The areas planned for mining activity are not visible from the local communities or from adjacent roads.

20.4.2 Local Hiring, Procurement and Sponsorship

As of March 2023, the Las Chispas Operation personnel consisted of 908 personnel (327 employees of Llamarada and 581 contractors), of which 139 people were from the Sonora Valley, 450 were from the rest of Sonora and 317 were from other states in Mexico. Table 20-4 below summarizes the source of employment for the Las Chispas Operation.

Table 20-4: Source of Employment

Las Chispas Personnel, including Llamarada and Contractors		
Men	801	88%
Women	107	12%
	908	**100%**
Employees from the Sonora River valley area (Bacoachi, Arizpe, Banamichi, Huepac, Aconchi, Baviacora y Ures; this is considered locals)	139	15%
Employees from the rest of the Sonora state	450	50%
Other Mexican states	317	34%
Internationals	2	1%
	908	**100%**

LLA has two main contractors at the Las Chispas Operation: One main contractor for the Mine development and operation and one contractor for the non-production drilling requirements. Together, these two contractors have more than 125 employees from the local area. They also do business with more than 70 local vendors. In 2022, the economic impact of these two contractors has been estimated to be more than $4 M.

SilverCrest is one of the major sponsors of a non-profit organization (Impulso Koria A.C.) located in Arizpe. Impulso Koria's objectives include supporting local infrastructure, education and health care needs. SilverCrest communicates with Impulso Koria representatives on a regular basis as part of local community and social responsibility (CSR) efforts.

20.4.3 Community Engagement and Relationship Management

20.4.3.1 Ejidos

There are four main ejido groups that SilverCrest has been engaging with, three of which are being impacted by mining operations (Ejido Bamori, Ejido Arizpe, and Ejido Sinoquipe) and the fourth (Ejido Los Hoyos) by the powerline:

- Ejido Bamori - 84 members as of April 2023. LLA maintains constant and direct dialogue with the Ejido members. LLA attends the monthly Board of Directors meetings, the annual general meeting (AGM) and, as required, may attend periodic meetings. LLA has a 20-year lease agreement with Ejido Bamori that applies to 400 ha of land within the Las Chispas operation area. The Ejido Bamori controls 9,184 ha.

- Ejido Arizpe - 348 members (as of March 2023) and Ejido Sinoquipe - 116 members (as of March 2023) – There are currently no agreements in place with either group given the Las Chispas Operation does not impact their land; however, LLA maintains constant and direct dialogue with both groups of Ejido members. LLA attends the monthly Board of Directors meetings, the AGMs, and, as required, may attend periodic meetings.
- Ejido Los Hoyos has 156 members. In 2020, LLA contractually agreed upon a right of way relationship with the Ejido to have land access to build the Las Chispas Operation power line.
- Resulting from LLA findings in its Task Force on Climate-Related Financial Disclosures work, it has been estimated that 74% of the local communities work in agriculture. In 2022, LLA initiated a five-year water stewardship program to increase the availability of water to the community by fixing the water intake valves and the aqueducts allowing water to efficiently reach those that need it. This program also includes the repair and replacement of the sewage system in Arizpe.

Cattle ranching is a significant part of the economy in Sonora state and in the Sonora Valley. SilverCrest established a ranching business, Babicanora Agrícola del Noroeste S.A de C.V (BAN), and as of March 2023, the ranch has 77 cows and six bulls. BAN formally got accepted as a member of the Arizpe ranching association in March 2022. Active participation in this organization is an important community communication channel.

20.4.3.2 Consultation and Engagement Observation

LLA started community consultation and engagement activities in March 2019, and the report was finalized in January 2020. The main findings were as follows:

- The community lacked details and knowledge of the Las Chispas operation.
- The community had concerns relating to a 2014 environmental incident in Cananea (some 100 km north of Las Chispas), and outside the control of SilverCrest.
- The community wished to see improvement to their local infrastructure.
- The communities requested that adequate environmental safety and appropriate mine closure protocols were in place in order to protect the region at the end of the mine life.
- The communities desired more jobs with a focus on providing women with opportunities.,
- The communities mentioned water safety and scarcity as regional concerns.

20.4.3.3 Summary Findings from Additional Studies and Reports

SilverCrest established a board-led Safety Environmental and Social Sustainability (SESS) Committee in May 2019 to oversee corporate ESG.

In early 2020, SilverCrest completed a materiality assessment led by an independent consultant to determine they key material risks and opportunities to the Company as well as the communities in which it operates.

SilverCrest completed a Task Force for Climate Related Financial Disclosure (TCFD) study in Q3 2021, which included the following key findings:

- Drought, flooding and severe heat are key risks

- Las Chispas water consumption was 12 L/s, while the community uses 2100 L/s
- Agriculture makes up over 74% of the livelihoods in the area
- Arizpe does not have water concessions which makes them unable to access government funding for water-related infrastructure
- The sewage systems and water delivery systems serving the farmers is severely inefficient and the floods have damaged current infrastructure.

In early 2022, SilverCrest created a 5-year Water Stewardship Plan:

- Fixing over 20 km of aqueducts, fixing the water intake valve allowing for delivery of water from the river to the aqueducts and fixing the local sewage system
- Attempting to obtain water permits for Arizpe
- Partnering with local ejidos and ranchers to prioritize key areas of concern

Other recent highlights include:

- New jobs created for the assay lab built in Arizpe (completed in Q2 2022)
- Partnerships with over 70 local businesses in the community
- Strong local employment (over 90% from Sonora and over 98% in Mexico)

An inaugural ESG report was released by SilverCrest in 2023, highlighting steps taken to establish and integrate systems to minimize the environmental footprint, and engage and support local communities.

20.4.4 Stakeholder Identification and Materiality Analysis

In early 2020, SilverCrest engaged two third-party ESG consultants, to complete a Materiality Assessment designed to identify the key risks facing SilverCrest including potential risks relating to SilverCrest's relationship with and impact on local communities. A detailed stakeholder analysis was completed that included interviews with the mayor of Arizpe, the owner of a key contracting partner and a workshop with members from the local community. Key findings predominantly echoed those found within the community consultation and engagement activities and were centered around climate and water risks, community health issues (mining, food, water), environmental safety of the local river and agriculture, employment opportunities, a desire for improved infrastructure (sports, recreation, health) and a concern regarding a potential influx of people from outside the community taxing local infrastructure.

As part of SilverCrest's ESG framework, and in response to the issues raised within the community consultation and engagement activities and the Materiality Assessment, SilverCrest formalized a community communication strategy that includes direct outreach, use of social media, presentation of company-generated videos, flyers, posters, and workshops. SilverCrest set up a whistleblower policy and a grievance mechanism.

20.4.5 Disclosure of Socioeconomic Risk

In the seven years SilverCrest has operated within this community, it has conducted internal research, stakeholder engagement and completed a TCFD and Water Stewardship Report. SIlverCrest has learned that access to water is a major risk. To gain an understanding of the full extent of water risk in the region, SilverCrest collaborated with a third-party consultant to conduct a climate-risk assessment of its site and for the surrounding community. The TCFD study confirmed that drought and flooding is the predominant climate risk for the region, and its severity and frequency are expected to worsen over the coming decade.

In addition, a report by the Bank of Nova Scotia on 'Water Scarcity Across Mining Operations in the Americas' conducted a thorough review and analysis of water risk in mining. The report highlights a severe water scarcity issue in Mexico and finds that silver is the most water stress exposed metal, reaffirming concerns around water scarcity in Las Chispas Operation and the wider surrounding area. Federal annual spending on the order of $2.5 B each year is recommended over a 20-year period to guarantee access to water. The Las Chispas Operation site is expected to have a low water usage footprint, and operational disruptions related to water shortage are not expected if managed correctly. However, water scarcity and droughts may have a significant impact on the surrounding communities that depend on water for their livelihoods and well-being.

To address the issue, SilverCrest has committed to investing $1.5M over five years (2022 - 2026) to improve local water infrastructure, which is expected to address the issue of water scarcity being identified as a major risk in the Las Chispas Operation site and the surrounding region. This investment will go towards the revitalisation of river water intake valves, fixing sewage systems in Arizpe and repairing or replacing aqueducts delivering water from the Sonora River to local farmers and ranchers.

An International Council on Mining and Metals (ICMM) aligned water stewardship report has been produced to communicate these planned water initiatives and track progress in building water resilience into the company's operations and surrounding communities.

20.4.6 Indigenous Communities

Impacts to Indigenous populations were examined. There are no communities of Indigenous people within 10 km of the Las Chispas Operation.

20.5 Closure Considerations

20.5.1 Conceptual Closure Plan

A Conceptual Closure Plan was prepared in general accordance with applicable Mexican standards and WSP's experience with similar projects. Under Mexican law, mining may be initiated under a Conceptual Closure Plan with a Detailed Closure Plan being developed later in the project life.

The Conceptual Closure Plan incorporates information from the Detailed Engineering Phase 1 Filtered Tailings Storage Facility (FTSF) Design (WSP, 2022a), information gathered for a recent Asset Retirement Obligation update (WSP, 2022b), as well as environmental information provided by SilverCrest, which includes on-going environmental baseline studies, MIAs, environmental laboratory testing results and data that supplements the granted environmental permits.

The Conceptual Closure Plan focuses on ensuring the post-mining landscape is safe and physically, geochemically, and ecologically stable. The plan ensures that the quality of water resources (possible effluents) in the area is protected, and that the restitution plan is welcomed by communities and regulators. The optimum performance of reclamation activities heavily depends on stakeholder participation and adequate monitoring of the reclaimed site conditions.

The objectives of the Closure Plan include minimizing long-term environmental liabilities, complying with current legislation, and observing international standards and best practices for long-term environmental protection. The reclamation process should lead to a stable terrain configuration that can be used for other purposes, such as conservation, recreation, or other services.

The main objectives of the Conceptual Closure Plan are:

- Cessation of activities that cause disturbances or impacts (noise, lights, dust, vehicle traffic, etc.)
- Physical, chemical, and biological stabilization of impacted land
- Ensuring appropriate environmental compliance
- Minimizing risks to safety and public health
- Reclamation of the mine site to similar site conditions that were present prior to mining.

20.5.2 Closure and Reclamation Areas

The total anticipated disturbed area from the Las Chispas operation is expected to be approximately 95 ha, including:

- Filtered Tailings Storage Facility (FTSF), associated water management structures (ponds, channels, etc.): 17 ha
- Access roads: 17 ha
- Temporary waste rock storage facility (WRSF) and stockpile: 9 ha
- Buildings, yards, Process Plant, and miscellaneous infrastructure: 45 ha.

The FTSFs represent the biggest surface-impacted areas to be reclaimed and the most challenging in terms of ensuring the long-term physical and chemical stability of the waste to remain on site in the post-closure stage. The greatest closure efforts, starting with progressive reclamation, should be focused on these facilities.

Closure will include:

- FTSFs: Scarifying and grading of temporary access roads, benches and slopes; use of an inert cover material; covering the facility with a layer of topsoil to promote vegetative growth; closure of water management infrastructure; and revegetation;
- Facilities: Buildings will be dismantled, donated, retired, and/or kept;
- Portal, shafts and adits: Will be sealed to prevent access from surface;
- WRSF and stockpile: Planned to be depleted prior to cessation of mining. Disturbed footprint areas will be graded and reclaimed;
- Waste and water storage ponds: Will be demolished, and/or filled, graded and reclaimed;
- Water and miscellaneous tanks: May be donated, sold, dismantled or demolished;

- Water reservoir: Will be left in place to supply local pasture or farming water needs;
- Pipelines: Will be dismantled and recycled; and,
- Access roads: The main access roads will be maintained during the monitoring phase. Secondary roads that are no longer needed will be regraded, closed, and revegetated.

20.5.3 Conceptual FTSF Closure

The proposed FTSFs will be located close to the Babicanora stream, and therefore, water management will be a prime consideration during the closure and post-closure periods. The potential impact of any FTSF contact water runoff on existing surface water streams will need to be properly mitigated.

A progressive reclamation approach is adopted where, as each slope or bench of the FTSF is completed, it is immediately covered with a coarse protective layer to minimize surface erosion. This process, when combined with revegetation, will result in progressive reclamation of a great portion of the FTSFs areas prior to closure. Therefore, most of the costs for the cover materials for the FTSFs will be incurred during operations rather than closure. The final operational bench of each FTSF will require, at the time of closure, grading of the disposed tailings to provide positive drainage towards the slopes and perimeter channels of the facilities. The cover layer will be composed of inert, non-acid-generating material with a minimum thickness of 0.5 m. A layer of organic soil that promotes the growth of native vegetation will be placed on top of each FTSF. The organic soil layer is proposed to have a uniform thickness of 0.2 m to facilitate root and vegetation development.

The FTSF design includes contact water collection structures during operation, to keep contact water from impacting the native ground, surface, and subsurface water in the Las Chispas Operation. These structures will need to be well maintained and remain operational during the lifetime of the FTSFs. The contact water ponds, and channel systems will remain active for at least one year after operations cease in case there is a need to capture contact water that could drain from the FTSFs. However, based on infiltration tests and numerical modelling, and assuming proper construction and operation of the facility, infiltration into the tailings is expected to be negligible. Once the contact areas are reclaimed and if the monitoring results indicate that water is of acceptable quality for discharge, the ponds will be filled, the surface will be graded and rehabilitated. Water runoff will be directed to the natural downstream creek bed, and finally the closed and revegetated FTSF would integrate into the surrounding environment.

20.5.4 Conceptual Closure Cost Estimate

WSP – Dry Stack Tailings prepared a conceptual closure cost estimate for the planned operation, using a combination of information derived from the Feasibility Study, drone imagery of existing facilities and landforms, information from the Detailed Engineering Phase 1 FTSF Design (WSP, 2022a), information gathered for a recent Asset Retirement Obligation update (WSP, 2022b) a database of itemized costs from local contractors working on similar projects in the area, and assumptions derived from WSP's experience in mine closure. The cost has been estimated to $6.8 M by WSP as of December 31, 2022, and is updated annually. Closure costs are assumed to be incurred over a period of approximately three years, following the cessation of production and a subsequent period of seven years of monitoring.

21 CAPITAL AND OPERATING COSTS

21.1 Sustaining Capital Costs

LOM sustaining capital costs total $219.9 M, which can be broken as per Table 21-1 below.

Table 21-1: Sustaining Capital Costs for the LOM ($M)

Calendar Year	LOM	2023	2024	2025	2026	2027	2028	2029	2030
Production Year		1	2	3	4	5	6	7	8
U/G Mine Development	176.0	24.3	33.2	31.8	32.8	28.6	21.4	1.8	1.7
U/G Mine Infrastructure	28.3	8.9	5.6	2.6	6.1	1.7	2.1	1.2	0.03
Process Plant	6.2	1.8	1.3	1.6	0.5	0.5	0.5	-	-
Dry Stack Tailings	3.2	-	2.9	-	-	-	0.3	-	-
G&A (including mobile)	6.7	4.1	1.0	0.3	0.3	0.3	0.3	0.3	-
Total	**219.9**	**39.2**	**44.1**	**36.2**	**39.7**	**31.1**	**24.7**	**3.3**	**1.7**

21.1.1 Underground Mine Development

In determining development costs, actuals metres and costs for January 2023 to April 2023 were used, with the remaining development metres for the life of mine provided by the Mineral Reserve mine plan and costs provided by the Entech Mineral Reserve mine design and cost model. Total mine development has been estimated at 50.3 km and $175.5 M including 44.9 km of lateral and 5.4 km of vertical development.

The lateral development unit rates were estimated by Entech through the use of first principles and actual cost information from the Las Chispas Operation. They include contractor costs, supplies, consumables, and an allocation for rehabilitation, Mine G&A, power, fuel, and fixed equipment maintenance.

Vertical development unit rates were estimated by Entech using actual costs from site and include contractor costs, supplies, consumables, escapeway installations where required, and an allocation for rehabilitation, Mine G&A, power, fuel and fixed equipment maintenance.

Development rates estimated by Entech are shown in Table 21-2 below.

Table 21-2: Capital Development Unit Rates

Lateral Heading Size	Unit Cost	Description
(Width x Height)	$/m	
4.5m X 4.5 m	3,350	Ramps, Level Accesses, Remucks, Exploration Drives, Pump Stations
3.3m X 4.0 m	3,150	Ventilation Access
3.3m X 3.6 m	2,950	Sumps, Escapeway Access
Vertical Heading Size	**$/m**	**Description**
1.2 m dia.	2,550	Laddered Escapeway
3.6 m dia.	2,800	Ventilation Raise
3.6 m dia.	3,600	Ventilation and Laddered Escapeway Raise

At the time of writing this report, LLA was negotiating terms with its mining contractors. Provision for potential increases to this contract were included in the rates noted above.

21.1.2 Underground Mine Infrastructure

The underground infrastructure demands were estimated and validated by BBE and WSP USA Inc., extending existing infrastructure and strategies to service the new mine plan for the Babicanora and Las Chispas Areas. Costs were derived from actual labour, equipment, material and supply costs incurred by Las Chispas Operation and then included in the first principles estimates from BBE and WSP USA Inc. The underground infrastructures have been scheduled according to the mine development plan. The total capital for U/G infrastructures account for $28.3 M as follow:

a. General infrastructures: $1.8 M – Includes the cost of construction and outfitting of the Las Chispas Portal and two Underground Maintenance Service Bays. These works are to be completed in 2023.

b. Dewatering and process water: $3.1 M – Includes labour, equipment, materials and supply costs for the construction of the dewatering and process water systems. The dewatering system consists of several underground capture sumps moving water to settling sumps by pumps and piping. Water from the underground settling sumps will be pumped to an available thickener at the Process Plant for settling and clarification and then returned to water storage tanks, ready for reuse in the underground as mine process water.

c. Electrical: $6.3 M – Includes labour, equipment, materials and supply costs to purchase and extend the mine electrical distribution network to service mine development and production areas as well as infrastructure.

d. Communications: $2.0 M – Includes the labour equipment, materials and supply costs to purchase and extend mine communication and information networks as mining progresses. Communication is facilitated by leaky feeder infrastructure and information facilitated by fibre optic equipment.

e. Compressed Air: $0.7 M – Includes the labour, equipment, materials and supply costs to purchase and install two booster compressors and all the pipe required to service both the Babicanora and Las Chispas Areas. The additional compressors will be installed in 2023 and 2024 while the pipe for distributing compressed air will continue to be installed as the development program advances.

f. Emergency preparedness: $3.5 M – Includes the cost to purchase and install an additional 7 mobile refuge stations and to construct 202 pressure bulkheads which will maintain air quality in primary ventilation raises and escapeways.

g. Ventilation: $10.9 M. – Includes the labour, equipment, materials and supply costs to purchase and install new primary ventilation fans and controls at the planned ventilation raises. An amount of rigid ducting and ventilation fans have been costed specifically for ramp development.

21.1.3 Process Plant, FTSF, G&A, Mobile

The total sustaining capital not related to the underground mine has been estimated at $16.1 M.

a. The Process Plant sustaining capital has been estimated at $3.2 M mainly for capital spares required for the LOM. Most of these capital spares were ordered in 2021 and 2022.

b. The sustaining capital associated with the G&A departments totals $3.6 M for the LOM which is mostly expected in 2023 and 2024. The main expenditures are related to G&A work already completed in 2023 ($1 M), the construction of a surface maintenance shop for the U/G mining contractor ($1.5 M) and for a monitoring system to improve the reliability of the power line ($0.3 M).

c. The FTSF estimate was completed by WSP USA Inc. with support from LLA and totals $3.25 M. It has been estimated from first principles and based on the recent experience during the construction of Phase 1 and escalated for construction in 2024. The second phase will total $2.9 M and phase 3 has been estimated at $0.35 M.

d. The LOM capital for surface mobile equipment has been estimated at $3.1 M and consists of additional mobile equipment (all terrain and service truck for the power line) and light vehicle replacement for the LOM.

e. Starting in 2025 and through 2028, a nominal amount of $0.5 M has been assumed to cover the need of the Process Plant and G&A departments capital improvements.

21.2 Reclamation and Closure Cost Estimate

An allowance of $6.8 M was made for closure, based on an estimate developed by WSP USA Inc. The spending was scheduled to occur across the three years following the cessation of production. No provision or accrual for closure was made (cash or otherwise) for the purposes of the economic evaluation. Any change in regulations that would require SilverCrest to undertake progressive closure, or to post a cash bond, would affect the timing of these cash flows.

No salvage value was assumed for the Process Plant and surface infrastructure. It has also been assumed that CFE would accept ownership of the power line which is common in Mexico.

21.3 Operating Cost Estimate

The average LOM operating cost is estimated at 168.18 $/t processed. The operating cost is defined as the total direct operating costs including mining, processing, and G&A costs. Mining costs are estimated to be 99.59 $/t processed (108.04 $/t mined). Tonnes of material to be processed includes mined ore that is already in stockpiles. Table 21-3 shows a summary breakdown of the operating costs.

Table 21-3: Operating Cost Summary

Area	LOM Average Operating Cost
Mining* ($/t processed)	99.59
Process ($/t processed)	47.21
G&A ($/t processed)	21.39
Total LOM Operating Cost ($/t processed)	**168.18**

Notes: *Includes stope development but excludes capitalized underground development. Total may not add due to rounding.

It is assumed that personnel will mostly be accommodated at site Camp facilities with the balance residing in nearby towns or villages. Personnel living in nearby towns and villages are being transported to site by LLA. The mining contractor personnel is being hired throughout Mexico and transported to site by the contractor.

The operating costs exclude doré shipping and refining charges. Costs associated with doré transport and refining are included in the financial analysis along with the applicable payable rates for gold and silver.

21.3.1 Basis of Operating Cost Estimate

21.3.1.1 Estimate Base Date and Validity Period

Overall, the operating cost were estimated from actual operating costs during the period of January to April 2023 and from May 2023 onward calculated from a combination of actual costs and budgeted costs developed from first principles and benchmarked against similar operations.

For the 2024 costs, an allocation of 7% has been assumed for LLA salaries. Similarly, an estimate was completed to account for increased costs within the Mining contract and then kept unchanged for the LOM.

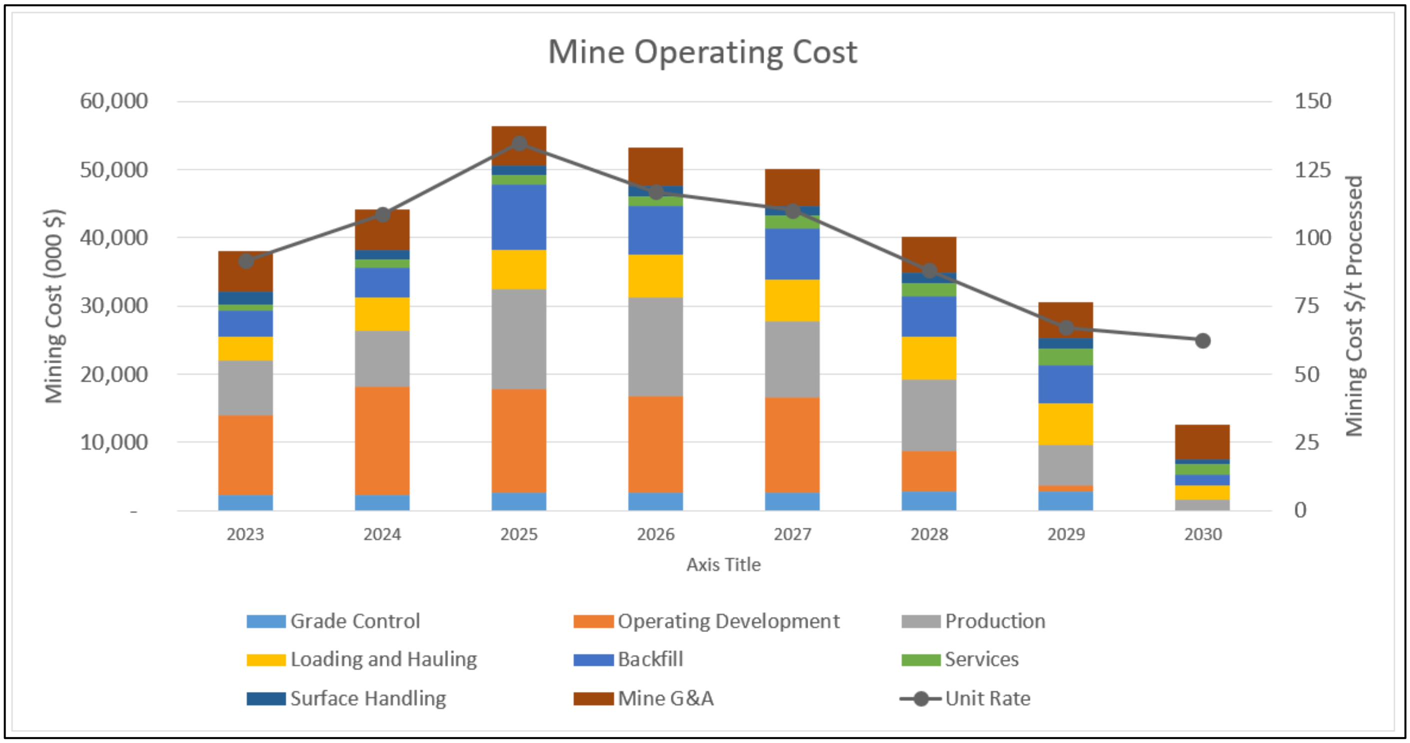
The unit cost for electrical power has been assumed at 0.118 $/kWh. The cost for diesel was assumed at $1.20/L.

All the costs provided in the operating cost estimate were estimated in US dollars, unless otherwise specified, and where required were converted to US dollars from Mexican Pesos using the exchange rate of 20:1.

21.3.2 Mining Operating Cost Estimate

The mine operating costs presented here were assembled by Entech in an independent cost model and calibrated to site actual costs. The mining unit costs ($/t processed) over the LOM are illustrated in Figure 21-1 and summarized in Table 21-4.

Figure 21-1: Annual Mine Operating Cost



Source: Entech, 2023.

Table 21-4: LOM Mining Operating Cost Summary

Area	Total LOM Cost ($M)	Unit Cost ($/t processed)	Percentage (%)
Grade control	18.1	5.54	6
Operating development	77.6	23.75	24
Production	74.4	22.77	23
Loading and hauling	41.0	12.54	13
Backfill	45.8	14.01	14
Services	12.6	3.86	4
Surface handling	11.7	3.59	4
Mining G&A	44.2	13.54	14
Total Mining Operating Cost	**325.4**	**99.59**	**100**

Note: Per tonne total LOM. Total may not add due to rounding.

Average annual mining unit costs range between $62-135/t processed, varying based on total ROM ore mined, operating development advance, proportion of higher cost cut and fill/resue stoping, as well as proportion of higher cost CRF backfill. Table 21-5 summarizes the annual mine operating costs, and Table 21-6 presents the annual mine physicals to illustrate the major activities that drive the variance in costs.

Table 21-5: Mining Operating Costs Estimated per Year of Operations ($M)

Area	Total	2023	2024	2025	2026	2027	2028	2029	2030
Grade control	18.1	2.3	2.2	2.6	2.7	2.7	2.8	2.8	-
Operating development	77.6	11.7	16.0	15.3	14.0	13.9	6.0	0.8	-
Production	74.4	8.0	8.1	14.6	14.5	11.2	10.5	5.9	1.6
Loading and hauling	41.0	3.5	4.9	5.8	6.3	6.1	6.1	6.2	2.1
Backfill	45.8	3.9	4.4	9.6	7.3	7.5	6.0	5.6	1.6
Services	12.6	0.9	1.2	1.3	1.4	1.9	2.0	2.4	1.5
Surface handling	11.7	1.9	1.5	1.4	1.6	1.6	1.6	1.5	0.7
Mining G&A	44.2	5.9	6.0	5.7	5.6	5.4	5.3	5.2	5.1
Total Mining Operating Cost	**325.4**	**38.1**	**44.2**	**56.4**	**53.3**	**50.2**	**40.2**	**30.5**	**12.6**
Total Mining Unit Cost ($/t mined)	**99.6**	**91.5**	**108.6**	**134.7**	**116.8**	**110.0**	**88.0**	**67.0**	**62.4**

Table 21-6: Annual LOM Mine Physicals

Description	Unit	Total	2023	2024	2025	2026	2027	2028	2029	2030
ROM Ore Tonnes	**kt**	3,011	283	366	428	442	440	456	464	131
Total Tonnes	**kt**	5,853	759	890	940	989	910	767	467	131
LH Proportion of Stope Tonnes	**%**	60	56	73	61	63	79	81	97	100
C&F Proportion of Stope Tonnes	**%**	35	35	20	26	27	11	16	2	0
Resue Proportion of Stope Tonnes	**%**	5	8	8	14	10	10	3	1	0
Total Backfill Volume	**k.m^3**	1,330	122	123	278	209	216	170	159	53
Rough Waste Fill Proportion	**%**	66	64	65	81	70	62	57	47	45
Cemented Rock Fill Proportion	**%**	34	36	35	19	30	38	43	53	55
Operating Lateral Development	**km**	35.1	5.3	7.2	6.9	6.3	6.4	2.6	0.3	0.0

Operating development costs peak in 2024 and decrease over the Life of Mine as requirement diminishes. Production costs increase and peak in 2025 as the mine ramps up and more cut and fill and resue tonnes are added to the mine plan. Loading and hauling costs increase to a peak in 2026 with development and production increasing over greater distances. Backfill costs fluctuate based on demand and cement content. Services costs increase as electrical costs increase to peak in 2029 as additional mine infrastructure is added. Surface handling costs decrease from its peak in 2023 as haulage from historic stockpiles diminishes.

21.3.2.1 Mine Cost Model

The mining costs were estimated in a cost model created by Entech using existing site service and supply contracts, actual site costs for materials and supplies, first principles calculations and historic actuals for similar sites. The final production and development operating costs were calibrated to site actuals.

The largest cost is the existing service contract with the Mining Contractor. This contract includes costs for; labour, indirects for labour, the operation and maintenance of mobile equipment and at the face materials and supplies such as auxiliary fans, flex ducting, drill steel and bits, electrical junction boxes, development pumps, and trailing cable to carry out the mine development and production over the LOM. Contractor costs include an estimated escalation to account for costs of the mining contract starting in 2024 until end of LOM.

The responsibility for the remainder of the materials and supplies outside of the Mining Contract lie with LLA, which has established supply contracts and constitute the following:

- Electrical power for the underground operation
- Diesel
- CRF binder
- Production consumables (explosives, ground support, etc.)
- Development consumables (explosives, piping, ground support, etc.)
- Maintenance of fixed infrastructure including electrical, compressed air, dewatering and primary ventilation installations.

The key assumptions used in the estimate of the mining costs include:

- January to April 2023 actual costs
- Mine physicals calculated in the Deswik Scheduler® LOM schedule
- Contractor rates from the existing mine contract with an estimated escalation applicable starting in 2024
- Mining owner oversight costs (mining G&A costs and technical services) which are included as a fixed cost
- Explosive cost of $1.28/t for ANFO
- Cement cost of $199.40/t for use in backfill
- Equipment hours were estimated over the LOM and were used to estimate the mine power and ventilation requirement. Support equipment was added based on production requirements
- Ventsim™ software simulation was completed to estimate the ventilation requirement over the LOM
- Pumping hours were estimated over the LOM considering the mine schedule and dewatering requirement
- Dewatering/mine process water pipe, power cable and compressed air line quantities were adjusted to account for re-use within the operation
- No contingency has been applied to operating costs.

Costs were applied to the quantities to generate a cost per tonne, as shown in Table 21-4.

21.3.2.2 Stoping Costs

The mining cost estimate was completed for each stope by considering the mining tasks required and applying the mine contract rates, consumables and materials cost to each. Table 21-7 shows the average mining costs per mining method as a unit rate of mine recovered tonnes, exclusive of processing and site G&A.

Table 21-7: Mining Operation Cost per Mining Method

Mining Method	Unit Cost ($/t mined)
Longhole	86.05
Cut and Fill	135.92
Resue	210.40

21.3.2.3 Longhole Stoping Costs

For each longhole stope, the following elements were considered:

- Production cycle to drill, blast, and muck a sill drive at the base and on the top of each stope
- Production cycle to drill, blast, and muck opening raise for each stope
- Production cycle to drill, blast, and muck longhole stope
- Backfilling of each stope
- Mucking and hauling to surface
- Grade control
- LLA supervision and technical services
- Allocation of electrical power, fuel and fixed equipment maintenance based on proportion of tonnes.

21.3.2.4 Cut and Fill Breasting Mining Costs

For each cut and fill breast stope, the following elements were considered:

- Production cycle to drill, blast, muck and support a sill drive at the base of each stope, mining a 3.6m high sill drive at the base of each stope
- Production cycle to drill, blast, muck and support 3.6m high lifts to complete the stope, requiring six lifts to complete the stope
- Slashing the pivot drive to gain access to each lift as the stope is mined from the base upwards
- Backfilling of each lift, filling the stope and providing a base on which the subsequent lift is mined
- Mucking and hauling to surface
- Grade control

- LLA supervision and technical services
- Allocation electrical power, fuel and fixed equipment maintenance based on proportion of tonnes.

21.3.2.5 Resue Mining Costs

For each resue stope, the following elements were considered:

- Production cycle to drill, blast, muck and support a sill drive at the base of each stope, mining a 3.6 m high sill drive at the base of each stope
- The 3.6m vertical ore slash taken from the sill drive and the backfilled floor of each subsequent lift
- Slashing the pivot drive to gain access to each lift to slash waste horizontally, adding backfill if necessary to gain access to the lift above and repeat an ore slash
- The mucking of swell rock not required for backfill and the installation of ground support
- Mucking and hauling to surface
- Grade control
- LLA supervision and technical services
- Allocation of electrical power, fuel and fixed equipment maintenance based on proportion of tonnes.

21.3.2.6 Underground Operating Development

In determining development costs, actuals metres and costs for January 2023 to April 2023 were used, with the remaining development metres for the LOM provided by the Mineral Reserve mine plan and costs provided by the Entech Mineral Reserve mine design and cost model. Total mine operating development has been estimated at 35.1 km and $95.9 M.

The lateral development unit rate costs were estimated by Entech using first principles and calibrated with actual costs from the Las Chispas operation and include contractor costs, supplies, consumables, an allocation for rehabilitation, G&A, power, fuel and fixed equipment maintenance.

Operating development unit rates estimated by Entech are shown in Table 21-8 below.

Table 21-8: Operating Development Unit Rates

Lateral Heading Size	Unit Cost ($/m)	Description
3.3m X 4.0 m	2,500	Sill Access, LHOS Sill
3.5m X 3.6 m	2,450	Cut and Fill Sill, Resue Sill
3.3m X 3.6 m	1,750	Pivot Drives

At the time of writing this Report, LLA was negotiating terms with its mining contractors. Provision for potential increases to this contract were included in the rates noted above.

21.3.3 Process Operating Cost Estimate

The process operating cost estimates are on a unit rate basis comprising of crushing, grinding, whole ore cyanide leaching, countercurrent decantation washing, Merrill-Crowe precious metals recovery, and smelting unit operations to produce gold–silver doré bars. Tailings filter operation, FTSF operation and, FTSF seepage treatment costs were also included.

Overall, the processing costs were estimated from the experience gained over the last year of operation but more specifically for the period of January to May 2023 and are a combination of actual costs and budgeted costs developed from first principles and benchmarked against similar operations.

Costs related to the doré shipping and refining were included in the financial analysis in Section 22.

21.3.3.1 Processing Operating Cost Summary

The unit process operating cost for the LOM was estimated at 47.21 $/t processed, based on a milling rate averaging 1,200 tpd. Table 21-9 summarizes the operating costs expected for the process area.

Table 21-9: LOM Process Operating Cost Summary

Area	TOTAL ($ M)	2023 ($ M)	2024 ($ M)	2025 ($ M)	2026 ($ M)	2027 ($ M)	2028 ($ M)	2029 ($ M)	2030 ($ M)
Crushing Stock & Fines	**3.12**	0.93	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Milling	**22.10**	7.09	6.72	6.72	6.72	6.72	6.72	6.72	6.72
Bulk Leach	**28.12**	9.40	9.76	8.28	8.28	8.28	8.28	8.28	8.28
CCD	**2.02**	0.60	0.62	0.62	0.62	0.62	0.62	0.62	0.62
Merril-Crowe	**16.39**	4.88	5.04	5.04	5.04	5.04	5.04	5.04	5.04
Refining	**10.34**	3.08	3.18	3.18	3.18	3.18	3.18	3.18	3.18
Detox	**2.09**	1.30	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Tailing Filters	**16.68**	7.04	4.82	4.82	4.82	4.82	4.82	4.82	4.82
FTSF	**6.73**	2.00	2.07	2.07	2.07	2.07	2.07	2.07	2.07
Management/Labour/Services	**46.64**	14.19	13.89	13.57	13.57	13.57	13.57	13.57	20.36
Total Milling Operating Cost ($ M)	**154.2**	**21.0**	**19.4**	**19.2**	**20.9**	**20.9**	**20.9**	**20.8**	**11.1**
Total Milling Cost per ROM Tonnes ($/t)	**47.21**	**50.51**	**47.60**	**45.80**	**45.80**	**45.80**	**45.80**	**45.80**	**55.25**

Note: Total LOM milled mineralized material tonnage of 3.35 mt derived from mine plan.

The milling costs for the period of January to May 2023 averaged $50.40 /t and have been included as is in the estimate for 2023. This period was used and adjusted for non-recurrent work to establish LOM costs. The average milling cost for the LOM is $47.21 /t.

Manpower cost was increased by 7% for 2024 and then kept constant for the purpose of the LOM estimate. Manpower levels have been adjusted downward from the current levels through the LOM starting in 2024 as the plant is now stable and has completed its ramp-up period

In 2030, the LOM assume an output of the mine that will be equivalent to six months of Process Plant operation. For the purpose of cost estimation, the Process Plant has been assumed to operate with 2 crews (normally 3 crews) operating for 2 weeks and being down for 1 week. The resulting unit cost estimate for the 12 months period shows an increased operating cost to $55.25 /t.

The operation cost associated with FTSF (mobile equipment, maintenance, fuel, contractors) is included in the Process Plant costs estimate, with the exception of the site services manpower which remains in the site G&A section.

Table 21-10 below provides a summary of the processing cost by cost center along with percentage.

Table 21-10: Process Plant Operating Cost (LOM Average)

Area	Total LOM ($ M)	Unit LOM	Percentage
		($/t processed)	(%)
Electrical Energy	21.6	6.59	14%
Reagents & Consumables	54.4	16.66	35%
Labour (including benefits)	23.7	7.23	15%
Site services	23.7	7.26	15%
Supplies (maintenance and others)	30.9	9.45	20%
Total Process Operating Cost	**154.2**	**47.21**	**100%**

21.3.3.2 Electrical Energy

The electrical energy consumption is largely based on the experience operating the Process Plant during the period of January to April 2023. During this period of time the plant operated at an average rate of 1,145 tpd and consumed a total of 7.7 GWh, which translates to an average of 56.0 kWh/t processed.

Electricity is provided to site by CFE at a unit cost of $0.118/kWh. Electricity accounts for $6.59/t or 14% of the processing costs.

21.3.3.3 Reagents and Consumables

Individual reagent and consumable consumption rates were estimated from experience gained over the last year of operation but more specifically over the period of January to May 2023. The unit prices of the consumables are based on current market conditions in Mexico. The LOM average cost of reagents and consumables was estimated at

$16.66/t processed, which accounts for 35% of the overall process operating cost and is the largest Process Plant operating cost center. The large majority of the consumables (83%) are for cyanide, lead nitrate, zinc and grinding media.

21.3.3.4 Labour

The estimated average labour cost was $7.23 /t processed. It was based on fully loaded Q1 2023 labour rates from SilverCrest. For 2024, a salary adjustment of 7% has been assumed for LLA staff. Manpower required for the assay laboratory is included in the laboratory cost estimate. Manpower required for the FTSF is included in the site G&A section under site services.

The manpower requirement for the Process Plant is expected to reduce as the operation stabilizes. The labour costs amount for 15% of the processing costs.

21.3.3.5 Site Services

The site services costs ($7.26/t processed) include an allocation for the camp operation, the mobile equipment operating cost (including fuel, supplies and maintenance), and the assaying costs.

The mobile equipment cost is mainly associated with the FTSF operation. The labour to operate the equipment is captured in the site G&A costs.

21.3.3.6 Supplies

The Process Plant supplies cost was estimated at $9.45/t processed. It includes contractors and consultants for maintenance and all supplies, spare parts and consumables for the maintenance of the Process Plant.

21.3.4 General and Administrative Operating Cost Estimate

G&A costs covered the expenses of the service departments. Operating departments (mine, geology, mine engineering, plant operation/maintenance) are covered respectively in mine operating costs and Process Plant operating costs. SilverCrest personnel numbers have already peaked during 2022 and stands at 366 full time employees in 2023. During the LOM and as the mining operation stabilizes, it is expected that the total manpower will reduce to 294 by year 2030.

Overall, the G&A costs included:

- Manpower: Included general manager and staffing in community relations, government relations, accounting, purchasing, environmental, health and safety, security, human resources, information technology and site services.
- Manpower salaries and benefits: Based on LLA salary matrix in Mexico as of Q1-2023. For 2024, the salary matrix was increased by 7% and then kept stable for the LOM. The costs include base salary or wage and related burdens, covering retirement savings plans, various life and accident insurances, extended medical benefits, unemployment insurance, incentives and other benefits;

- Contractors and consultants' expenses: included general administration, contractor services, insurance, security, medical services, legal services, human resources, travel, communication services/supports, permits obligations, enviro assay/testing, surface rights payments, overall site maintenance, surface electricity requirement, and engineering consulting;
- Material and supplies expenses: Included costs associated with employment such as telephones, information technology equipment (computers and software).

The total annual G&A cost was estimated at a total of $69.9 M during production which equated to an average LOM G&A cost of $21.39/t processed. G&A costs are summarized in Table 21-11.

Table 21-11: General and Administrative (G&A) Costs for the LOM

Item	Total LOM ($ M)	Unit LOM ($/t processed)	Unit LOM ($/t processed)							
			2023	2024	2025	2026	2027	2028	2029	2030
Management	16.7	5.10	5.35	5.46	5.25	5.25	5.25	5.26	5.25	7.83
HR/IT	12.6	3.85	3.35	4.20	4.18	4.08	4.09	4.09	4.10	5.61
Health/Safety /Security	14.7	4.50	4.40	4.94	4.83	4.69	4.70	4.72	4.73	6.31
ENVIRO and Permitting	4.4	1.35	1.49	1.44	1.37	1.38	1.38	1.39	1.39	1.94
Site Services/WH	16.1	4.93	5.86	5.43	5.15	5.00	5.01	4.97	4.92	6.52
CSR	5.4	1.65	2.10	1.82	1.70	1.67	1.60	1.60	1.60	2.38
Total	**69.9**	**21.39**	**22.55**	**23.30**	**22.49**	**22.06**	**22.03**	**22.03**	**22.00**	**30.60**

22 ECONOMIC ANALYSIS

22.1 Forward-Looking Information Cautionary Statements

The results of the economic analysis discussed in this Section represent forward-looking information as defined under Canadian securities law. The results depend on inputs that are subject to several known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented herein. Information that is forward looking includes the following:

- Proven and Probable Mineral Reserves that have been modified from Measured and Indicated Mineral Resource Estimate
- Cash flow forecasts
- Assumed commodity prices and exchange rates
- Proposed mine and process production plan
- Projected mining and process recovery rates
- Ability to have doré refined on favourable terms
- Proposed capital and operating costs
- Assumptions as to closure costs and closure requirements
- Assumptions as to environmental, permitting, and social risks.

Additional risks to the forward-looking information include:

- Changes to costs of production from what is assumed
- Unrecognised environmental risks
- Unanticipated reclamation expenses
- Unexpected variations in quantity of mineralization, grade or recovery rates
- Geotechnical or hydrogeological considerations during operations being different from what was assumed
- Failure of mining methods to operate as anticipated
- Failure of Process Plant, equipment or processes to operate as anticipated
- Changes to assumptions as to the availability and or generation of electrical power, and the power rates used in the operating cost estimates and financial analysis
- Ability to maintain the social licence to operate
- Accidents, labour disputes and other risks of the mining industry

- Changes to interest rates, tax rates or applicable laws
- Receipt of any required permits, beyond those already held by SilverCrest.

22.2 Methodology

A pre- and post-tax economic analysis was completed on the basis of a discounted cash flow model featuring a 5% discount rate. The analysis used constant (real) 2023 US$ and the Las Chispas Operation cash flows were modelled in annual periods.

The model assumed a production period of eight years, including 2023-2030.

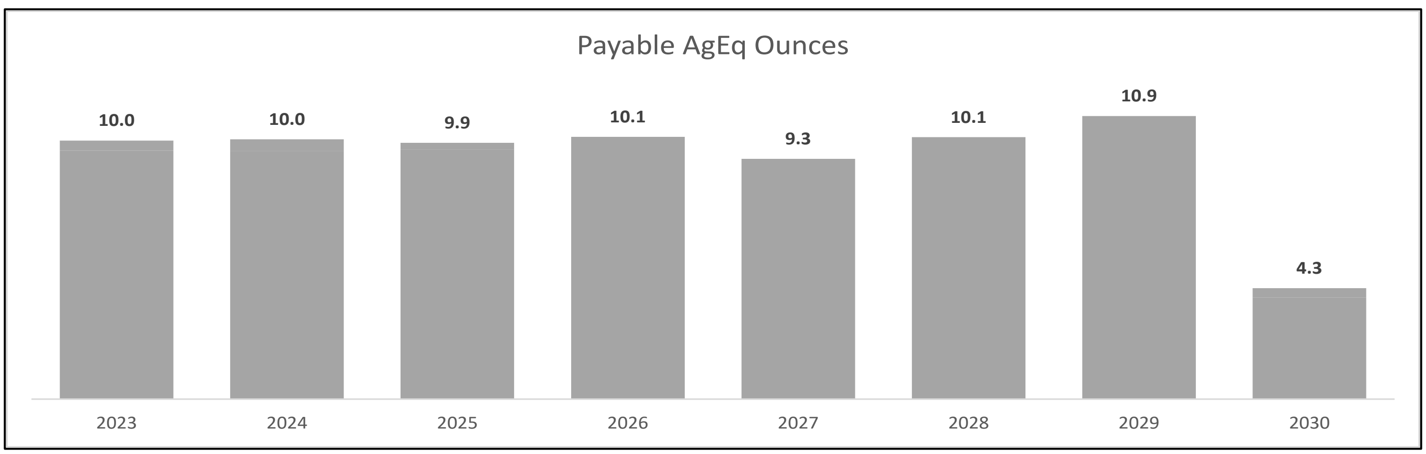
22.3 Financial Model Parameters and Assumptions

22.3.1 Mineral Resources, Mineral Reserves and Production Schedule

The mine plan is based on the estimated Mineral Reserves for the Las Chispas Operation. No Inferred Mineral Resources were included in the material scheduled for processing.

Figure 22-1 provides the LOM doré production forecast. Figure 22-2 and Figure 22-3 summarize the material movement and anticipated production schedule.

Figure 22-1: LOM Production Forecast (Moz)



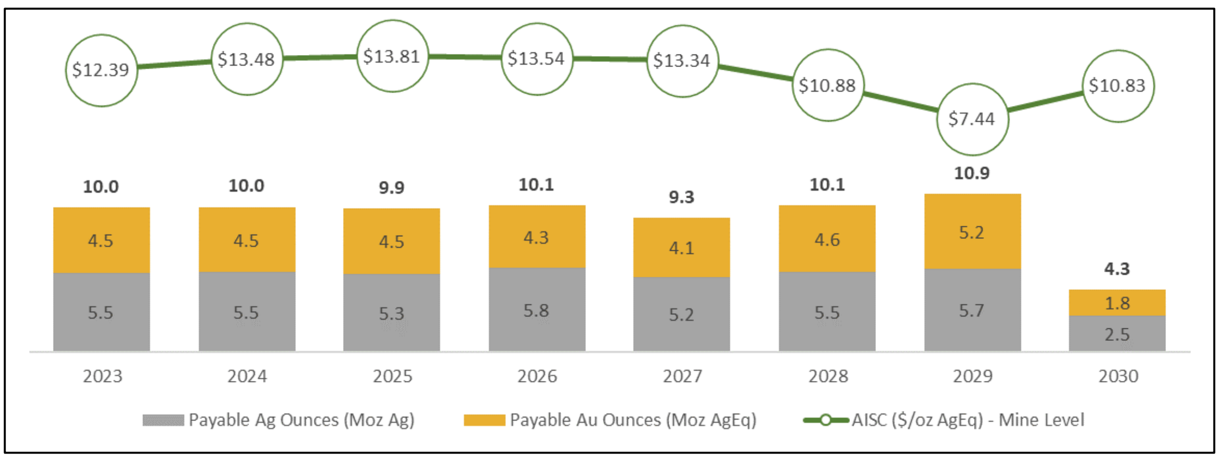
Source: SilverCrest, 2023.
Notes:

1. The AgEq is based on Ag:Au ratio of 79.51:1, calculated using metal prices of $1,650 /oz Au and $21.00/oz Ag, and metal recovery values of 98% Au and 97% Ag.
2. All numbers are rounded.
3. Payable ounces previously unsold includes ounces contained in inventory as of January 2023.
4. 2030 includes ounces contained in-circuit.

Figure 22-2: Material Movement Schedule

Source: SilverCrest, 2023. Includes actual tonnes and grade mined from January 2023 – April 2023.

Figure 22-3: Annual Production Schedule & All-In-Sustaining-Costs



Source: SilverCrest, 2023. Includes actual metal sold from January 2023 – April 2023.

22.3.2 Metallurgical Recoveries

Metallurgical recoveries were applied to the economic model in accordance with the metallurgical testwork and the actual metal recoveries described in Section 13. The overall achieved LOM recoveries are shown in Table 22-1.

Table 22-1: LOM Processing Recoveries

Metal	Unit	Recovery
Gold	%	98.0
Silver	%	97.0

22.3.3 Freight, Smelting and Refining

Assumed terms for smelting and refining of the gold and silver product are discussed in Section 19. Rates are based on the average historic payment terms and refining costs provided by SilverCrest, which are typical to charges in the industry.

22.3.4 Metal Prices

The economic model is based on the following assumptions:

- Gold price of $1,800/oz
- Silver price of $23.00/oz.

Base case metal prices selected for this Report were based on consensus average long-term forecast gold and silver prices from Canadian financial institutions. These metal prices were selected in Q1 2023 with consideration of three-year trailing prices and spot prices at the time.

The economic analysis is based on flat prices for the projected LOM.

22.3.5 Operating Cost

The operating costs are detailed in Section 21. 3 summarizes the overall unit costs. The projected total operating costs are estimated to average $168.18/t processed. Mining costs are estimated to be $99.59t processed ($108.04/t mined).

Table 22-2: LOM Operating Costs

Area	LOM Average Operating Cost
Mining* ($/t processed)	$99.59
Process ($/t processed)	$47.21
G&A ($/t processed)	$21.39
Total LOM operating cost ($/t processed)	**$168.18**

Note: Includes stope development but excludes capitalized underground development.

22.3.6 Capital Costs

All initial construction capital costs have been incurred at Las Chispas Operation. Future capital costs are limited to sustaining capital costs, predominantly related to underground mine development and infrastructure, and closure costs. All mining related sustaining capital costs were estimated by Entech and scheduled to match the expected spend profile developed as part of the mining cost estimation process and based on the production and waste movement profile. Sustaining capital costs for the Process Plant, tailings facility and other surface infrastructure were scheduled based on projected capital expenditures.

Closure costs we estimated by WSP USA Inc. as of December 31, 2022. It is estimated that these costs would be incurred over a period of approximately three years, following the cessation of production from 2030-2032.

Table 22-3: Sustaining Capital Cost

Area	Units	Sustaining Capital
Mine & Underground Infrastructure	$M	203.8
Process Plant	$M	3.2
Mobile Equipment	$M	3.1
Tailings	$M	3.3
Miscellaneous	$M	6.6
Total	**$M**	**219.9**
Closure	$M	6.8

22.3.7 Royalty

There is a 2% royalty on the Nuevo Lupena and Panuco II concessions.

The royalty is subject to material that exceeds specified grade thresholds on these concessions. None of the estimated Mineral Reserves are within these concessions; therefore, this royalty is not applicable and was excluded from the economic analysis.

22.3.8 Working Capital

This estimate was reached based on value added taxes (IVA) required at the outset of the Las Chispas Operation. The model assumes that value added taxes will be collectible in an estimate of one year and a half from the date the related costs are incurred.

22.3.9 Taxes and Government Royalties

The corporate taxes and government royalties applied to this Report cash flow include the following:

- Corporate income tax of 30%
- Special mining duty of 7.5% of income less authorized deductions, applicable to mining companies
- Extraordinary mining royalty of 0.5% of net revenue (NSR), applicable to gold and silver operations.

Taxes were prepared by SilverCrest's tax manager.

The estimated Income tax assumption includes the corporate income tax, special mining duty and the extraordinary mining royalty.

A beginning balance of tax-loss carry forwards that could be used as deductions offsetting taxable income is assumed to be $71 M as of December 31, 2022.

22.3.10 Closure Costs and Salvage Values

An allowance of $6.8 M was made for closure, based on an estimate developed by WSP USA Inc. The spending was scheduled to occur across the three years following the cessation of production. No provision or accrual for closure was made (cash or otherwise) for the purposes of the economic evaluation. Any change in regulations that would require SilverCrest to undertake progressive closure, or to post a cash bond, would affect the timing of these cash flows.

No salvage value was assumed for any items.

22.3.11 Financing and Inflation

No consideration of financing was made. The model considers the cash flow only at an asset level and assumes 100% equity ownership.

The modelling was undertaken in real Q1 2023 US$ with no inflation applied to either commodity prices or costs (unless otherwise stated). An assumption of US$ accounting was made.

22.4 Financial Results

The economic analysis demonstrates that the mine plan has positive economics under the assumptions used. The Las Chispas Operation post-tax (NPV) at a 5% discount rate is estimated to be $549.9 M. A financial summary is shown in Table 22-4.

Table 22-4: Economic Analysis Summary

Description	Unit	LOM Total/Avg.
Average Mill Throughput	tpd	1,200
Mine Life years	years	8
Average Gold Mill Head Grade	gpt Au	4.02
Average Silver Mill Head Grade	gpt Ag	396
Average Silver Equivalent Mill Head Grade	gpt AgEq	716
Contained Gold in Mine Plan	koz Au	422.7
Contained Silver in Mine Plan	koz Ag	41,615.6
Contained Silver Equivalent in Mine Plan	(koz AgEq)	75,227.6
Average Gold Metallurgical Recovery	% Au	98.0
Average Silver Metallurgical Recovery	% Ag	97.0
Payable Gold	koz Au	421.6
Payable Silver	koz Ag	41,005.5
Payable Silver Equivalent	koz AgEq	74,525.4
Average Full Year Annual Production		
Gold	Au koz/yr	57.0
Silver	Ag koz/yr	5,503.5
Silver Equivalent	AgEq koz/yr	10,036.0
Mining Cost	$/t mined	108.00
Mining Cost	$/t processed	99.59
Process Cost	$/t processed	47.21
G&A Cost	$/t processed	21.39
Total Operating Cost	$/t processed	168.18
LOM Sustaining Capital Cost	$M	219.9
Closure Costs	$M	6.8
Cash Costs LOM – Mine Level	$/oz AgEq	7.84
AISC LOM – Mine Level	$/oz AgEq	11.98
Au Price	$/oz	1,800
Ag Price	$/oz	23
Pre-Tax NPV 5%, $M	5%, $M	706.5
Post-Tax NPV (5%, $M)	5%, $M	549.9
Undiscounted LOM net free cash flow	$M	654.1
LOM AISC Margin	%	48%

The production schedule was incorporated into a pre-tax financial model to develop the annual recovered metal production. The annual at-mine revenue contribution of each metal was determined by deducting the applicable treatment, refining, and transportation charges (from mine site to market) from gross revenue.

The cash flow is based on payable ounces of 421.6 koz gold and 41,005.5 koz silver.

Sustaining capital costs were incorporated on a year-by-year basis over the LOM, and operating costs were deducted from gross revenue to estimate annual mine operating earnings.

The financial model includes a mine closure and reclamation cost forecast of $6.8 M, which is incurred after the completion of production, over a three-year period.

The operating costs are expected to average $168.18 per tonne milled over the LOM. All-in sustaining costs, which is an industry-accepted metric used to reflect the recurring costs to achieve production, average $11.98 /oz AgEq payable when averaged over the LOM. The standard definition for all-in sustaining costs includes all on-site costs, royalties and production taxes, derivative gains or losses, permitting costs, refining costs, corporate G&A, stockpile inventory adjustments, corporate G&A and share based compensation, and all sustaining capital costs, including exploration. Given that the cashflow analysis is presented at the operation level only, all corporate related costs and sustaining exploration have been excluded from this analysis.

Table 22-5 is an overall cost summary for the Las Chispas Operation.

Table 22-5: Cost Summary

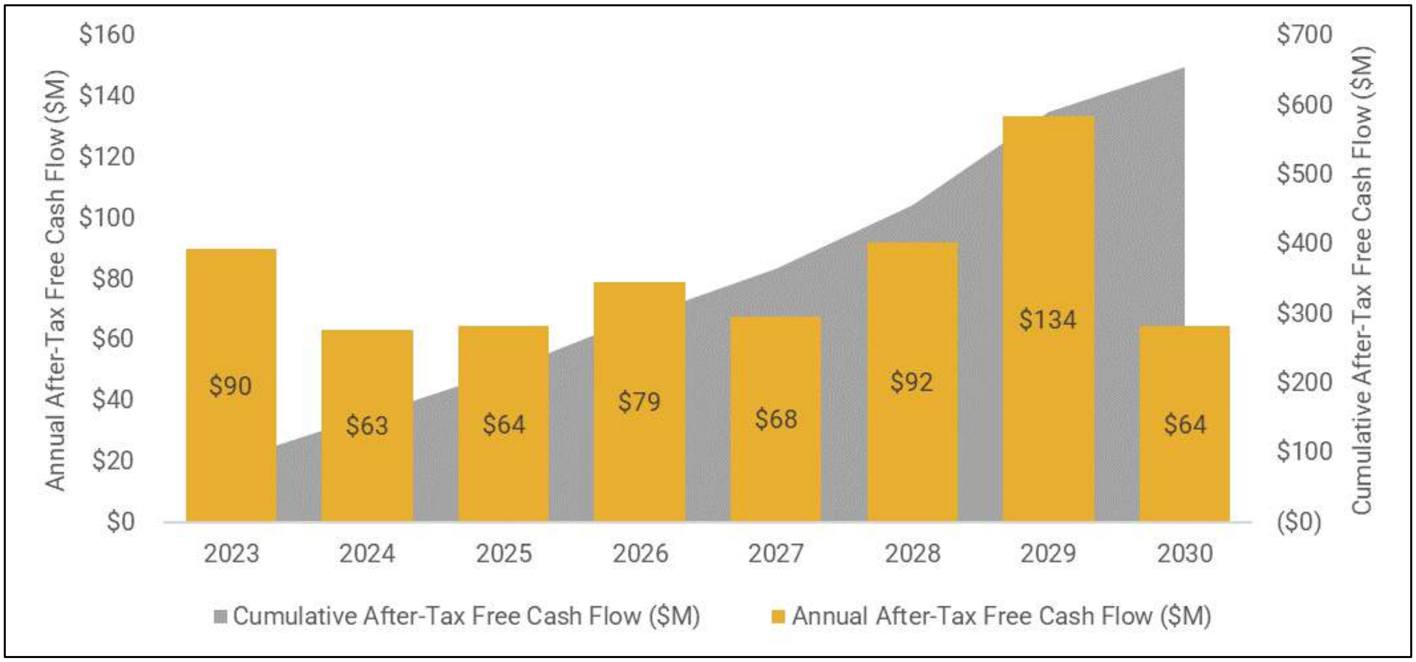
Item	LOM $M	Per AgEq Oz
Mining	325.4	4.37
Processing + TCRC	178.6	2.40
G&A	69.9	0.94
Inventory Adjustments	10.3	0.14
Cash Costs	**584.2**	**7.84**
Sustaining Capital	219.9	2.95
Closure	6.8	0.09
Government Royalties	82.0	1.10
AISC	**892.9**	**11.98**

Note: Inventory adjustments includes costs applied to previously unsold ounces from inventory. Operating costs differ from cash costs.

The post-tax financial analysis was completed using the pre-tax cash flow by applying the tax model (refer to Section 22.3.9).

Figure 22-4 shows the annual after-tax net cash flows (NCFs) and cumulative after-tax net cash flows.

Figure 22-4: After-Tax Cash Flow

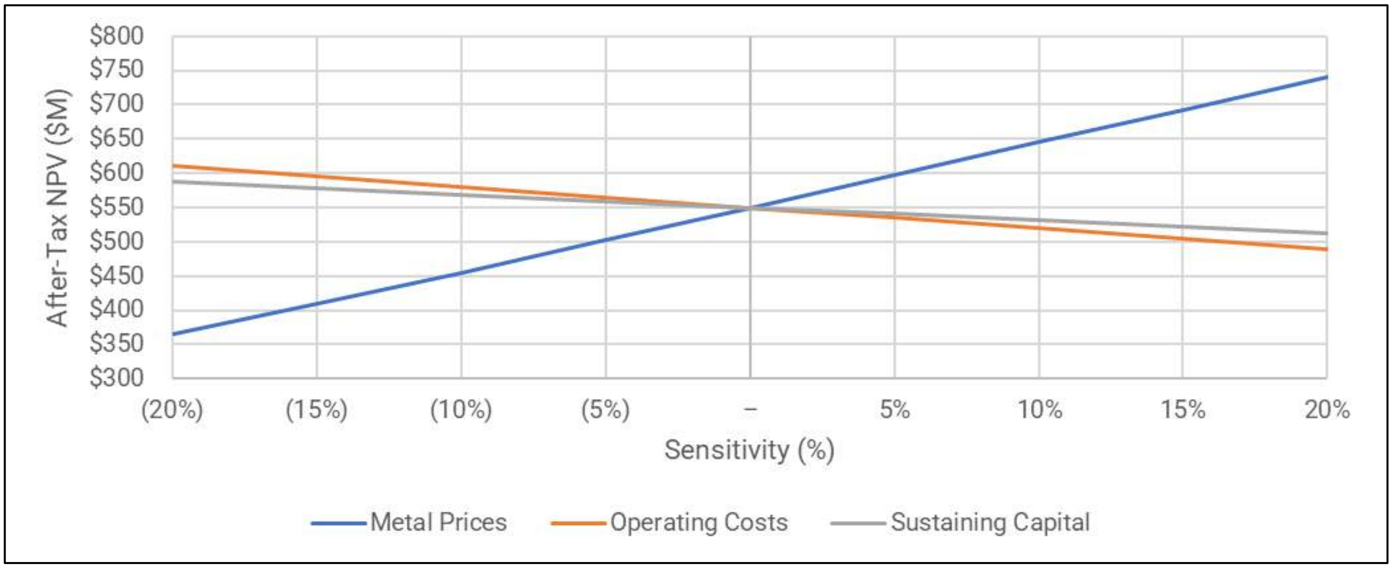


Source: SilverCrest, 2023.

22.5 Sensitivity Analysis

A sensitivity analysis was completed to evaluate the response of the NPV and IRR to changes in assumptions on key inputs of metals prices, sustaining capital costs and operating costs. The after-tax results across a range of ±20% from the base case assumption value are shown in Figure 22-5. The Las Chispas Operation maintains a positive NPV across the range tested and is most sensitive to metal prices, with a smaller impact due to changes in operating and sustaining capital costs.

Figure 22-5: Post-Tax NPV Sensitivities



Source: SilverCrest, 2023.

Table 22-6: Post-Tax NPV Sensitivities (base-case is bolded)

Sensitivity	Metal Prices	Operating Costs	Sustaining Capital
(20%)	$366	$610	$588
(15%)	$409	$595	$578
(10%)	$455	$580	$569
(5%)	$502	$565	$559
–	**$550**	**$550**	**$550**
5%	$598	$535	$540
10%	$645	$520	$531
15%	$693	$505	$521
20%	$741	$490	$512

Table 22-6 shows the post-tax NPV tax impact of changes to metal prices, operating costs and sustaining capital. Table 22-7 shows the impact on mine level AISC margin for every 5% change in metal prices. The base case is bolded in the table.

Table 22-7: Post-Tax Operating Margin Sensitivities (base-case is bolded)

Metal Price Sensitivity	Operating Margin (%)
(20%)	36
(15%)	40
(10%)	43
(5%)	45
–	**48**
5%	50
10%	52
15%	53
20%	55

22.6 Gold and Silver Price Scenarios

A sensitivity analysis was performed to assess the impact of changing gold and silver prices on the Las Chispas Operation, as outlined in Table 22-8. The base case is bolded in the table.

Table 22-8: Economic Results for Different Metal Price Scenarios

Price Case	Gold Price ($/oz)	Silver Price ($/oz)	Post-Tax NPV 5% ($M)
Base Case	**1,800**	**23.00**	**549.9**
Upside (Spot Case)	1,963	24.92	632.3
Downside (FS Base Case Prices)	1,500	21.00	434.4

Note: Spot Prices are based on data as of July 26, 2023. The downside FS Base Case is based on the pricing from the 2021 FS Report.

23 ADJACENT PROPERTIES

Advanced exploration or operating properties are not known to exist immediately adjacent, or contiguous to, the Las Chispas Property that have relevance to the Report.

24 OTHER RELEVANT DATA AND INFORMATION

There is no additional relevant data or information that should be included in 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 Report.

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

Information from legal and SilverCrest experts support that the tenure held is valid and sufficient to support a declaration of Mineral Resources and Mineral Reserves.

The Las Chispas Operation consists of 28 mineral concessions, totalling 1,400.96 ha. Concessions have expiry dates that run from 2039-2073. LLA, a wholly-owned subsidiary of SilverCrest, has acquired 100% title to the mining concessions, except for one concession that is in the grant process, and one concession that has been the subject of legal proceedings following cancellation. The mineral concessions that host the Mineral Resources and Mineral Reserves are in good standing. At the Effective Date of the Report, all required mining duties were paid.

There are three option agreements. Option 1 is for the La Fortuna mining concession applications No. 082/39410 and 082/38731, which cover the Panuco II and Carmen Dos Fracción II mineral lots; title transfer to LLA of the new concession are pending until the applications are issued as mining concessions. Under Option 2, LLA has a 67% ownership interest in the Lopez concession. Option 3 provides LLA with 100% rights to Panuco II, pending title for ownership. All three options are not material to the Report.

SilverCrest holds sufficient surface rights to support planned operations. The surface rights overlying the Las Chispas mineral concessions and road access from local highway are either owned by LLA or held by LLA under negotiated lease agreements.

A 2% royalty is payable to the Gutierrez-Pérez-Ramirez optionees, on the Nuevo Lupena and Panuco II concessions (when granted) for material that has processed grades of ≥0.5 oz/tonne gold and ≥ 40 oz/tonne silver, combined. No Mineral Reserves exist on these concessions.

To the extent known to the QP, there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the Las Chispas Operation that are not discussed in the Report.

25.3 Geology and Mineralization

Mineral deposits in the Las Chispas district are classified as gold and silver, low to intermediate sulphidation epithermal systems.

The understanding of the vein settings, lithologies, mineralization, and the geological, structural, and alteration controls on mineralization is sufficient to support estimation of Mineral Resources and Mineral Reserves.

There is remaining exploration potential in the Las Chispas Operation area. A number of the known veins remain open along strike (e.g., Las Chispas Main) and at depth (e.g., Amethyst, Babi Main Babicanora Norte Veins). Surface geological mapping identified several mineralization structures to the north of the Las Chispas Area that require further drill testing (e.g., Los Chiltepins, El Cumaro and Ranch Veins).

25.4 Exploration, Drilling and Analytical Data Collection in Support of Mineral Resource Estimation

The exploration programs completed to date are appropriate for epithermal-style mineralization.

Sampling methods are acceptable to support Mineral Resource estimation.

Sample preparation, analysis and security were generally performed in accordance with exploration best practices and industry standards at the time the information was collected.

The quantity and quality of the logged geological data, collar, and downhole survey data collected in the exploration and infill drill programs are sufficient to support Mineral Resource estimation.

No material factors were identified with the data collection from the drill programs that could significantly affect Mineral Resource estimation.

Sample preparation and analyses were performed by independent accredited laboratories. The sample preparation, analysis, and security practices and are acceptable, meet industry-standard practices at the time they were undertaken, and are sufficient to support Mineral Resource estimation.

QA/QC submission rates meet CIM Mineral Exploration Best Practice Guidelines (2018) at the time of each of the drill campaigns. The QA/QC programs did not detect any material sample biases in the data reviewed that supports Mineral Resource estimation.

The data verification programs concluded that the data collected from the Las Chispas Operation adequately support the geological interpretations and constitute a database of sufficient quality to support the use of the data in Mineral Resource estimation.

25.5 Mineral Resource Estimate

Mineral Resource estimation has been prepared in accordance with the 2019 CIM Best Practice Guidelines and has been reported using the 2014 CIM Definition Standards.

The Mineral Resource Estimate includes in-situ narrow vein gold and silver mineralization at the Babicanora and Las Chispas Areas that is potentially amenable to underground mining methods, and gold and silver mineralization contained within surface stockpiles that resulted from historic operations and ROM stockpiles.

The Mineral Resources have been validated and classified as Measured, Indicated and Inferred Mineral Resources. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to the Measured and Indicated Mineral Resource and were not eligible for consideration as Mineral Reserves. It is reasonably expected that the majority of the Inferred Mineral Resource could potentially be upgraded to an Indicated Mineral Resource with continued exploration.

25.6 Mineral Reserve Estimate

Mineral Reserve estimation uses industry-accepted practices, and the estimate is reported using the 2014 CIM Definition Standards, and the 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines.

Mineral Reserves were converted from Measured and Indicated Mineral Resources and do not include any Inferred Mineral Resources. Inferred Mineral Resources contained within the Mineral Resource block models were treated as waste at zero grade.

Factors that may affect the Mineral Reserve Estimate include geological complexity, geological interpretation, and Mineral Resource block modelling; COG estimations; commodity prices, market conditions and foreign exchange rate assumptions; operating cost and productivity assumptions; sustaining capital costs to maintain production; rock quality and geotechnical constraints, dilution and mining recovery factors; hydrogeological assumptions; and metallurgical process recoveries. There are no other environmental, legal, title, taxation, socioeconomic, marketing, political or other relevant factors known to the QP that would materially affect the estimation of Mineral Reserves that are not discussed in the Report.

25.7 Mining Methods

25.7.1 Geotechnical Considerations

Extensive geomechanical core logging and underground mapping has been completed by SIL at the Babicanora and Las Chispas Complexes using the RMR76 and Q' rock mass classification systems. Rock mass structure data has been collected through mapping in the sill drives at the BAN, BAV, and BAM veins. The rock mass quality and structural data were reviewed by KP through site visits, core photos, and complementary underground mapping.

The available data have been used to define rock mass quality domains based on spatial variability, proximity to the mineralized zone, and lithology. The rock mass quality in the waste development and in the mineralized areas is typically GOOD (i.e., RMR76 values between 60 and 70). At the BAM and BAS veins, the rock mass quality in proximity to the mineralization is variable and can be of reduced quality (i.e., POOR to FAIR with RMR76 values between 20 and 60). The mineralization is hosted in a fault zone at the BAC vein, and the rock mass quality is typically POOR (i.e., RMR76 values between 20 and 35).

The available discontinuity orientation data have been used to define the structural domains that reflect differences between the veins as well as several key lithologies. The defined joint sets are parallel to sub-parallel to the mineralization, cross-cut the mineralization, and are sub-horizontal.

The following geotechnical design input was provided to the mine plan was based on the rock mass quality and structural domains, empirical stability analyses, 2D numerical modelling, existing experience at the mine, and experience from other similar projects and mines:

- Stope dimensions and overbreak

- Dimensions for crown, sill, rib and inter-lode pillars
- Offsets and strategies for mining around voids and historic workings
- Offsets between stopes and development
- Extraction sequencing
- Strategies for temporary sill pillar recovery under sill mats
- Ground support

25.7.2 Hydrological Considerations

The new mine plan at the Las Chispas Operation implies some of the workings to be eventually submerged below the water table; dewatering will therefore be required. Even if hydrogeological studies completed so far indicate there is no major concerns related to groundwater additional information will be required to define the exact inflow to support the dewatering strategy. When mine development gets closer to the water table, further analysis will be completed to refine the assumptions used in this Report. Those will include drilling from underground in various areas and testing open boreholes from underground.

25.7.3 Mining Methods

The mine design was based on a targeted production rate of 1,200 tonnes per day. The proposed underground mining approach will use variations of longhole stoping and cut and fill mining methods via several access drifts and ramps. These methods are appropriate to the sub-vertical vein geometry, where the veins have thicknesses ranging from 0.1–10 m.

Mining operations will extract from the principal veins divided into six mining areas, which will be accessed via three portals. Each mining area will be serviced by supporting infrastructure including power distribution, compressed air distribution, water supply, ventilation, dewatering and communications.

The equipment fleet is conventional for underground mining operations.

All mining activities are being completed by a contractor. Geological, grade control and planning services are being provided by SilverCrest. The contractor will supply adequate underground mining equipment for the different mining activities.

25.8 Recovery Methods

The Process Plant has originally been designed for 1,250 tpd with an estimate rate of milling of 57 tph (tonne per operating hour) and a 91.3% availability.

Since start-up, the plant has been operating without the flotation circuit. The cyanide detox system has been retrofitted to operate on pond seepage solution as well as leach slurry and has been proven effective.

The main challenges to overcome during the start-up period were related to the lack of oxygen in the leach tanks and the premature failure of the plates of the tailing filter. The oxygen system is now very robust while the filter plate issue is understood and continue to improve.

Overall, the Process Plant has operated according to the design criteria except as noted above and met or exceeded throughput and availability targets. For the LOM, it is reasonable to expect that the Process Plant will be able to process the expected mine production to mill of 1,200 tpd at a metallurgical recovery of 98.0% for gold and 97.0% for silver.

25.9 Project Infrastructure

The Operation includes the following infrastructure: underground mine, including portals and ramps; various roads such as the main access road to site, borrow pit haul road, FTSF haul road, WRSF haul road, and explosives access road; diversion and collection channels, culverts, and containment structures; site main gates and guard houses; accommodation camp; warehouse and truck shops, offices, medical clinic, and nursery; explosives magazines, exploration core shack; Process Plant; control room; doré room; assay laboratory (off-site facility); reagent storage facilities; water treatment plant; stockpiles and WRSFs; FTSF; hazardous waste containment facility; and Nuclear Devices warehouse.

Electrical power is supplied to site from the national grid, by way of a 33 KV overhead power line. Emergency power is also available throughout the property.

Water is being sourced from Underground and from the Sonora valley.

25.10 Market Studies and Contracts

Gold and silver doré can be readily sold on many markets throughout the world and the market price ascertained on demand. Las Chispas Operation doré is delivered to the refinery, where is refined under a fixed-term contract. After refining, gold and silver are sold on the spot market to arm's length international metal brokers and institutional banks. The existing contract for refining as well as with metal brokers and banks is considered to be within industry standards. The commercial terms are reviewed at the renewal period and the company does not expect any difficulties with renewing the existing contract or securing new contracts for the sale of the doré.

At the Report Effective Date, the Company has entered into contracts necessary for operating Las Chispas. These contracts and agreement include, but are not limited to, contracts for drilling, underground mining, explosives, power, supply of consumables, catering and camp management, security, personnel transportation and refining (as per above). These contracts are reviewed and negotiated periodically to ensure they remain competitive and aligned within industry norms for projects in similar settings in Mexico.

Metal pricing used in the economic analysis is based on consideration of various metal price sources. This included review of consensus price forecasts from banks and financial institutions, three-year trailing average of spot prices, and current spot prices.

25.11 Environmental Studies, Permitting and Social Considerations

25.11.1 Environmental Considerations

Environmental surveys and studies for the Las Chispas Operation were completed in support of permit applications. Completed studies include climate, flora, fauna, air quality, noise, surface and groundwater quality.

ML testing showed that potentially leachable metals included barium and lead, but in concentrations that were well below the maximum allowable limits. ARD testing indicated that the majority of the rocks showed no ARD potential. The majority of tailings samples showed non-acid forming (NAF) characteristics in NAG testing.

No known environmental liabilities exist in the Las Chispas Operation are from historic mining and processing operations. Soil and tailings testing were conducted as part of the overall sampling that has been ongoing at site. To date, there are no known contaminants in the soils. Water quality testing is currently ongoing through ongoing environmental studies.

25.11.2 Permitting Considerations

LLA has a permitting team in Mexico located at the Las Chispas Operation. The permitting team is in charge of monitoring all LLA obligation pertaining to its existing permits, including the data acquisition and reporting obligations. The permitting Team is also monitoring potential regulatory changes in Mexico and mandated to require such permit if and when required. The Permitting Team is supported with Mexican Legal Counsel.

LLA now operates under the umbrella of a LAU (Licencia Ambiental Unica) which is an integrated permit for all of its operation at the Las Chispas Operation. Permits will be renewed as required.

25.11.3 Closure and Reclamation

A Conceptual Closure Plan was prepared in general accordance with applicable Mexican standards. Under Mexican law, mining may be initiated under a Conceptual Closure Plan with a Detailed Closure Plan being developed later in the project life.

The closure cost forecast is $6.8 M. Closure costs were assumed to be disbursed over a period of approximately three years, following cessation of production.

25.11.4 Social Considerations

A social baseline study, completed in 2019–2020, found key areas of community concern were: water usage, and water safety; a lack of information on the Las Chispas Operation; concerns around an environmental incident in 2014 that was caused by a different mining company (100 km from the Las Chispas Operation); a desire to see improvements in the local infrastructure; that environmental safety and appropriate mine closure protocols should be in place to protect the region at the end of the LOM; and job creation with a focus on opportunities being made available for women.

A 2019–2020 materiality assessment as well as a climate risk assessment in 2021 formed the basis of a company-wide Environmental and Social Management System. Key findings from the materiality and climate risk assessments were centered around climate (drought, extreme heat, flooding) and water risks (economic reliance on access to water), community health issues (poor sewage), environmental safety of the local river and agriculture, employment opportunities, a desire for improved infrastructure (aqueducts, sports, recreation, health) and a concern regarding a potential influx of people from outside the community taxing local infrastructure.

SilverCrest has formalized a Five-year Water Stewardship Plan aimed at improving the local infrastructure which will provide improved economic resilience for the large percentage of the community that relies on farming and ranching. In conjunction with the local infrastructure projects, SilverCrest has implemented a communication strategy that employs direct outreach, social media, company-generated videos, flyers, posters and workshops. At the Report Effective Date, SilverCrest has set up a whistle blower policy and hotline and a grievance mechanism process.

25.12 Capital and Operating Costs

25.12.1 Sustaining Capital Cost Estimates

LOM sustaining capital costs total $219.9 M, which can be broken down as per Table 25-1.

Table 25-1: LOM Sustaining Capital Cost Estimates ($M)

Calendar Year	LOM	2023	2024	2025	2026	2027	2028	2029	2030
Production Year		1	2	3	4	5	6	7	8
U/G Mine Development	176.0	24.3	33.2	31.8	32.8	28.6	21.4	1.8	1.7
U/G Mine Infrastructure	28.3	8.9	5.6	2.6	6.1	1.7	2.1	1.2	0.03
Process Plant	6.2	1.8	1.3	1.6	0.5	0.5	0.5	-	-
Dry Stack Tailings	3.2	-	2.9	-	-	-	0.3	-	-
G&A (including mobile)	6.7	4.1	1.0	0.3	0.3	0.3	0.3	0.3	-
Total	**219.9**	**39.2**	**44.1**	**36.2**	**39.7**	**31.1**	**24.7**	**3.3**	**1.7**

25.12.2 Reclamation and Closure Cost Estimates

An allowance of $6.8 M was made for closure costs with spending scheduled to occur across the three years following the cessation of production. Any change in regulations that would require SilverCrest to undertake progressive closure, or to post a cash bond, would affect the timing of these cash flows.

No salvage value was assumed for the plant and surface infrastructure. It has also been assumed that CFE would accept ownership of the power line which is common in Mexico.

25.12.3 Operating Cost Estimate

The average LOM operating cost is estimated at $168.18/t processed. The operating cost is defined as the total direct operating costs including mining, processing, and G&A costs. Mining costs are estimated to be $99.59/t processed ($108.04/t mined). Tonnes of material to be processed includes mined ore that is already in stockpiles. Table 25-2 shows a summary breakdown of the operating costs.

Table 25-2: Operating Cost Summary

Area	LOM Average Operating Cost
Mining ($/t processed)	99.59
Process ($/t processed)	47.21
G&A ($/t processed)	21.39
Total LOM Operating Cost ($/t processed)	**168.18**

25.13 Economic Analysis

A pre- and post-tax economic analysis was completed on the basis of a discounted cash flow model featuring a 5% discount rate. The analysis used constant (real) Q1 2023 US$ and the Las Chispas Operation cash flows were modelled in annual periods.

The model assumed a production period of eight years, including 2023-2030.

The economic model was based on a gold price of $1,800/oz and a silver price of $23.00/oz. The refining terms used as the basis of the economic analysis are based on actual average cost paid by SilverCrest with its third-party refiner. The freight terms are also based on actual rates.

The taxable income was estimated at. SilverCrest applied a tax rate of 30% to this amount over the LOM.

The economic analysis demonstrates that the mine plan has positive economics under the assumptions used. The Las Chispas Operation post-tax (NPV) at a 5% discount rate is estimated to be $549.9 M. A summary of the economic analysis of the Las Chispas Operation is shown in Table 22-4.

The Las Chispas Operation is most sensitive to metal pricing and recovery/grade. Grade sensitivity mirrors the sensitivity to metal prices.

25.14 Risks

A structured risk management process was established to promote early identification of risks, determine the likelihood and consequence of risk actualisation, and propose risk mitigation plans to reduce the likelihood and/or impacts. The same process was used to identify and promote opportunities.

25.14.1 Mineral Resource Estimate

Potential risks relating to confidence in the grade, vein thickness and corresponding volume of material above a COG that could influence the Mineral Resource statement have been identified.

Confidence in the grade, vein thickness and corresponding volume of material above a COG is influenced by several factors, including the distance between drill core samples, the direction between samples, and proximity to high-grade shoots within the vein. Lower confidence is thus associated with widely spaced drilling and higher confidence is associated with closer-spaced drilling. The actual drill sample spacing varies by vein and the classification of Mineral Resource Estimate was assigned based on the level of confidence from drill core sample spacing. Risk is associated with all classifications of Mineral Resource Estimate, most particularly with Inferred Mineral Resource Estimate.

25.14.1.1 Wire Frame

There is a risk that the Mineral Resource Estimate wireframes (>150 gpt AgEq) may be moderately high biased with respect to the representative volume, and subsequent estimated tonnage and metal content. This potential bias could be where the wireframes extend somewhat too far into lower-grade (<150 gpt AgEq) assay areas of influence. A follow-up rolling reconciliation is recommended to allow for any mine call factor adjustments to be made.

25.14.1.2 Accuracy of Localized Extreme High-Grade Samples

Localized extremely high-grade samples were encountered in drill core sampling as part of the mineralization system. From limited duplicate sampling, the grade behaved as nuggety gold and silver mineralization, which was described from the duplicate core samples as having comparable order of magnitude grades within a margin of error of approximately ±15%, for grades >10 gpt Au and >1,000 gpt Ag. Locally, this represents a risk in the accuracy of grade estimation for Mineral Resource and subsequent Mineral Reserve estimation, and to operational grade control.

25.14.1.3 Grade Capping

Where only widely spaced sampling is available, the spatial extent of the high-grade mineralization may be uncertain. The selection of grade estimation methods to extrapolate high-grade samples can strongly influence regionalized vein grades and volumes. Controls such as grade capping and search distance constraints were implemented to manage the local influence of individual high-grade samples. However, there is a risk that the grade capping methodology used was too liberal during its attempt to preserve local grade variability. In areas with widely spaced sampling and containing high-grade assays, somewhat subjective grade capping strategies and restrictive search ellipse strategies were used that may introduce a risk for grade overestimation. This risk can be reduced through future close-range sampling to delineate high-grade shoots within the vein systems, thereby allowing the highest-grade material to be separately domained to constrain spatial influence of these samples within delineated shoots. Closely spaced pre-production definition drilling in combination with duplicate sampling protocols for high-grade samples should continue to be implemented to mitigate excessive extrapolation of high-grade values and to inform the local, short-range, grade variability.

25.14.2 Mineral Reserve Estimate and Mine Plan

General factors that may affect the Mineral Reserve Estimate include adjustments to gold price and exchange rate assumptions; changes in operating and capital cost estimates; dilution adjustments; changes to geotechnical assumptions, changes to hydrogeological and underground dewatering assumptions; and changes to modifying factor assumptions, including mining recovery and dilution. Additionally, adjustments to reserve estimates may be required if reserve to plant production reconciliation trend in a consistently bias manner (currently F3 is 0.95) over successive reserve estimations.

There is a known open stope area in the Babicanora Central zone. This area could cause recovery problems because although the general area is known, the exact size and geometry of the open stope is not appropriately defined. To mitigate the possible impact of this risk, all mining within 10 m of the known void have been removed from the plan, and test hole drilling cost estimates were included in the costing of this area.

SIL has established access to the historic workings at the historic Las Chispas Area and has created a 3D model of the extensive workings, through the use of digitized historic long sections. However, there remains considerable uncertainty in the position of some of the voids. It is recommended that surveys be completed to confirm the void position and geometry prior to further mining. Probe drilling will also be required on advance during development near potential voids.

25.14.3 Metallurgical Testwork and Recovery Plan

There is a minor risk that ore could act substantially different from the material tested to date that could adversely affect recoveries, however, considering the operating data and comprehensive testwork completed to date as well as the robust and flexible design of the Process Plant, the risk of significant reductions to recovery can be mitigated.

25.14.4 Filtered Tailings System Facility (FTSF)

Based on tailings filtering assays (Outotec, 2020) a portion of the tailings could show high clay/mica content, which could only be dewatered in the filter plant to a 22% gravimetric moisture content, which is above the range of optimum compaction contents determined from geotechnical laboratory testing. This could translate into greater moisture than the target at the filter plant, and longer times and greater effort to process and compact the filtered tailings at the FTSF.

This risk has not materialized in the year or so of the FTSF operation. However, this potential risk can be further mitigated by providing sufficient area for the FTSF, where tailings that do not meet the design specifications or higher clay content tailings can be temporarily placed in the interior portion of the FTSF. Filtered tailings can then be extended and compacted when conditions allow, without the need to stop tailings disposal.

Additional tailings storage capacity has been designed to a feasibility level of engineering to address the scenario of higher clay content tailings being produced staring in 2024. This design assumed that phase 2 of the FTSF, should be large enough for temporary, non-specification tailings storage. The capital cost estimate to construct the phase 2 FTSF and mitigate this risk, if it materializes, is already included in the Sustaining Capital cost estimate.

25.15 Opportunities

The following sub-sections summarize opportunities that could potentially improve on the economics of this Report. Alone or combined, these opportunities could change the approach to development, timelines, capital requirements and operating costs described within this Report with potential to change production, scale, economics and/or the Las Chispas Operation value.

25.15.1 Exploration and Mineral Resources

Several potential opportunities have been identified for expansion and increasing confidence of existing Mineral Resources, in addition to brownfields exploration to test mapped targets along vein strike and to depth.

The most significant upside is the potential for:

- conversion of Inferred Mineral Resources to Indicated Resources, and
- discovery of additional mineralization through exploration that may support Mineral Resource estimation.

The 2023 drill program should focus on identifying additional Inferred Mineral Resources and to improve confidence of existing Inferred to level of Indicated Mineral Resources. Work will consist of expansion and infill drilling, and brownfields drilling to test mapped targets along vein strike and to depth. The 2023 priorities for exploration are as follows (listed in order of priority):

25.15.1.1 Conversion of Inferred Mineral Resources

Inferred Mineral Resources are estimated at 24.1 Moz AgEq (refer to Table 14-17). There are approximately 15 Moz over 500 gpt AgEq with sufficient mining width, close to surface, and in proximity to current or planned underground workings, of which 10 Moz AgEq will be targeted immediately for drilling to assess conversion into Indicated Resources. A majority of these resources are located as follows.

BAS Area (BAS Main, BAS HW, BAS FW) has an estimated 7.31 Moz AgEq with a grade of 566 gpt AgEq (4.55 gpt Au and 204 gpt Ag) in Inferred Mineral Resources. Included in this amount is 4.86 Moz AqEq with a grade of 1,050 gpt AgEq (8.46 gpt Au and 378 gpt Ag) using a cut-off of 500 gpt AgEq. This mineralization is located proximal of the current ongoing underground development and proposed mine design for the BAS Main Vein. Encouraging high grade mineralization has been intercepted both at depth and towards surface in the main mineralized structures indicating a potential for expansion of mineralization.

El Muerto Area (El Muerto, El Muerto Splay, Los Parientes) has an estimated 3.42 Moz AgEq with a grade of 711 gpt AgEq (4.38 gpt Au and 362 gpt Ag) in Inferred Resources. This includes El Muerto Splay which contains 2.15 Moz AgEq with a grade of 1,148 gpt AgEq (6.62 gpt Au and 622 gpt Ag) using a cut-off of 500 gpt AgEq. Drilling of the El Muerto Zone at depth below the Babicanora Central Zone has potential to intercept additional high-grade mineralization below the limit of the current Mineral Resource Estimate.

BAN Area (BAN Main, BAN NW Ext., BAN HW, BAN Splay 1-4) has an estimated Inferred Mineral Resource of 3.44 Moz AgEq with a grade of 785 gpt AgEq (3.54 gpt Au and 503 gpt Ag). Included in this is BAN NW Extension with 1.55 Moz AgEq with a grade of 2,294 gpt AgEq (11.08 gpt Au and 1,413 gpt Ag) using a cut-off of 500 gpt AgEq. Expansion drilling along the projected NW strike of BAN Main has suggested the mineralized trend continues along strike and to surface in the area.

BAV Area (BAV Main, BAV FW, BAV Splay 1-3, BAV Andesite) has an estimated Inferred Resource of 2.43 Moz AgEq with a grade of 1,337 gpt AgEq (10.72 gpt Au and 484 gpt Ag). This includes BAV FW with 1.08 Moz AgEq with a grade of 2,327 gpt AgEq (14.00 gpt Au and 1,214 gpt Ag) using a cut-off of 500 gpt AgEq. Underground development in the BAV Main area has intercepted the BAV FW. Drilling underground with short, targeted holes may support potential for conversion of Inferred Mineral Resources to Indicated Mineral Resources.

Encinitas has an estimated Inferred Mineral Resource of 1.25 Moz AgEq with a grade of 567 gpt AgEq (6.51 gpt Au and 49 gpt Ag). Included in this amount is approximately 898 Koz AgEq with a grade of 902 gpt AgEq (10.45 gpt Au and 72 gpt Ag) using a cut-off of 500 gpt AgEq. Located in the BAS Area, Encinitas has potential for mineralization along strike and to depth. Further step-out drilling along trend has potential for additional Inferred Mineral Resources.

Las Chispas Area (Las Chispas Main, Gio Mini, Luigi, Luigi FW, and excluding William Tell) has an estimated Inferred Resource of 2.25 Moz AgEq with a grade of 529 gpt AgEq. This includes Las Chispas Main Vein which contains 1.24 Moz AgEq with a grade of 1,783 gpt AgEq (8.66 gpt Au and 1,095 gpt Ag) using a cut-off of 500 gpt AgEq. This mineralization is along trend of current proposed mine design for the Las Chispas Main Vein and is open along strike and to depth which makes it a target for potential Mineral Resource expansion.

25.15.1.2 Exploration Potential

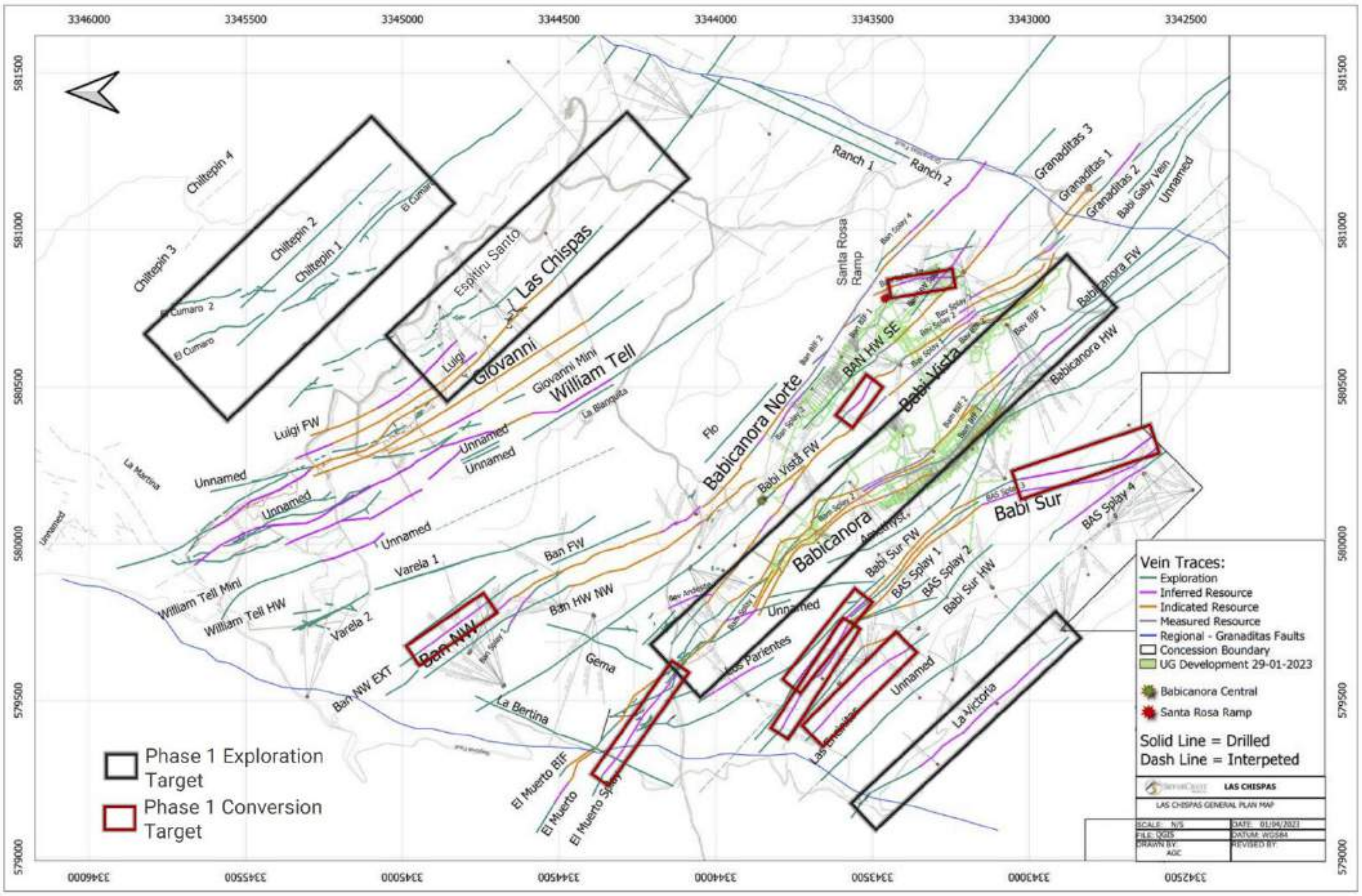
The Las Chispas property has significant brownfields exploration potential. There are over 23 km of underexplored veins throughout the property that have been identified on surface through mapping and sampling programs. There are also several blind veins and structures that have been tagged through various drill programs including potential vein expansion to depth along several of the currently known zones.

The 23 km of veining consist of several areas of interest including, but not limited to the following:

- Chiltepin area which consist of several northwest trending parallel and cross cutting structures. These veins can be seen on surface in old workings as thin veins with stockwork systems. On going surface mapping and sampling have shown the veins likely extend further to the NW with surface samples grading from below detection limit to 0.65 m of 140.5 gpt Au, 13 gpt Ag or 11,184 gpt AgEq.
- La Martina Area consists of several NS trending structures that have had minimal exploration and sampling to date. There is a mapping and sampling program on going in the area.
- Las Chispas Southeast Area consists of the extension of several veins. Unexplored and mostly inaccessible historic workings in this area (Espiritu Santo) have historic grab sampling up to 88.9 gpt Au, 18,369.7 gpt Ag or 25,443 gpt AgEq (Mulchay, June 1935) and a historical production report for 13.2 tonnes grading 24.61 gpt Au, 5,714.9 gpt Ag or 7,672 gpt AgEq (Mulchay, June 1935). There is currently ongoing underground ramping in the Las Chispas Area which will allow for further at depth exploration.
- Ranch Vein area has several EW and NW cross cutting veins that have had minimal drilling and showcase structures of barren quartz and calcite up to 30 m wide. Follow up in this area with surface sampling and further geological interpretation is ongoing.
- La Victoria Vein currently has immediate exploration potential to the NW and SE with several drill holes and surface samples above cut-off grade.

All the current exploration surface veins systems are shown in Figure 25-1. Also included in this figure are the target areas for Phase 1 exploration and conversion drilling that are on going as of the effective date of this Report.

Figure 25-1: Current Exploration Surface Vein Systems Map



Source: SilverCrest, 2023.

Beyond the current 23 km of surface veining, there is continued interpretation of the geological model which highlights the potential of targets to depth of current resource areas. Recent underground development has made these areas more accessible to future exploration drill programs.

Also, there are several blind veins that have been intercepted to depth throughout the extensive on-site drill programs. Of these intercepts there are more than 100 that are over the 500 gpt AgEq cut-off, and more than 40 that are over the 1,000 gpt AgEq cut-off. Follow up review on these intercepts is ongoing.

Exploration and study information collected in 2023 will be considered for a possible update of Mineral Resources. Further exploration and drilling do not guarantee success in the identification of additional mineralization, nor collection of information required for the confidence necessary to delineate Mineral Resources and Mineral Reserves.

25.15.1.3 Bulk Density

Results from independent site visit due diligence drill core sampling and metallurgical testing indicated that the bulk densities vary slightly according to host rock and style of mineralization. In some areas of the deposit, bulk densities are marginally higher than the 2.55 t/m^3 value used in Mineral Resource and Mineral Reserve estimation.

In addition, recent test-work completed on ore stockpile at site have confirmed higher than expected in-situ density which suggest that either the bulk density is slightly underestimated or that the void component is overestimated.

An underestimation of bulk density could lead to an increase in Resource and Reserve tonnage. Further monitoring will be completed on the remaining ore stockpile to quantify that potential.

25.15.2 Mine Design and Schedule Optimization

The design of the LOM was completed at a level of detail sufficient for inclusion in this Report. The LOM plan will be used to form the basis of future detailed design and schedule. As with any LOM, there exists an opportunity to further improve the mine design and schedule in terms of detailed design, especially with due regard to integration of services, layout of development, design of stopes and geomechanics. The benefit from this additional work is estimated to be in the order of 5M AgEq ounces.

Geomechanical assumptions and assessments present opportunities to reclaim AgEq ounces in the following areas:

- The collection of additional data to reassess crown pillars, potentially reducing their size.
- Longhole stopes under sill pillars are currently planned to be left empty with the use of rib and/or sill pillars. The addition of top sills in these stopes could result in an increase in recovery of these pillar at the cost of more development.
- Detailed design and sequencing of interlode pillars could add a few stopes where vein splays, the FW vein or HW vein are in close proximity to each other and the main veins.
- Evaluate longhole stoping in areas of BAS at reduced sill heights improving cost and productivity.

Additional opportunities to reclaim AgEq ounces through detailed design and site testing exist in the following areas:

- There is opportunity to review Measured and Indicated Resource which did not make the cut-off grade of after the first pass incremental MSO stope run. Some of this resource exists on the fringes of Mineral Reserve shapes and some exists as isolated material. More detailed design, such as varying stope widths, heights and strike lengths, could increase the mined grade of some of the fringe resource. In some cases, the isolated material could be bolstered with additional material converted during the exploration program. Site continues to work on improving blast design and wall control, which could allow for reductions in minimum mining widths and unplanned dilution.
- Cut and fill and resue mine areas have the potential for conversion to longhole stoping where ground conditions are suitable. Converting these stopes to longhole provide a more robust and efficient mine plan with a reduced cost per tonne with an acceptable impact to dilution.
- The Las Chispas Operation is currently trialing the Avoca variant of longhole open stoping. If trials are positive, Avoca could provide a cheaper and more productive method to apply in specific areas over the LOM.

- Opportunity exists with development and infrastructure optimization of the ventilation network through detailed design, calibrating the LOM plan to the short-term site plan, optimizing the placement of fresh and return air raises to limit development and improve the overall circuit.

25.15.3 Process Plant Recovery

The Process Plant Recovery applied to this Report is 98.0% for Gold and 97.0% for Silver. These values were derived from the operation results from February to May of 2023. During that period of time, monthly recoveries on gold of 98.5% were obtained and 98.0% on Silver were obtained, this while liquid losses were higher than expected. As such, efforts to improve metallurgical recoveries will continue to be investigated as there may be an opportunity to increase both gold and silver recoveries beyond the level used in the Report.

25.15.4 Plant Capacity

The Process Plant has been designed for 1,250 tpd (57 tph at 91.3% availability) and the LOM has now been set to 1,200 tpd. There exists an opportunity to process more than the nominal design as both the milling rate (57 tph) and availability (91.3%) have been already improved during the first few quarters of 2023. Milling rates above 62 tph and availability of more than 94% have already been proven to be achievable. Combining a higher milling hourly rate with higher availability could potentially allow up to 1400 tpd in the Process Plant.

25.15.5 Plant Expandability

Although the Process Plant has been built at a capacity of 1,250 tpd, it is designed to accommodate a future expansion of up to 1,750 tpd. Additional studies and engineering would be required to execute a future plant expansion, including a review of the crushing, grinding, flotation, leaching and dewatering circuits as well as power supply facilities.

25.15.6 Solar Power

SilverCrest completed its first ESG report in 2023. The work required to complete this Report included an assessment of baseline emissions from the Las Chispas Operation. Now that this work is complete, work to examine opportunities to reduce these emissions can begin in earnest. SilverCrest engaged outside consultants to examine the possibility of using renewable energy to meet operational needs. The broader geographic region is well suited for solar power and a request for proposal (RFP) is now underway to assess the availability of solar power from qualified producers. Responses to the RFP have been received and now being reviewed.

25.16 Recommendations

A sequential phase approach is presented for recommended future work. Phase 1 recommendations account for $15 M. Of this amount, a budget of $10 M has already been approved starting in July 2023 for a period of 9 months. The balance is expected to be reviewed with the 2024 budget cycle.

25.17 Conclusions

Based on the assumptions and parameters presented in the Report, the Las Chispas Operation shows positive economics.

26 RECOMMENDATIONS

26.1 Introduction

A sequential phase approach is presented for recommended future work. The following is the budget for the recommended Phase 1 (Year 1) and Phase 2 (Years 2 and 3) work.

Phase 1 recommendations account for $15 M. Of this amount, a budget of $10 M has already been approved starting in July 2023 for a period of 9 months. The balance is expected to be reviewed with the 2024 budget cycle. The targets for this program are highlighted in Table 26-1.

Table 26-1: Summary of Budget for Recommended Phase 1 and Phase 2

	Phase 1 ($M) Year 1	Phase 2 ($M) Years 2 and 3
Exploration and Mineral Resource Conversion Drilling	13.1	18.3
QA/QC	0.1	0.2
Bulk Density Investigation	0.03	nil
Resource Estimation	0.05	0.1
Mine Design	0.1	0.2
Sub-Total	**13.4**	**18.8**
Contingency (10%)	**1.3**	**1.9**
Total	**14.7**	**20.7**

Note: Numbers may not add due to rounding.

26.2 Exploration at Las Chispas

Contingent upon the success of the drilling program, between 90,000-120,000 m of drilling is recommended, of which 60% would be allocated to infill, step-out and expansion drilling, and 40% would be allocated to exploration drilling in Phase 1 and 40% would be infill, step-out and expansion drilling and 60% to exploration drilling in Phase 2. Specific collar locations have yet to be determined. Successive drill collar locations will be dependent on the results of each drilled hole for the step-out and exploration programs. The program budget assumes 60,000 to 90,000 samples per phase will be taken and submitted for assay.

Infill, step-out and expansion drilling should immediately target the higher grade, close to current and future underground workings Inferred resource. Other areas where Indicated Mineral Resources that did not make it into the updated Mineral Reserve are also considered in this phase. Other areas for future consideration will be included in the Phase 2 work.

Exploration drilling should be planned for the Los Chiltepins veins, La Martina veins, Las Chispas area veins, La Victoria vein, Babicanora Deep and follow up on high grade blind vein intercepts.

Surface exploration surveys should include additional geological mapping, sampling, and mineralogical studies.

The budget for the recommended Las Chispas geology and exploration program is $15 M for Phase 1 and $21 M for Phase 2. This budget is subject to modification, if warranted by the results of previous drilling programs. The details of this budget are given in Table 26-1. The Phase 1 program is targeting completion in 12 to 18 months and the Phase 2 program in 24 to 36 months.

26.3 QA/QC

The sample preparation, analysis, and security procedures implemented by SilverCrest at Las Chispas are consistent with standard industry practices. Since further drilling at the Las Chispas Operation is being undertaken to further define, increase confidence and expand on the current resources, the following is recommended:

- Continue insertion of all QC sample types (CRMs, blanks and duplicates) at the current rate of insertion for all sample types being collected
- Ensure that custom CRMs are suitably prepared, round-robin tested and span appropriate grade ranges
- Progressively phase out externally sourced CRMs when transitioning to custom CRMs, to enable the lab(s) time to adjust to new CRMs
- Continue real-time review and assessment of QC samples as results are received and follow up on any issues immediately
- Continue reanalysing 10 samples below and 10 above CRM failures in zones of significant mineralization, recording follow up actions taken
- Routinely umpire assay at least 5% of samples assayed at primary lab
- While the SGS lab is in the process of certification, routinely umpire assay closer to 10% of primary samples assayed, reducing to at least 5% after accreditation has been achieved.

The costs of this work program are estimated to be $120,00 in Phase 1 and $190,000 in Phase 2.

26.4 Bulk Density

A bulk density measurement program should be completed to provide additional density data for use in Mineral Resource and Mineral Reserve estimation. Bulk density measurements should be conducted on the channel samples collected in the ongoing in-vein development program and on the drill core in the definition drilling program. A minimum of 1,000 bulk density determinations, in waste and mineralization (20% and 80% respectively) are recommended to provide adequate coverage across the various vein sets. This data should also be used to refine the Mineral Resource and Mineral Reserve tonnage and contained metal estimates.

Assuming the work is mainly done by SilverCrest staff, the cost of this program is estimated at $27,000 for laboratory and administration costs.

26.5 Resource Estimation

Prior to the next Mineral Resource update, the following work is recommended to be completed:

- Create a density model (instead of a uniform density of 2.55) with the existing density measurements (~45,000)
- Continue to use results of reconciliation, geometallurgical study and underground development to optimize the geological model and grade estimation procedure.
- Consider the use of a minimum wireframe constraining width.

26.6 Mine Design

Through calibration of the long-term mining plan to the short-term site plan, several opportunities exist for optimizing ramp placement, raise locations, and other infrastructure. This has the potential to reduce capital development and power requirements for fixed equipment.

It is recommended that alternative dewatering pumps be studied to reduce or eliminate the need for settling sumps. Helical rotor style pumps that are designed to pump clean and dirty (up to 5% solids) water are a low maintenance alternative to submersible pumps. Additionally, with the removal of settling sumps, there is no need to utilize LHDs to clean the sump, allowing the equipment and personnel to focus on mining activities.

Due to the predominantly very narrow width of ore veins, the Mineral Reserve contains a total dilution of approximately 166%, where approximately 57% is unplanned dilution (or ELOS) and the remainder is internal dilution. Continuation of the ongoing work to improve drill and blast practices, ensuring timely extraction of blasted material, and prompt backfilling can all assist in reducing unplanned dilution. For the reduction of planned dilution, testing narrower minimum mining widths is recommended.

Sublevel spacing of 18 m for longhole open stoping could be increased with the introduction of more sophisticated drilling rigs. Hole deviation can be controlled with a more rigid drill, minimizing the impact of increased hole lengths.

Survey of the Las Chispas historic workings and stopes should be completed before production operations begin in this area.

26.7 Metallurgy and Process Recovery

The Las Chispas Operations are preforming at or above design values. It is recommended that the Operation continue to apply best-in-case actions to reduce the soluble metal losses and costs. Other than ongoing operational application of these practices, there is no cost to this work program.

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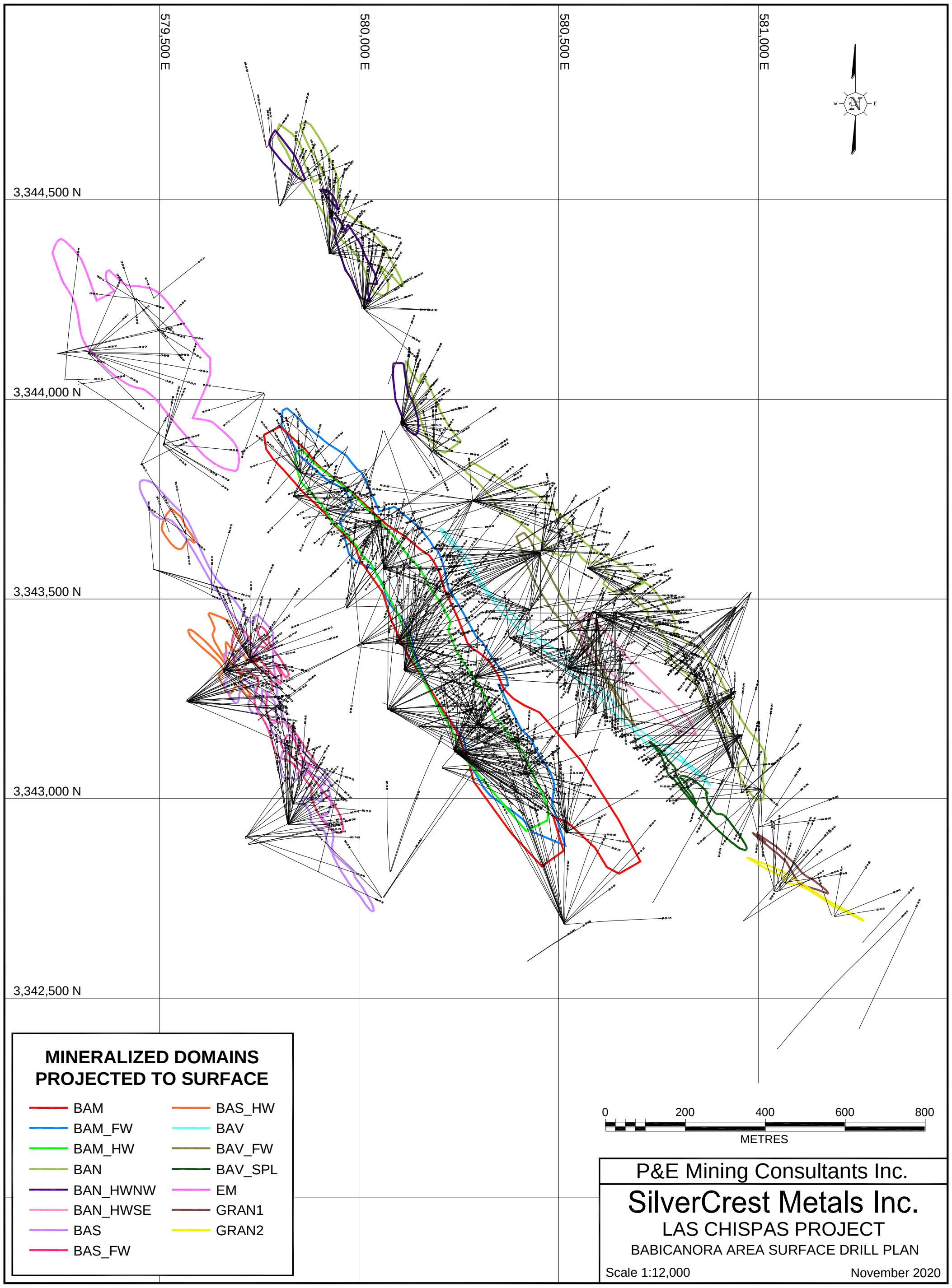
Appendix A – SURFACE DRILL HOLE PLAN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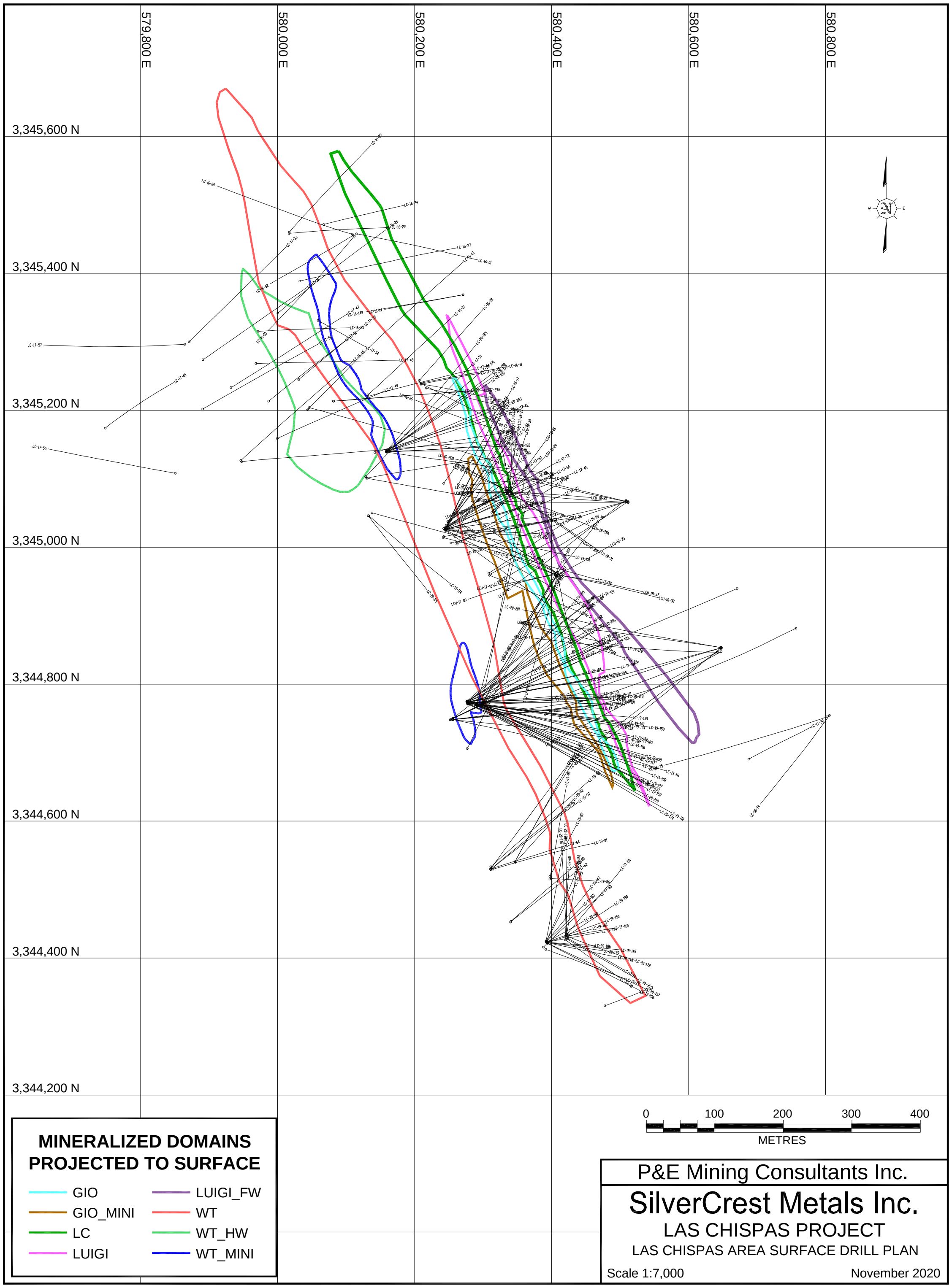
580,000 E
580,500 E
581,000 E
3,344,500 N
3,344,000 N
3,343,500 N
3,343,000 N
3,342,500 N
MINERALIZED DOMAINS PROJECTED TO SURFACE
BAM
BAM_FW
BAM_HW
BAN
BAN_HWNW
BAN_HWSE
BAS
BAS_FW
BAS_HW
BAV
BAV_FW
BAV_SPL
EM
GRAN1
GRAN2
0
200
400
600
800
METRES
P&E Mining Consultants Inc.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
BABICANORA AREA SURFACE DRILL PLAN
Scale 1:12,000
November 2020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580,200 E
580,400 E
580,600 E
580,800 E
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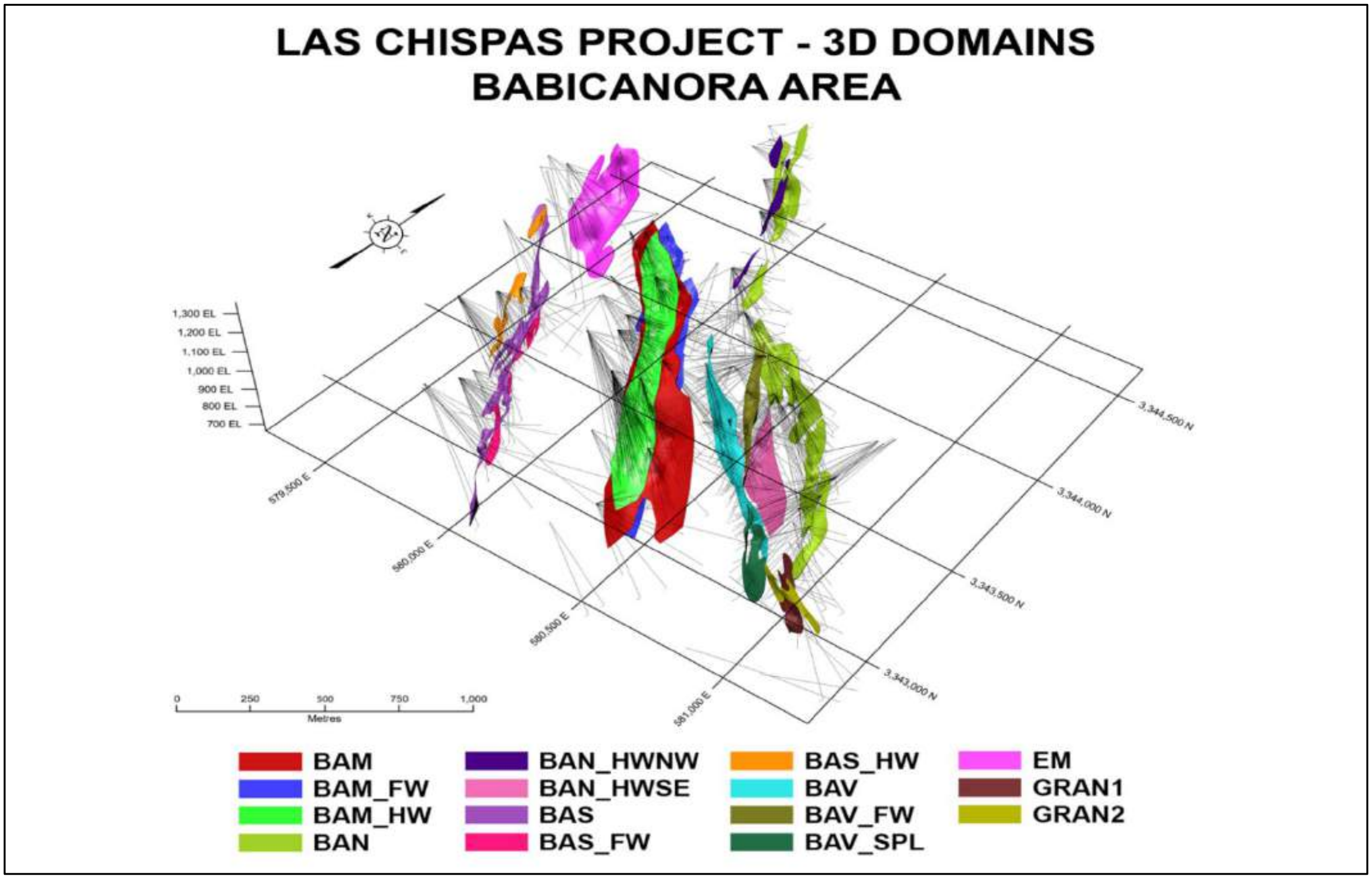
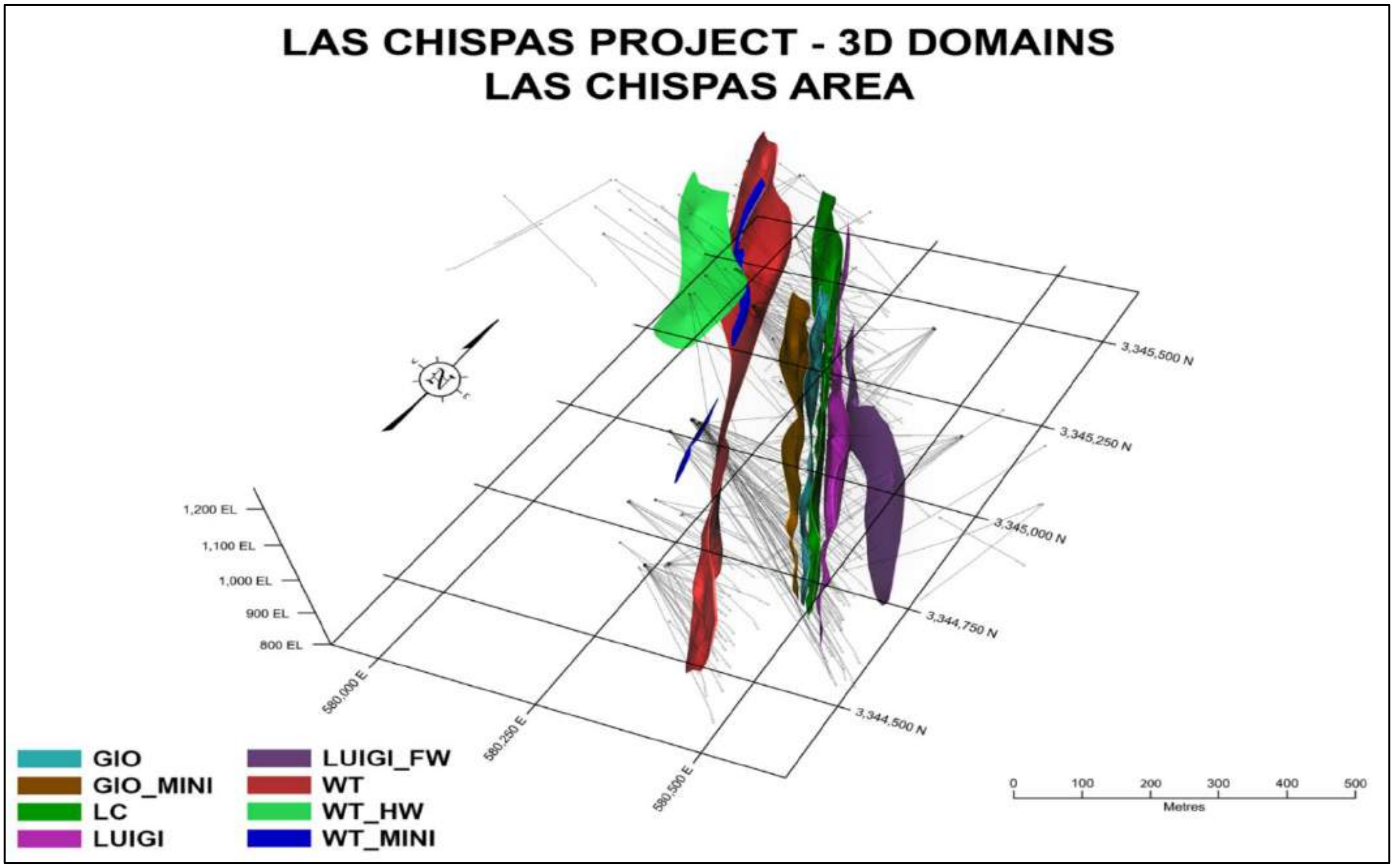
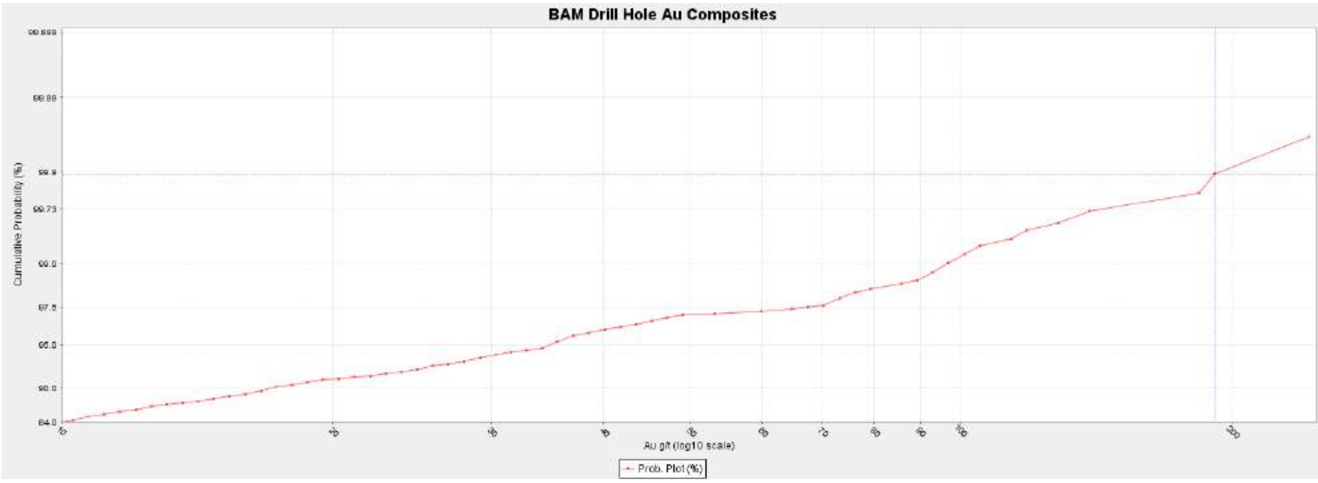
3,345,400 N
3,345,200 N
3,345,000 N
3,344,800 N
3,344,600 N
3,344,400 N
3,344,200 N
N
0
100
200
300
400
METRES
MINERALIZED DOMAINS PROJECTED TO SURFACE
GIO
GIO_MINI
LC
LUIGI
LUIGI_FW
WT
WT_HW
WT_MINI
P&E Mining Consultants Inc.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
LAS CHISPAS AREA SURFACE DRILL PLAN
Scale 1:7,000
November 2020

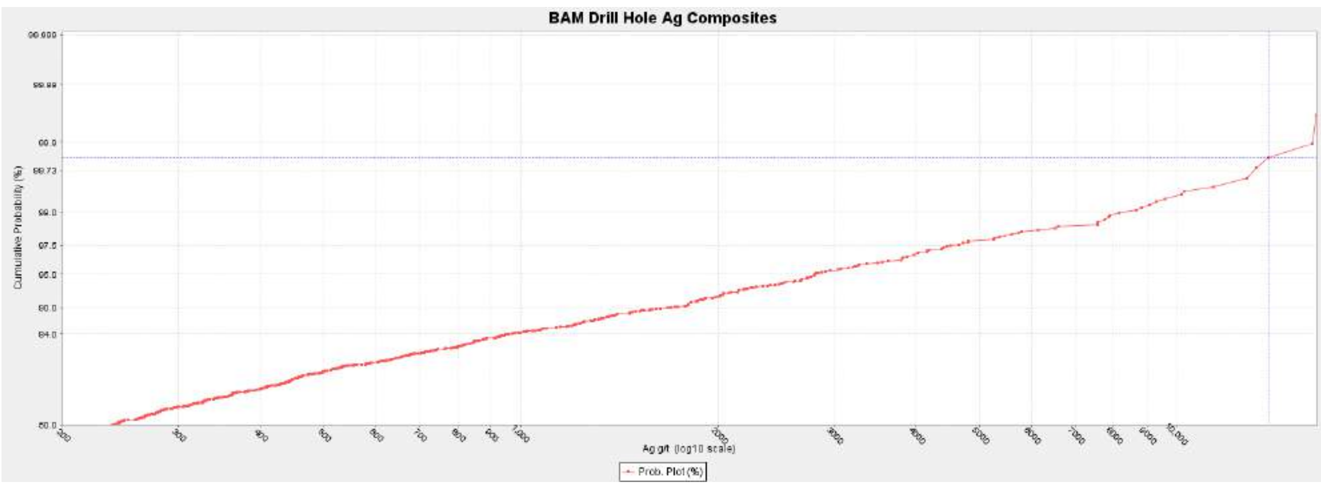
Appendix B – 3-D DOMAINS

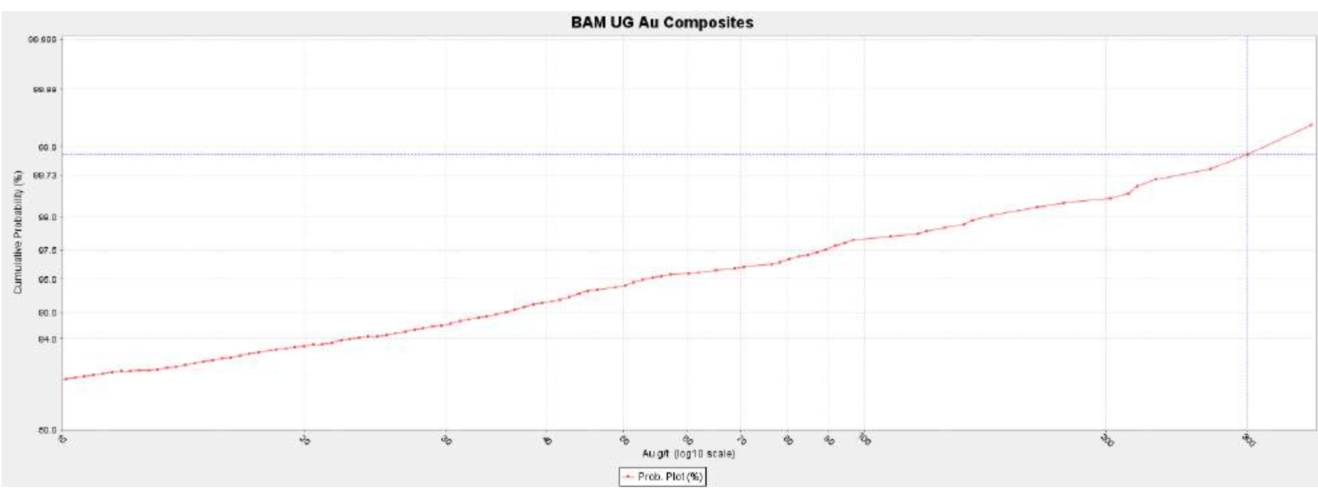

LAS CHISPAS PROJECT - 3D DOMAINS
BABICANORA AREA
1,300 EL
1,200 EL
1,100 EL
1,000 EL
900 EL
800 EL
700 EL
579,500 E
580,000 E
580,500 E
581,000 E
3,344,500 N
3,344,000 N
3,343,500 N
3,343,000 N
0 250 500 750 1,000
Metres
BAM
BAM_FW
BAM_HW
BAN
BAN_HWNW
BAN_HWSE
BAS
BAS_FW
BAS_HW
BAV
BAV_FW
BAV_SPL
EM
GRAN1
GRAN2

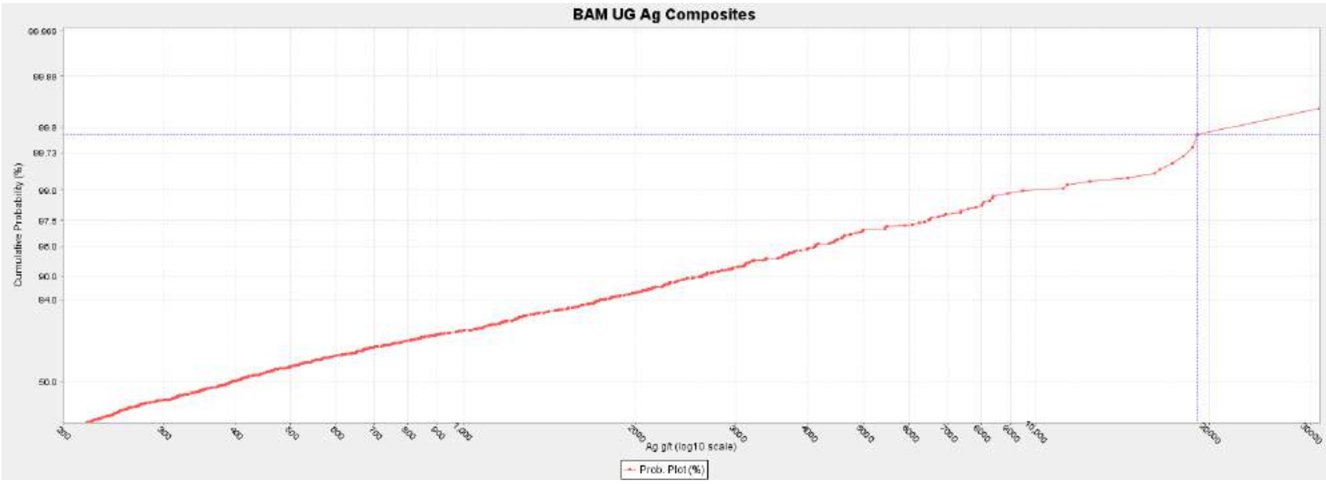

LAS CHISPAS PROJECT - 3D DOMAINS
LAS CHISPAS AREA
1,200 EL
1,100 EL
1,000 EL
900 EL
800 EL
580,000 E
580,250 E
580,500 E
3,345,500 N
3,345,250 N
3,345,000 N
3,344,750 N
3,344,500 N
GIO
GIO_MINI
LC
LUIGI
LUIGI_FW
WT
WT_HW
WT_MINI
0
100
200
300
400
500
Metres

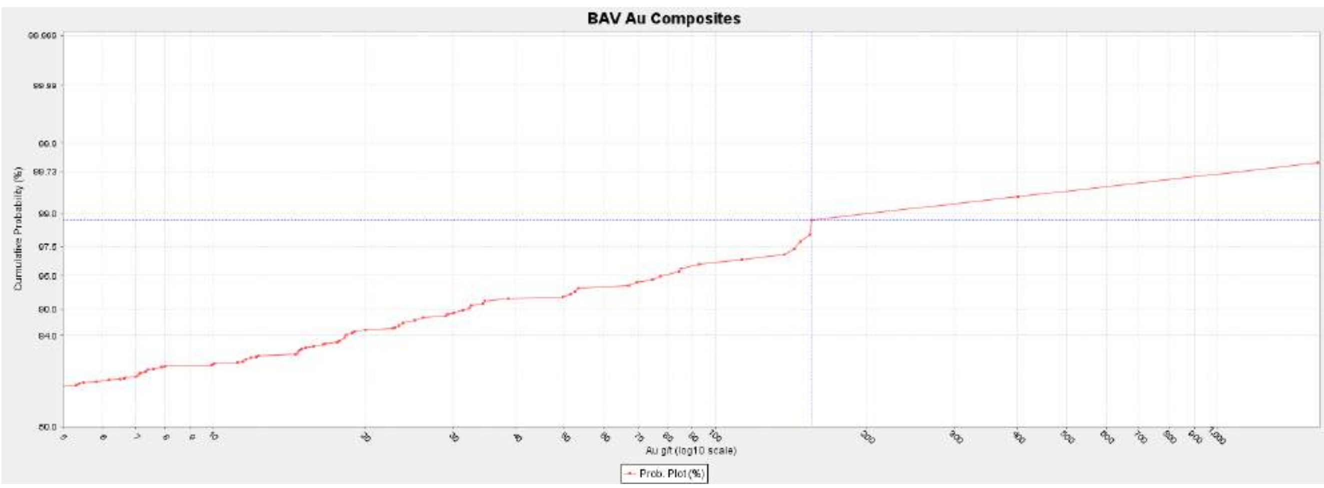
Appendix C – LOG PROBABILITY PLOTS

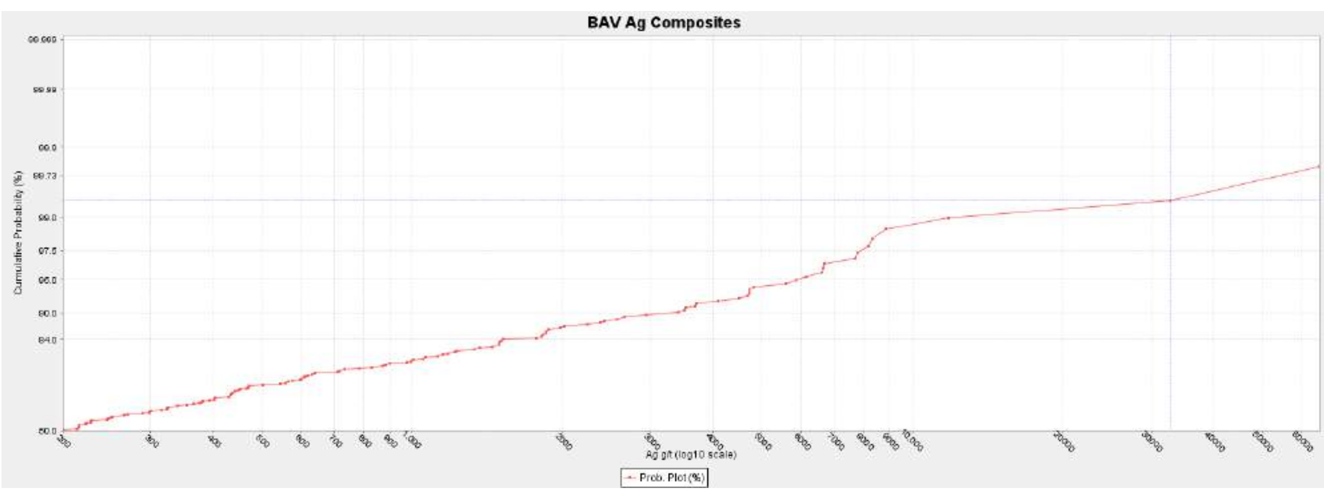

BAM Drill Hole Au Composites
Cumulative Probability (%)
Au g/t (log10 scale)
Prob. Plot (%)


BAM Drill Hole Ag Composites
Cumulative Probability (%)
Ag g/t (log10 scale)
Prob. Plot (%)

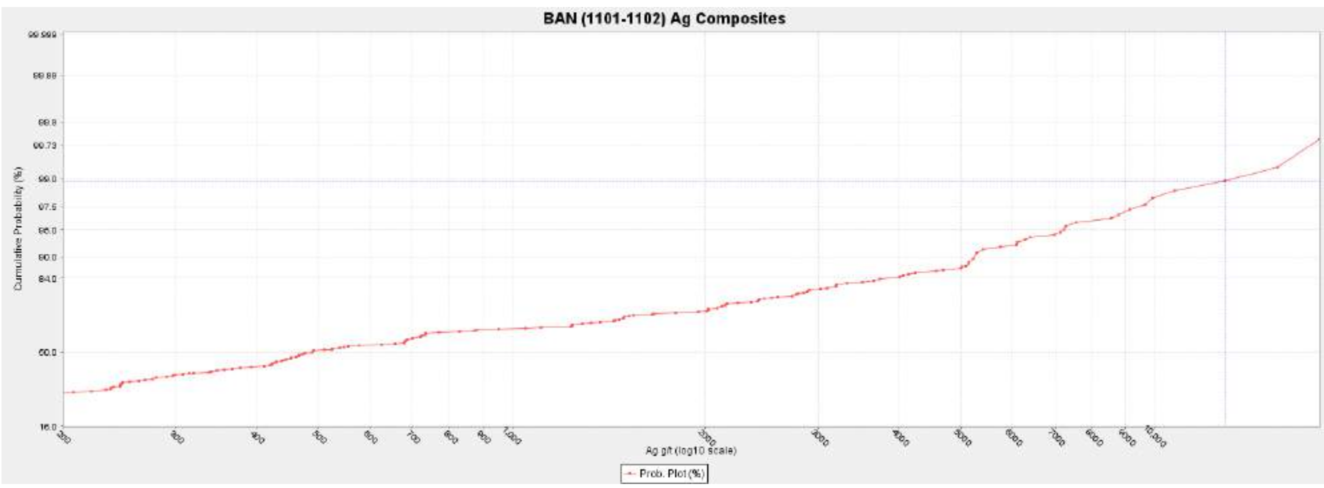

BAM UG Au Composites
Cumulative Probability (%)
Au g/t (log10 scale)
Prob. Plot (%)

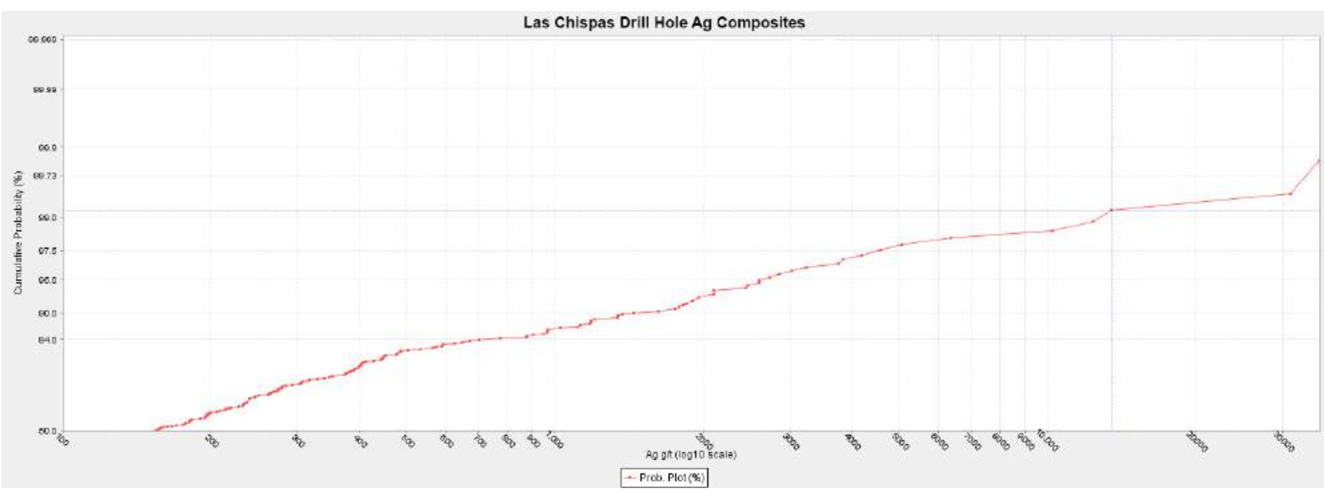

BAM UG Ag Composites
Cumulative Probability (%)
Ag g/t (log10 scale)
Prob. Plot (%)

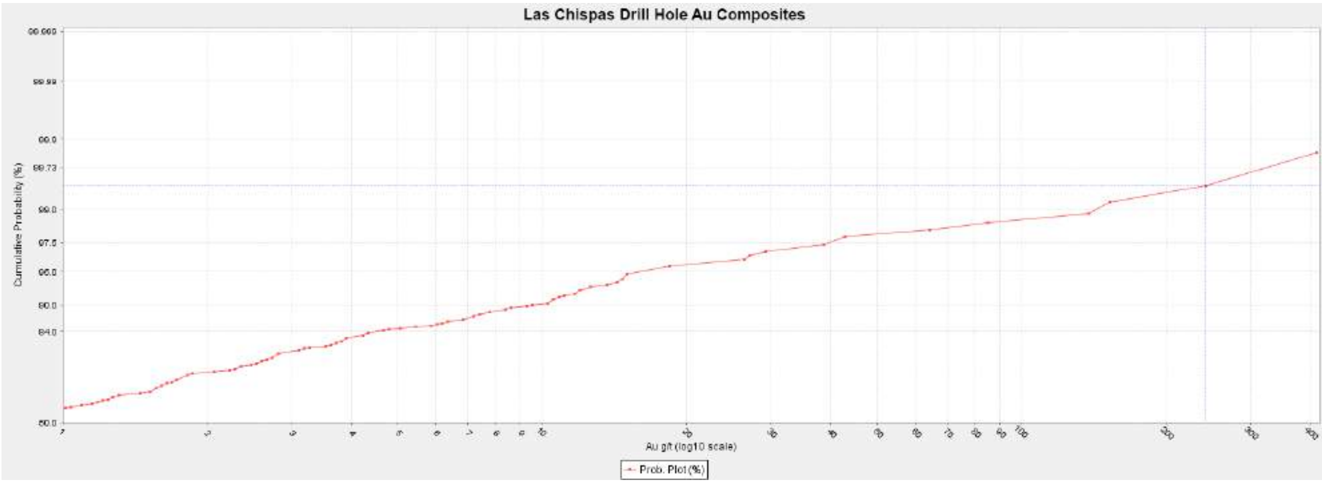

BAV Au Composites
Cumulative Probability (%)
Au g/t (log10 scale)
Prob. Plot (%)

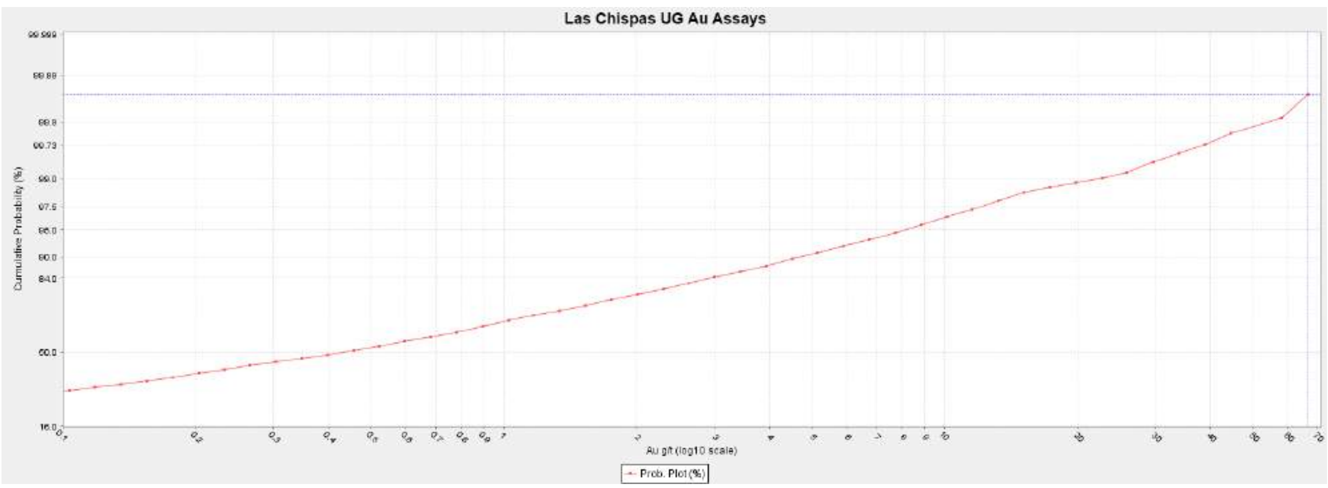

BAV Ag Composites
Cumulative Probability (%)
Ag g/t (log10 scale)
Prob. Plot (%)

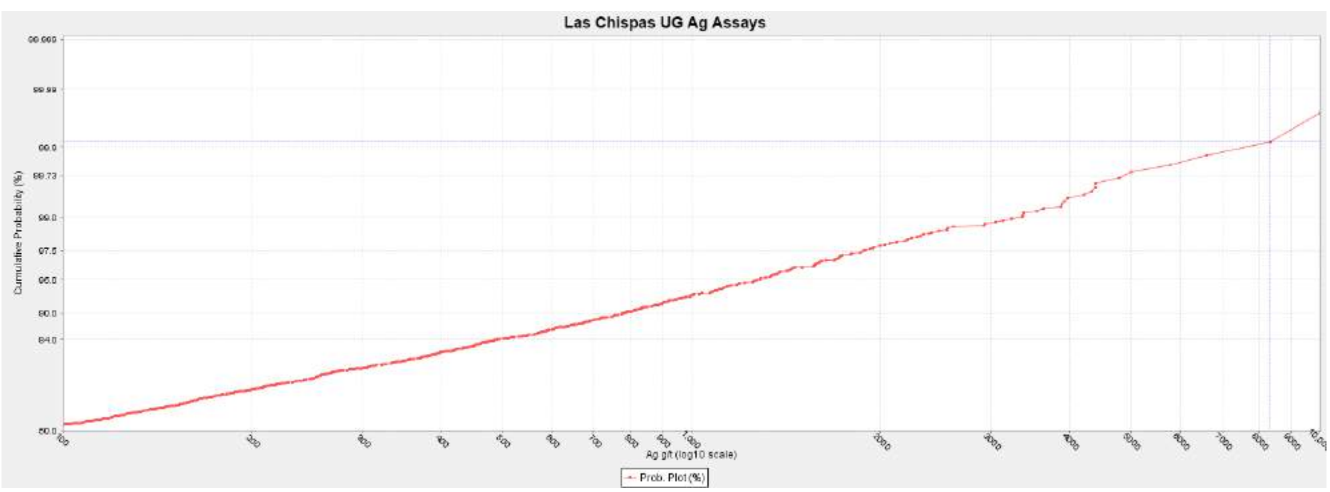

BAN (1101-1102) Au Composites
Cumulative Probability (%)
Au g/t (log10 scale)
Prob. Plot (%)

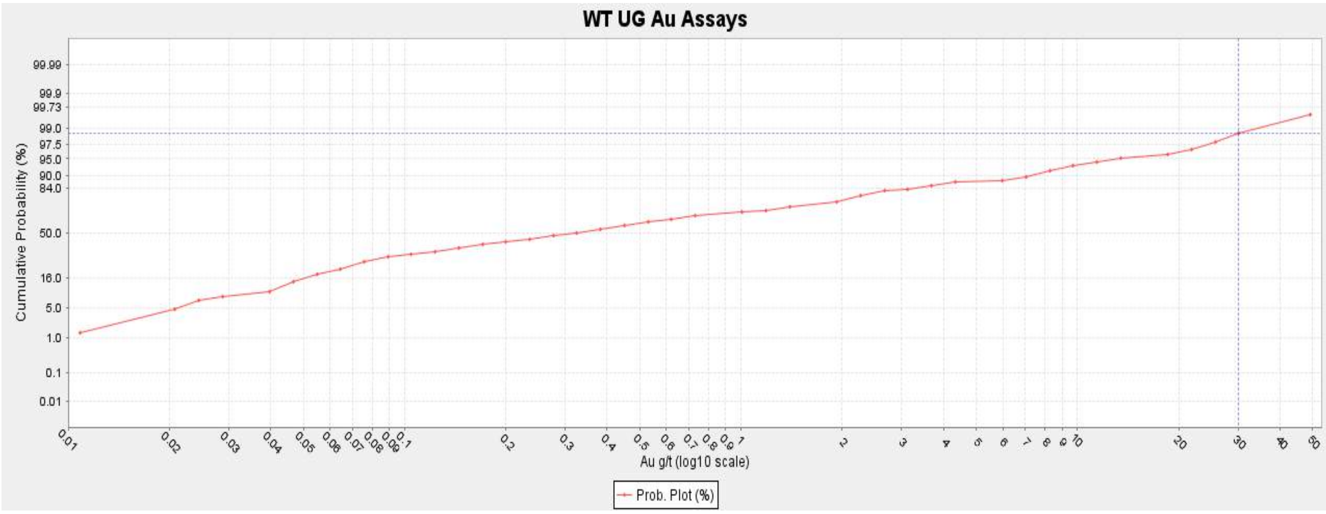

BAN (1101-1102) Ag Composites
Cumulative Probability (%)
Ag g/t (log10 scale)
Prob. Plot (%)

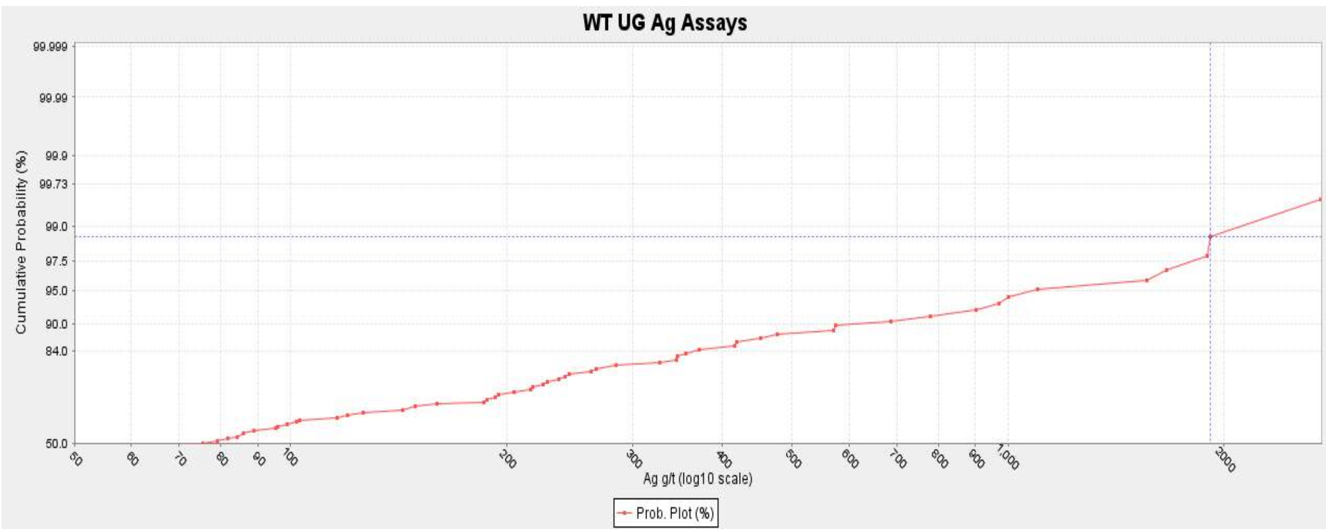

Las Chispas Drill Hole Ag Composites
Cumulative Probability (%)
Ag g/t (log10 scale)
Prob. Plot (%)

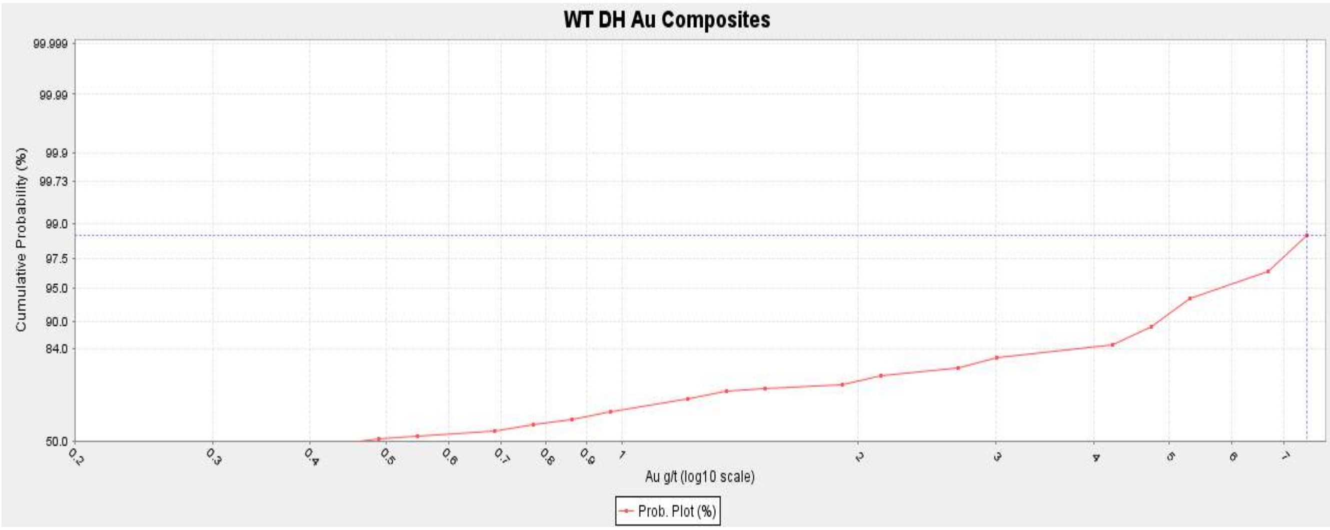

Las Chispas Drill Hole Au Composites
Cumulative Probability (%)
Au g/t (log10 scale)
Prob. Plot (%)

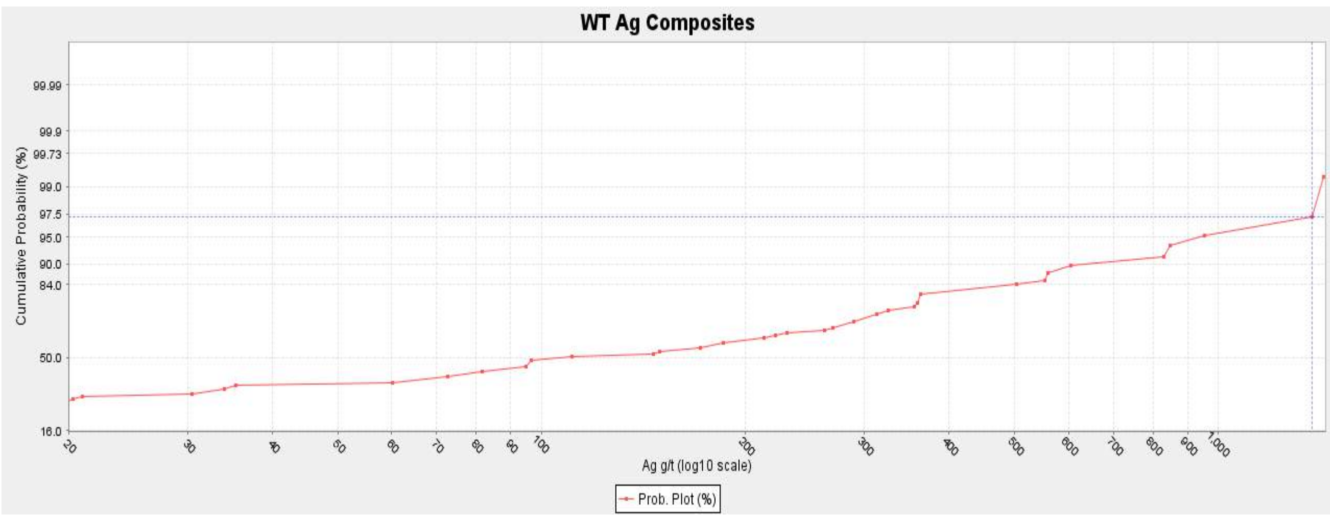

Las Chispas UG Au Assays
Cumulative Probability (%)
Au g/t (log10 scale)
Prob. Plot (%)


Las Chispas UG Ag Assays
Cumulative Probability (%)
Ag g/t (log10 scale)
Prob. Plot (%)

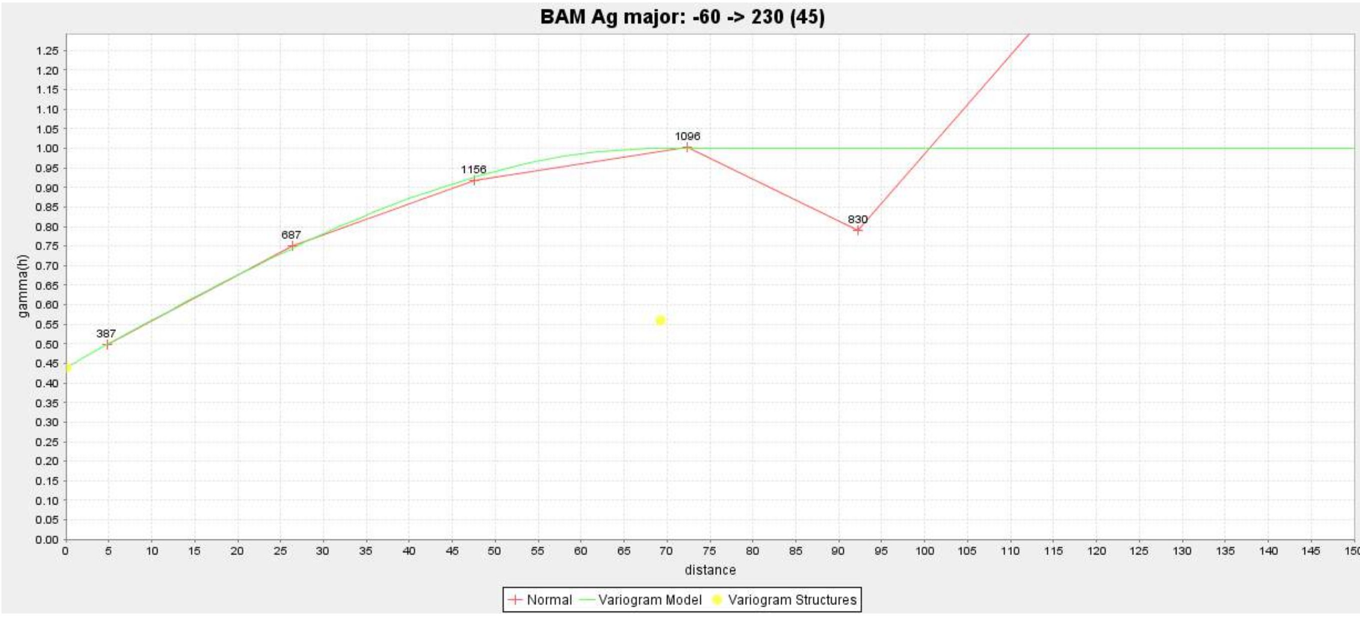

WT UG Au Assays
Cumulative Probability (%)
Au g/t (log10 scale)
Prob. Plot (%)

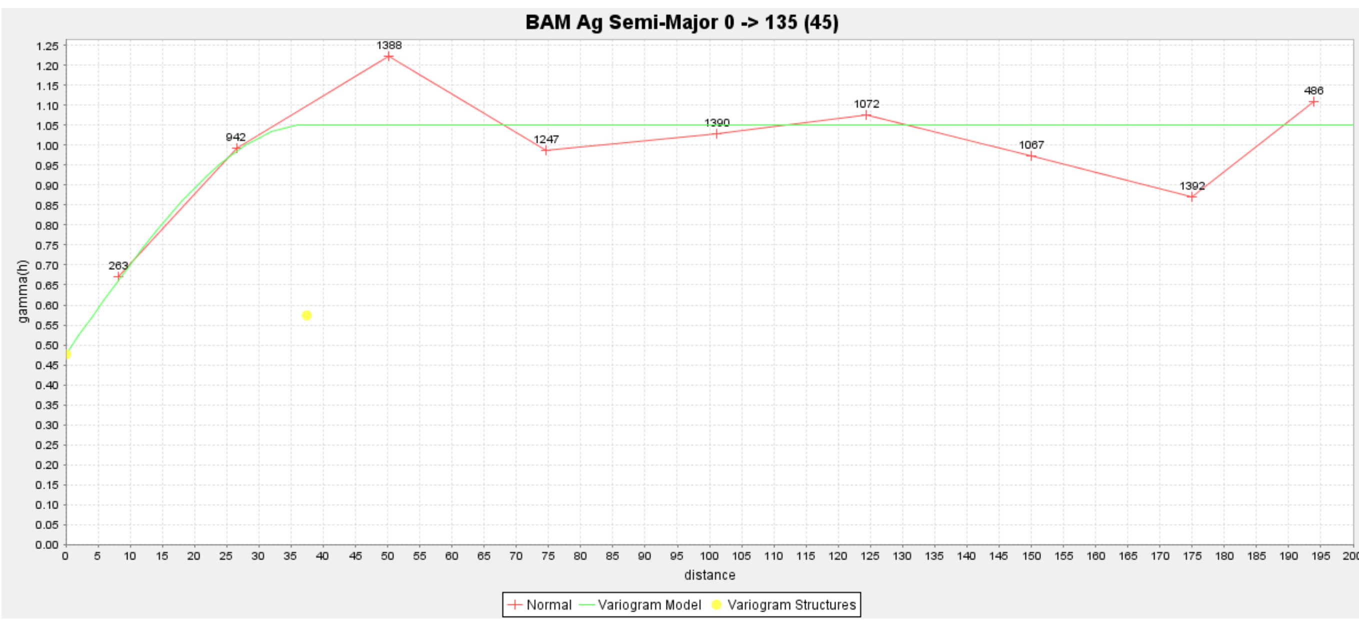

WT UG Ag Assays
Cumulative Probability (%)
Ag g/t (log10 scale)
Prob. Plot (%)

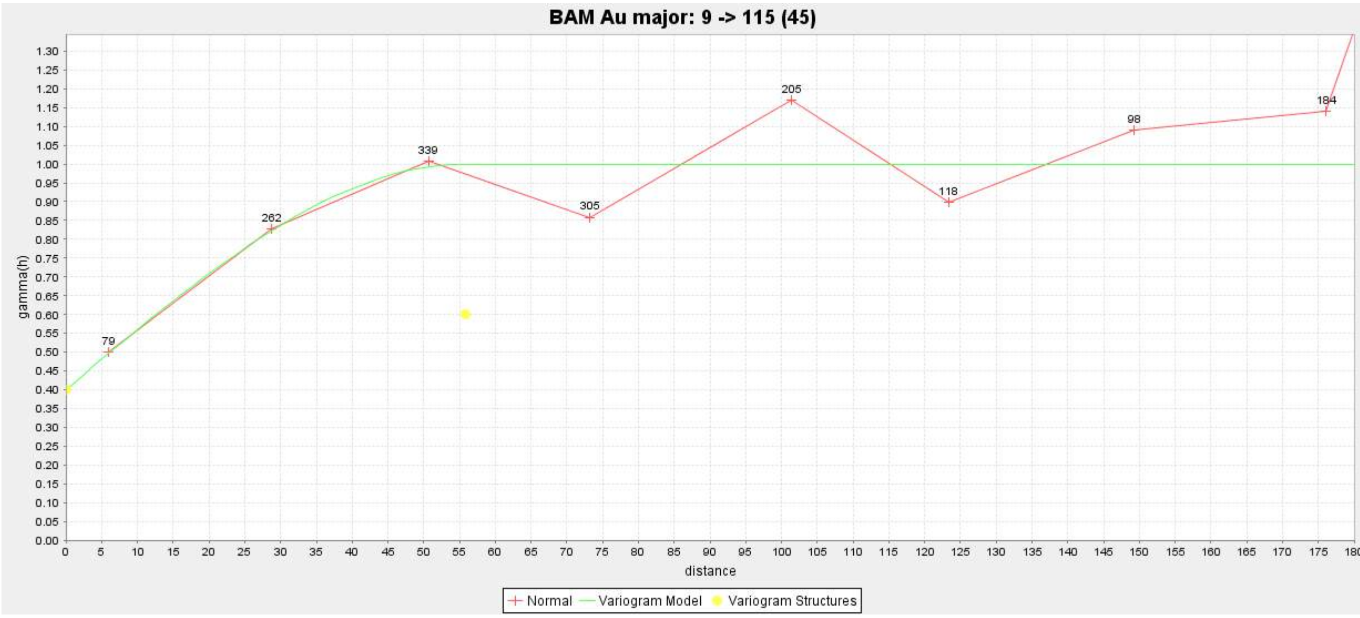

WT DH Au Composites
Cumulative Probability (%)
Au g/t (log10 scale)
Prob. Plot (%)

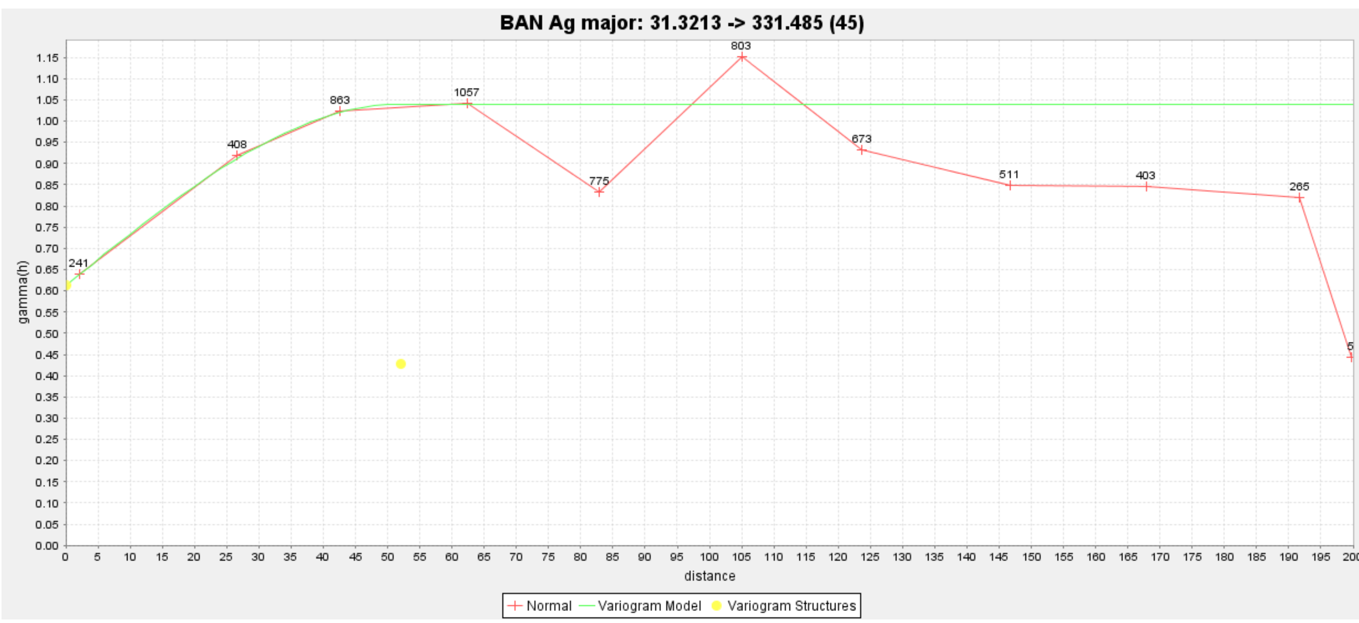

WT Ag Composites
Cumulative Probability (%)
Ag g/t (log10 scale)
Prob. Plot (%)

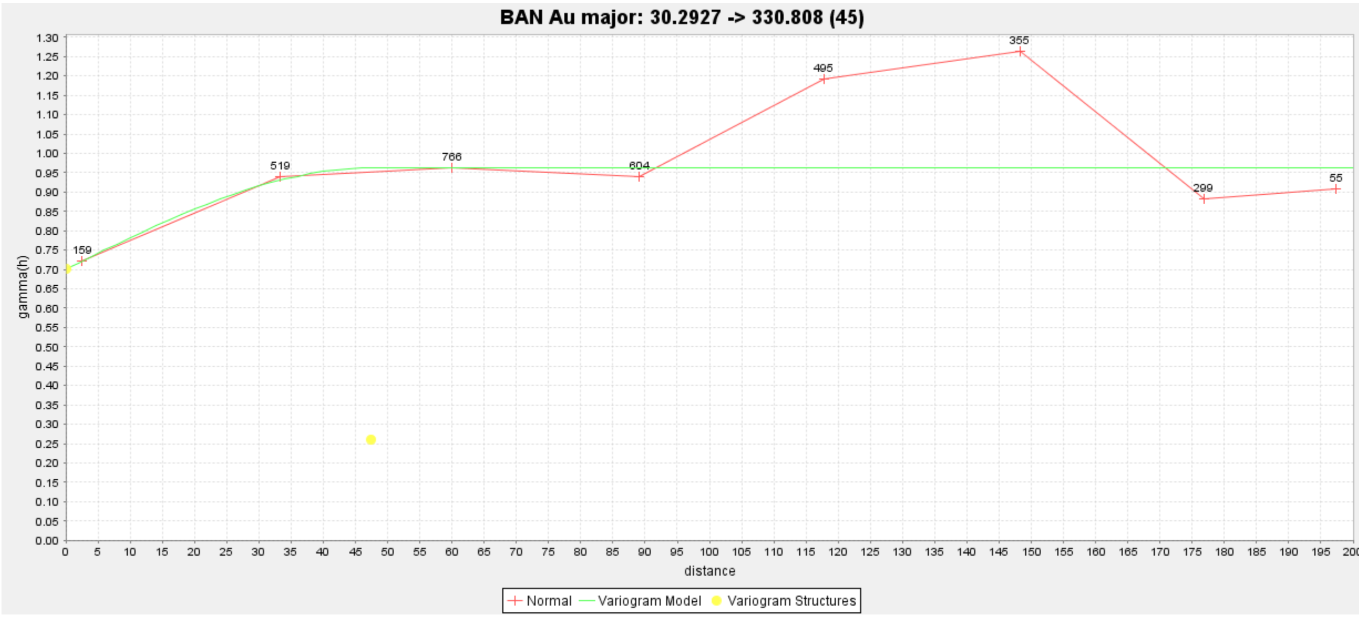
Appendix D – VARIOGRAMS

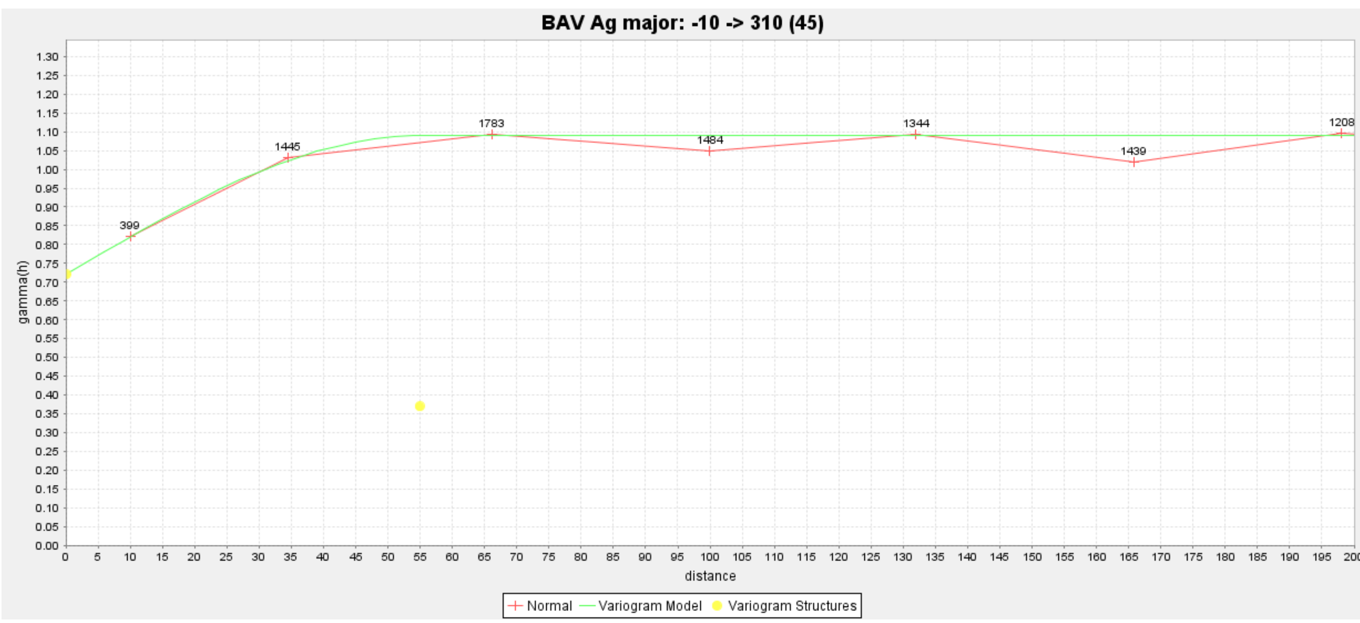

BAM Ag major: -60 -> 230 (45)
gamma(h)
distance
387
687
1156
1096
830
Normal
Variogram Model
Variogram Structures

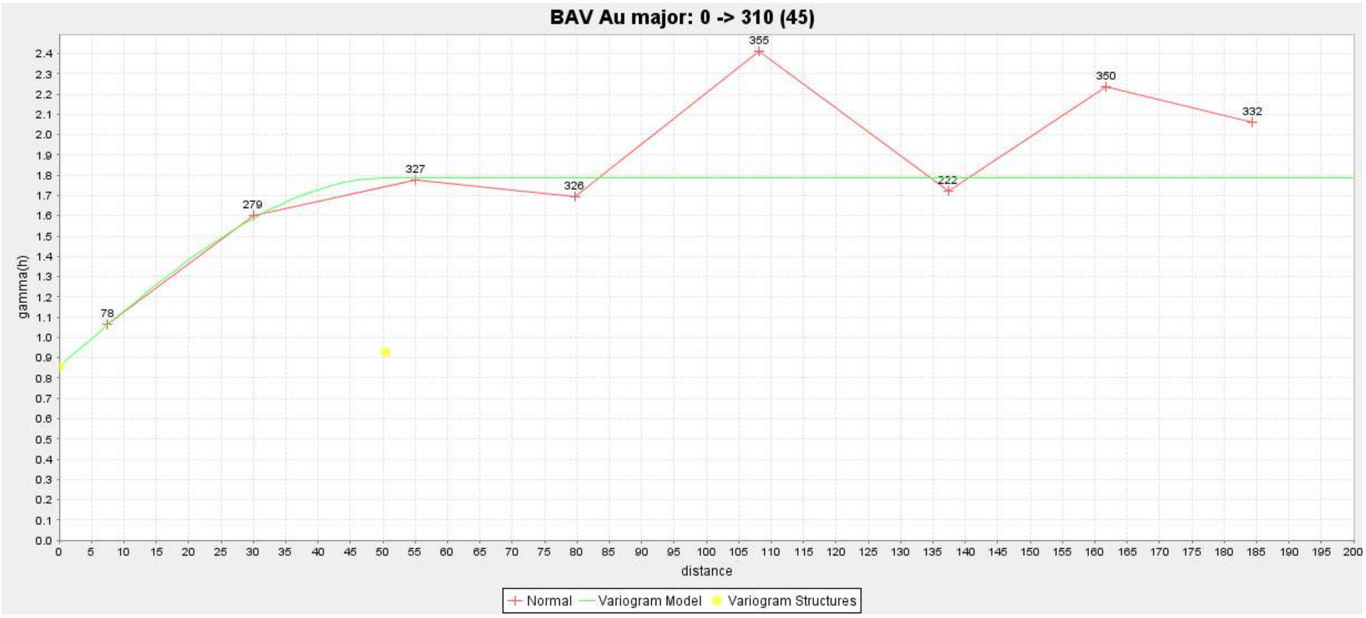

BAM Ag Semi-Major 0 -> 135 (45)
gamma(h)
distance
263
942
1388
1247
1390
1072
1067
1392
486
Normal
Variogram Model
Variogram Structures

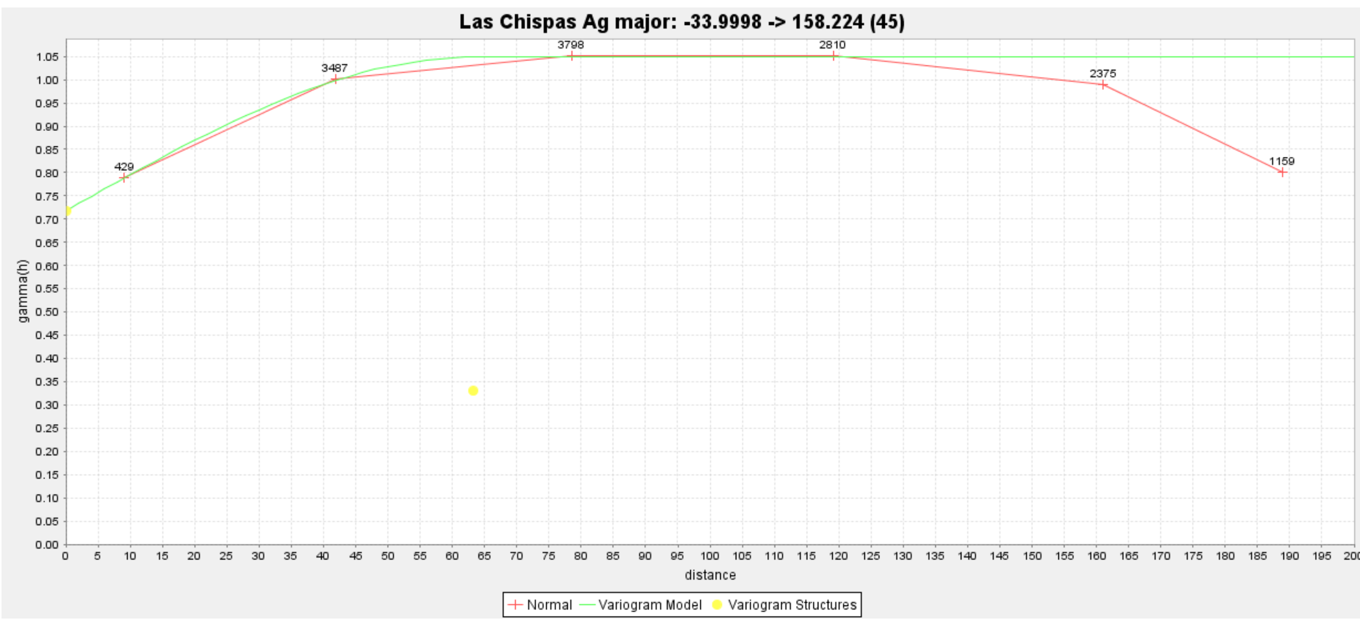

BAM Au major: 9 -> 115 (45)
gamma(h)
distance
Normal
Variogram Model
Variogram Structures

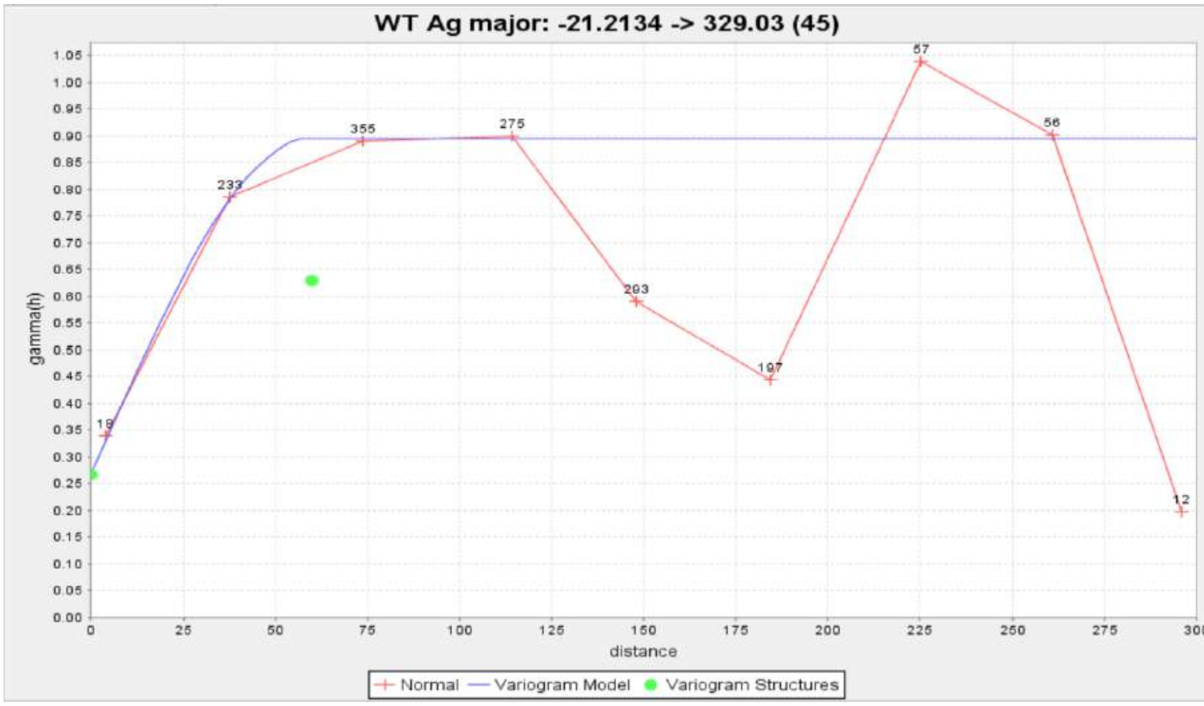

BAN Ag major: 31.3213 -> 331.485 (45)
gamma(h)
distance
Normal
Variogram Model
Variogram Structures

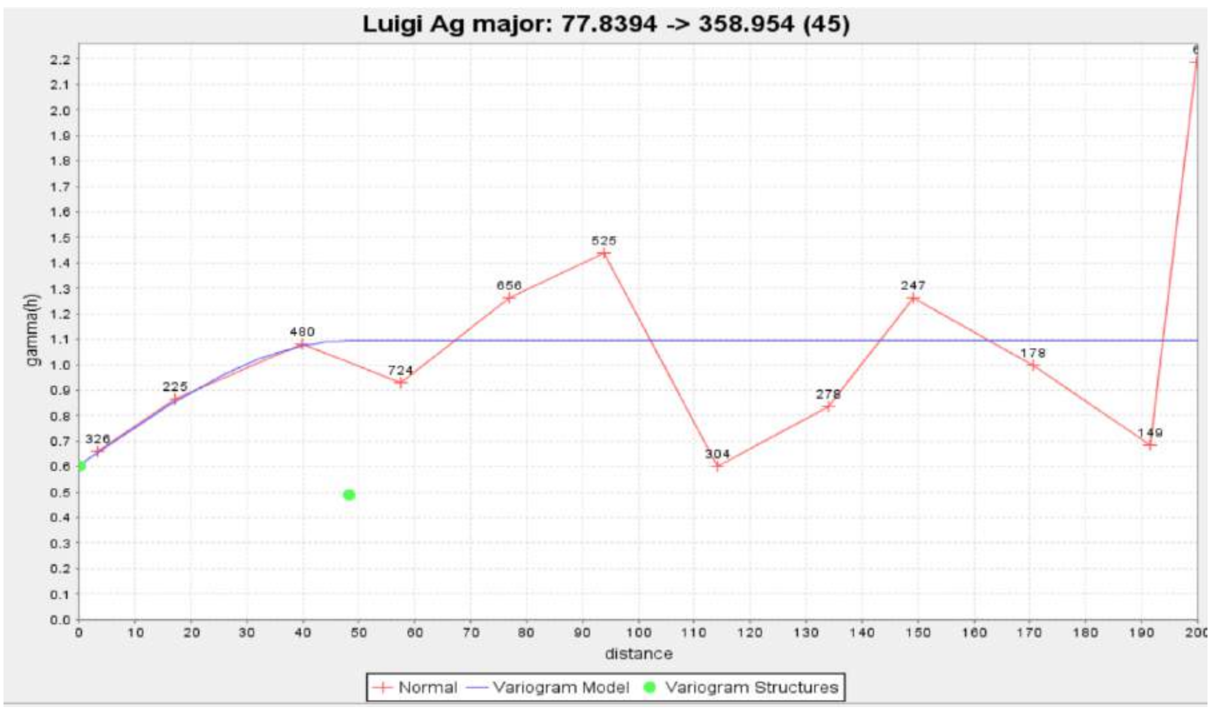

BAN Au major: 30.2927 -> 330.808 (45)
gamma(h)
distance
159
519
766
604
495
355
299
55
Normal
Variogram Model
Variogram Structures


BAV Ag major: -10 -> 310 (45)
gamma(h)
distance
399
1445
1783
1484
1344
1439
1208
Normal
Variogram Model
Variogram Structures

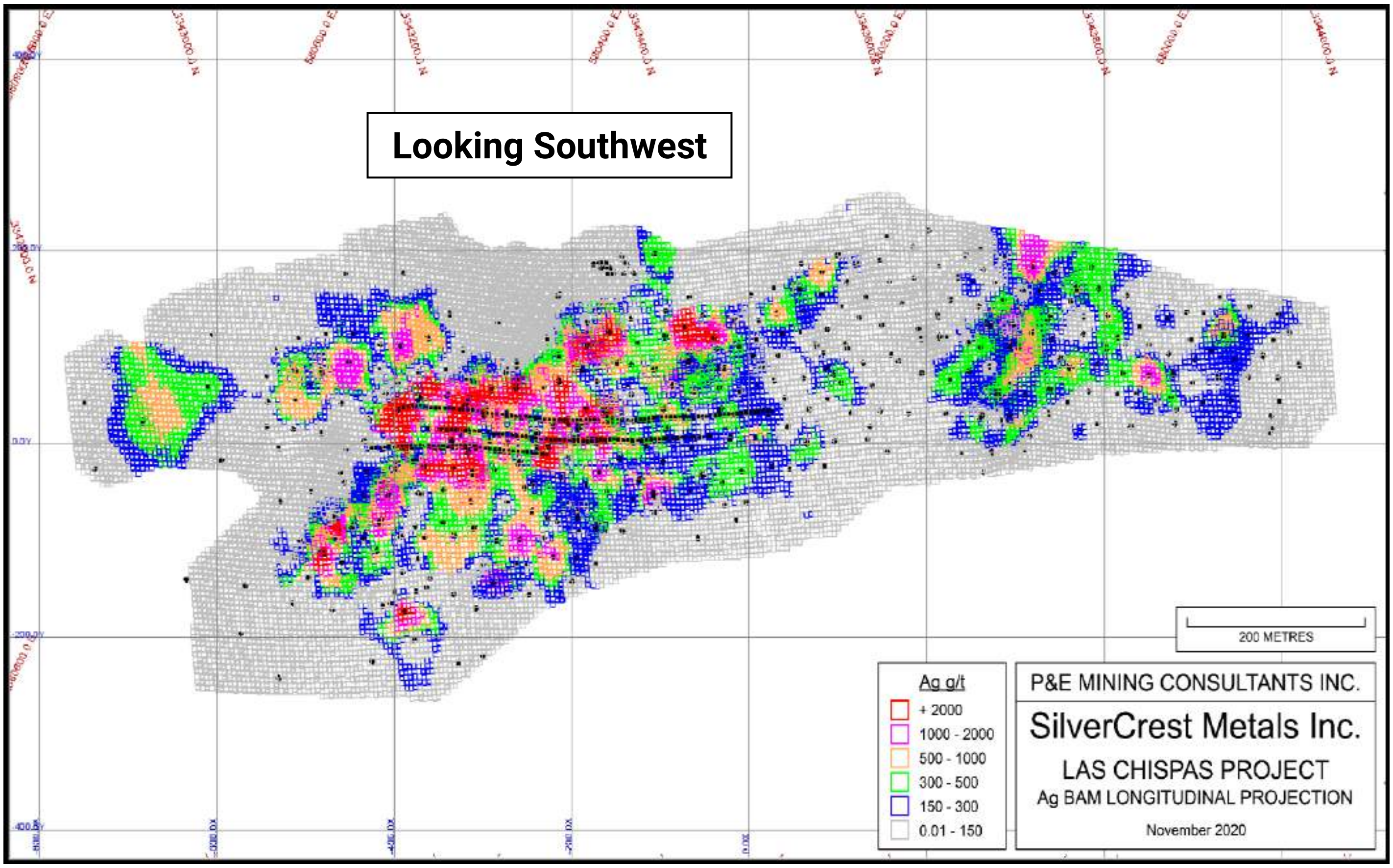

BAV Au major: 0 -> 310 (45)
gamma(h)
distance
78
279
327
326
355
222
350
332
Normal
Variogram Model
Variogram Structures

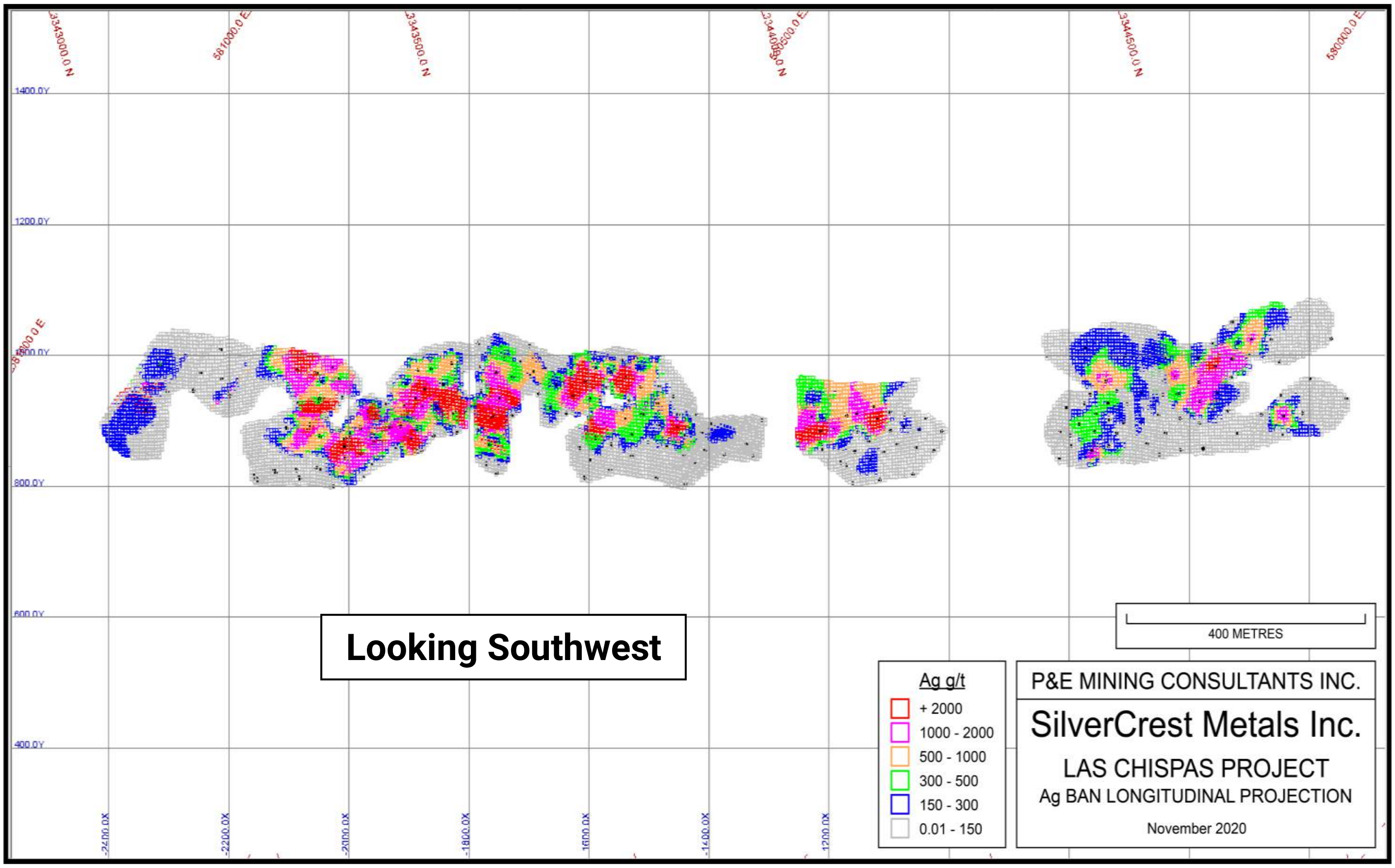

Las Chispas Ag major: -33.9998 -> 158.224 (45)
gamma(h)
distance
429
3487
3798
2810
2375
1159
Normal
Variogram Model
Variogram Structures

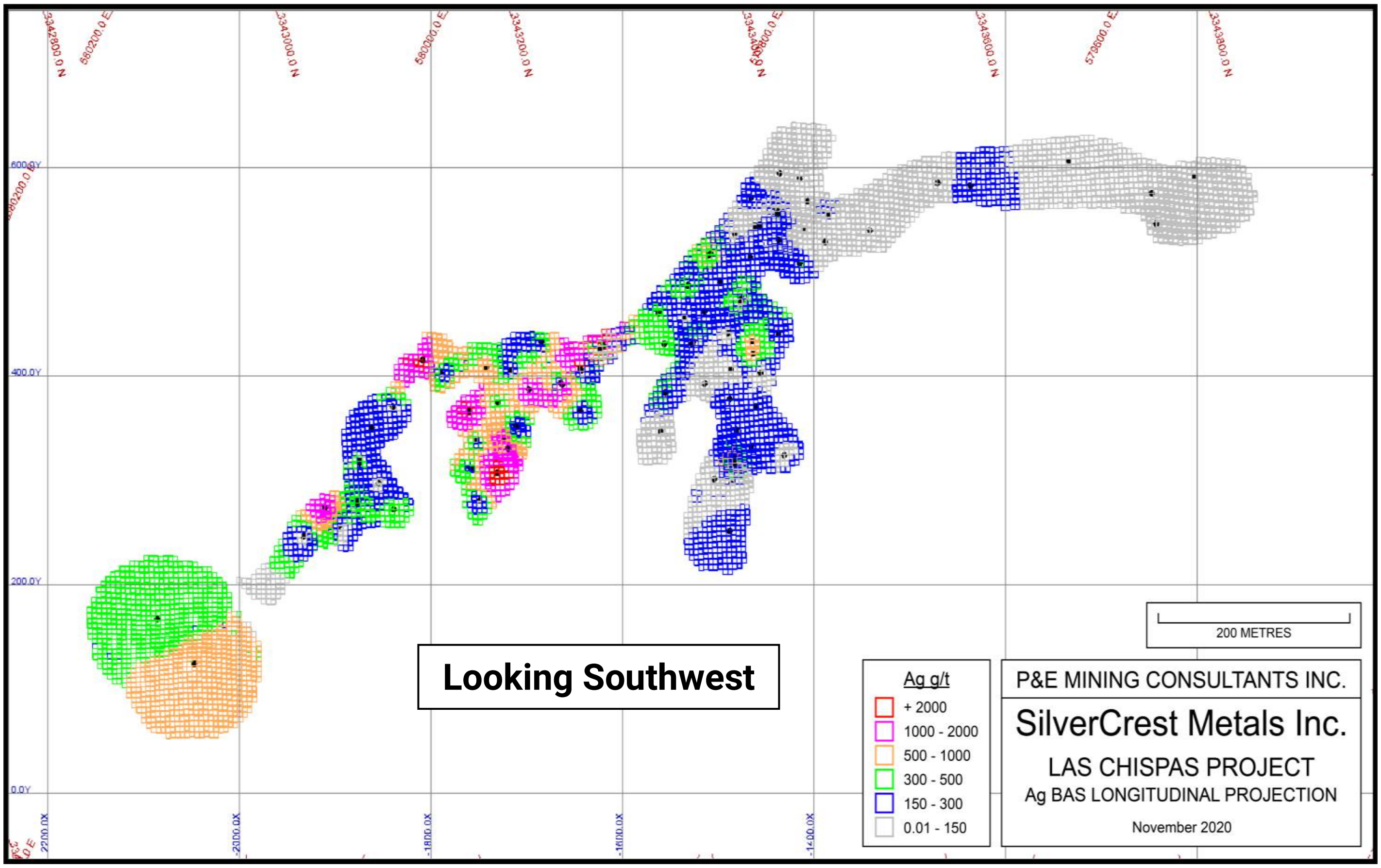

WT Ag major: -21.2134 -> 329.03 (45)
gamma(h)
distance
Normal
Variogram Model
Variogram Structures

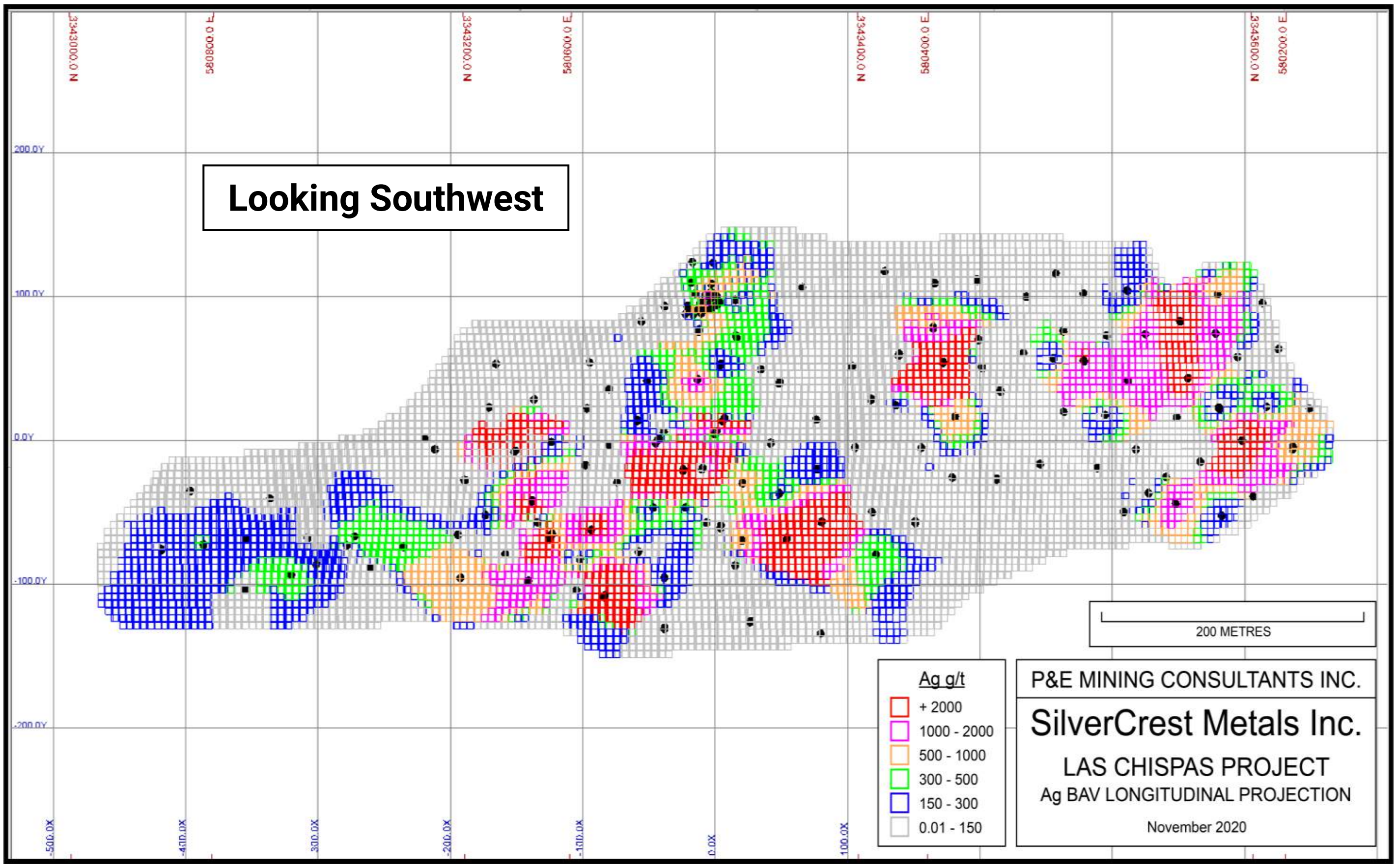

Luigi Ag major: 77.8394 -> 358.954 (45)
gamma(h)
distance
Normal
Variogram Model
Variogram Structures

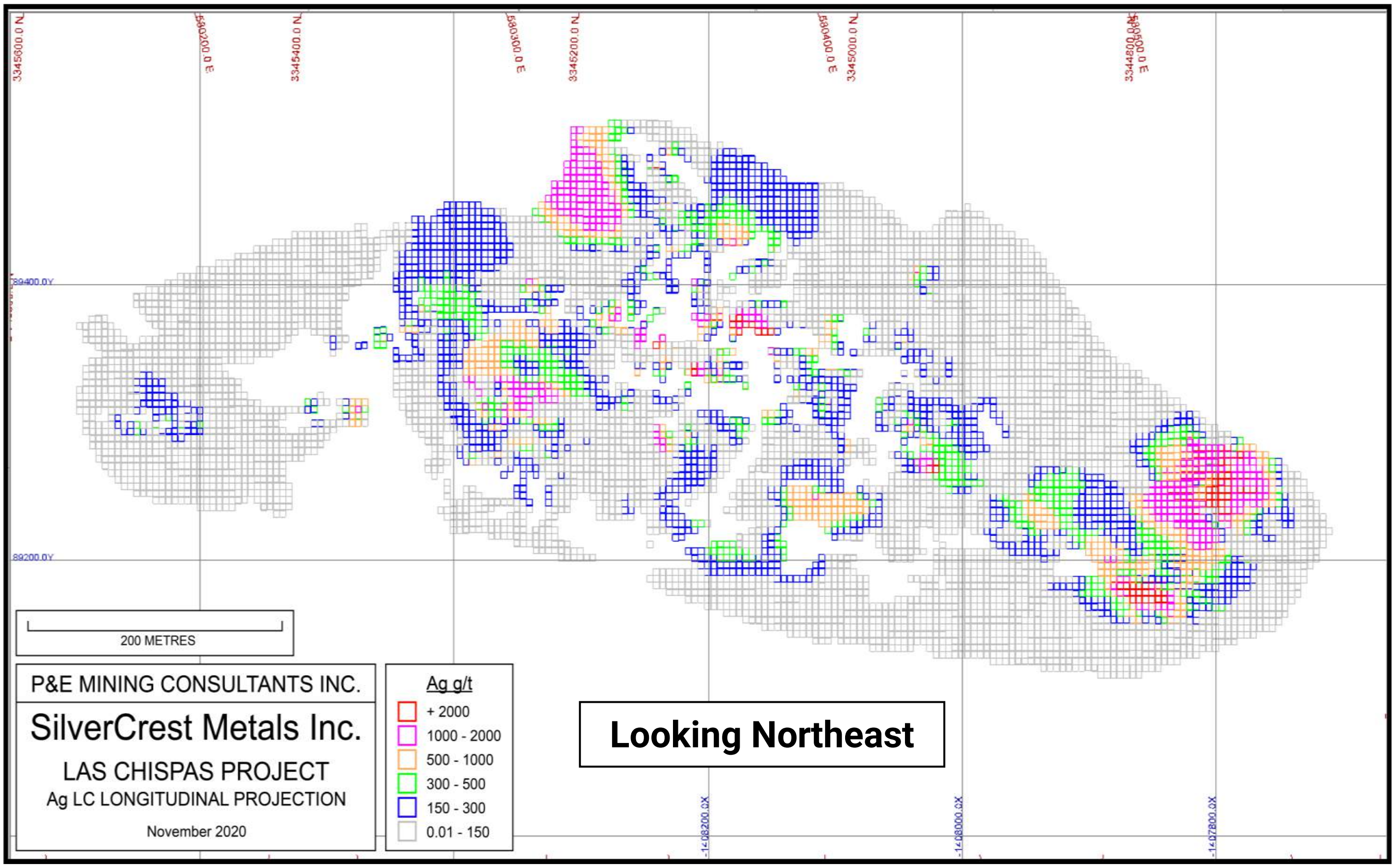
Appendix E – AG LONGITUDINAL PROJECTIONS


Looking Southwest
200 METRES
Ag g/t
+ 2000
1000 - 2000
500 - 1000
300 - 500
150 - 300
0.01 - 150
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
Ag BAM LONGITUDINAL PROJECTION
November 2020

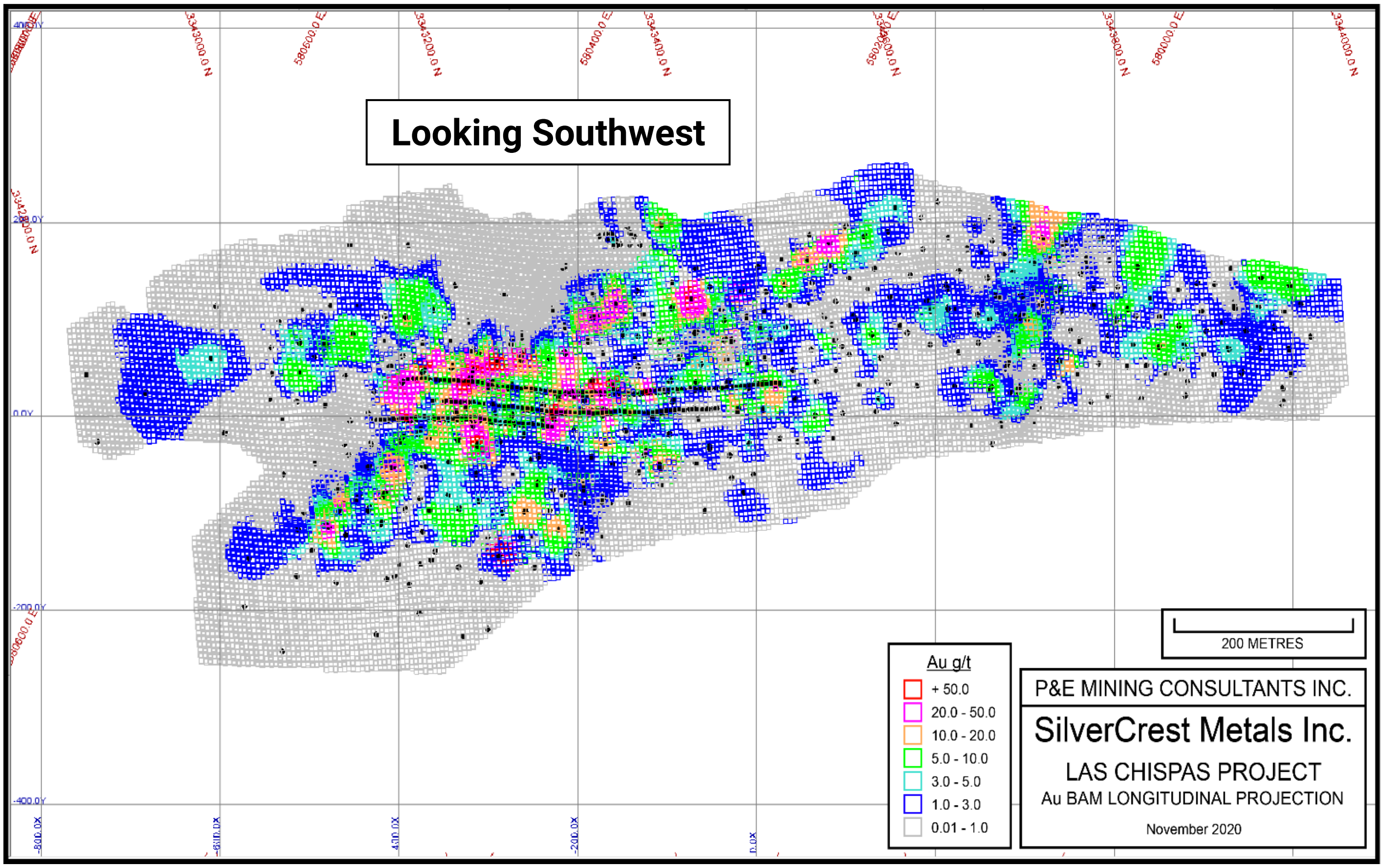

Looking Southwest
400 METRES
Ag g/t
+ 2000
1000 - 2000
500 - 1000
300 - 500
150 - 300
0.01 - 150
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
Ag BAN LONGITUDINAL PROJECTION
November 2020

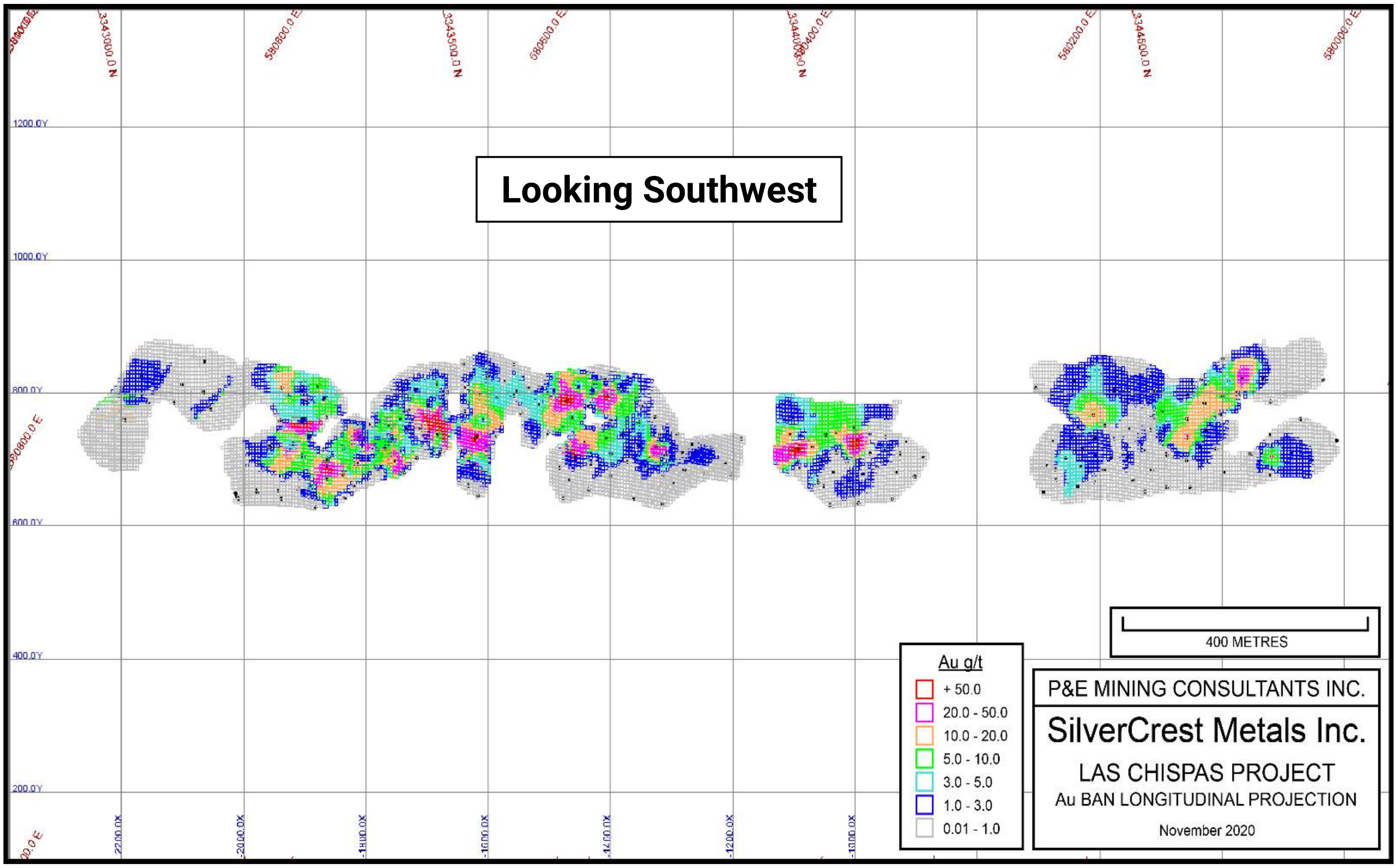

Looking Southwest
200 METRES
Ag g/t
+ 2000
1000 - 2000
500 - 1000
300 - 500
150 - 300
0.01 - 150
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
Ag BAS LONGITUDINAL PROJECTION
November 2020

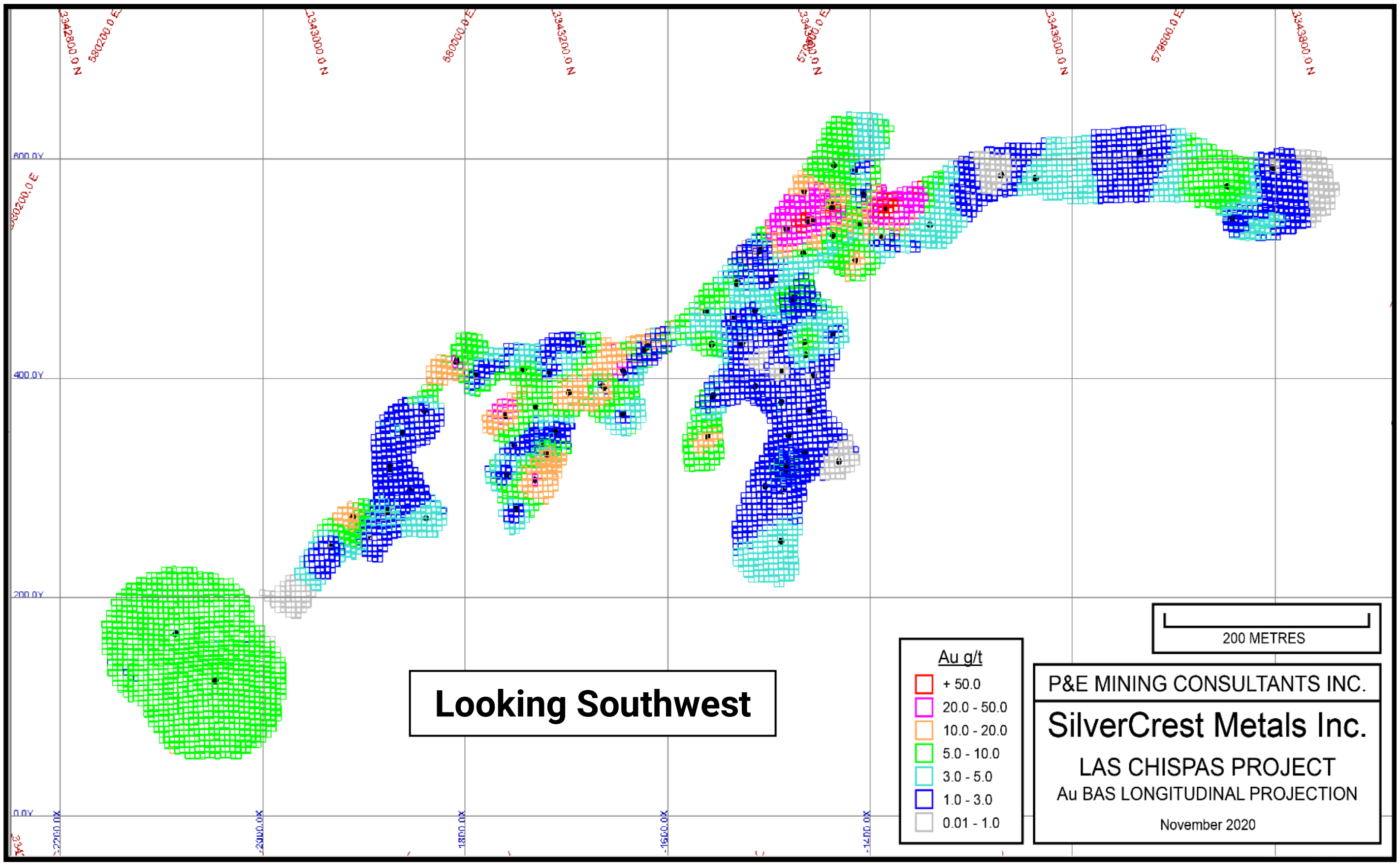

Looking Southwest
Ag g/t
+ 2000
1000 - 2000
500 - 1000
300 - 500
150 - 300
0.01 - 150
200 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
Ag BAV LONGITUDINAL PROJECTION
November 2020

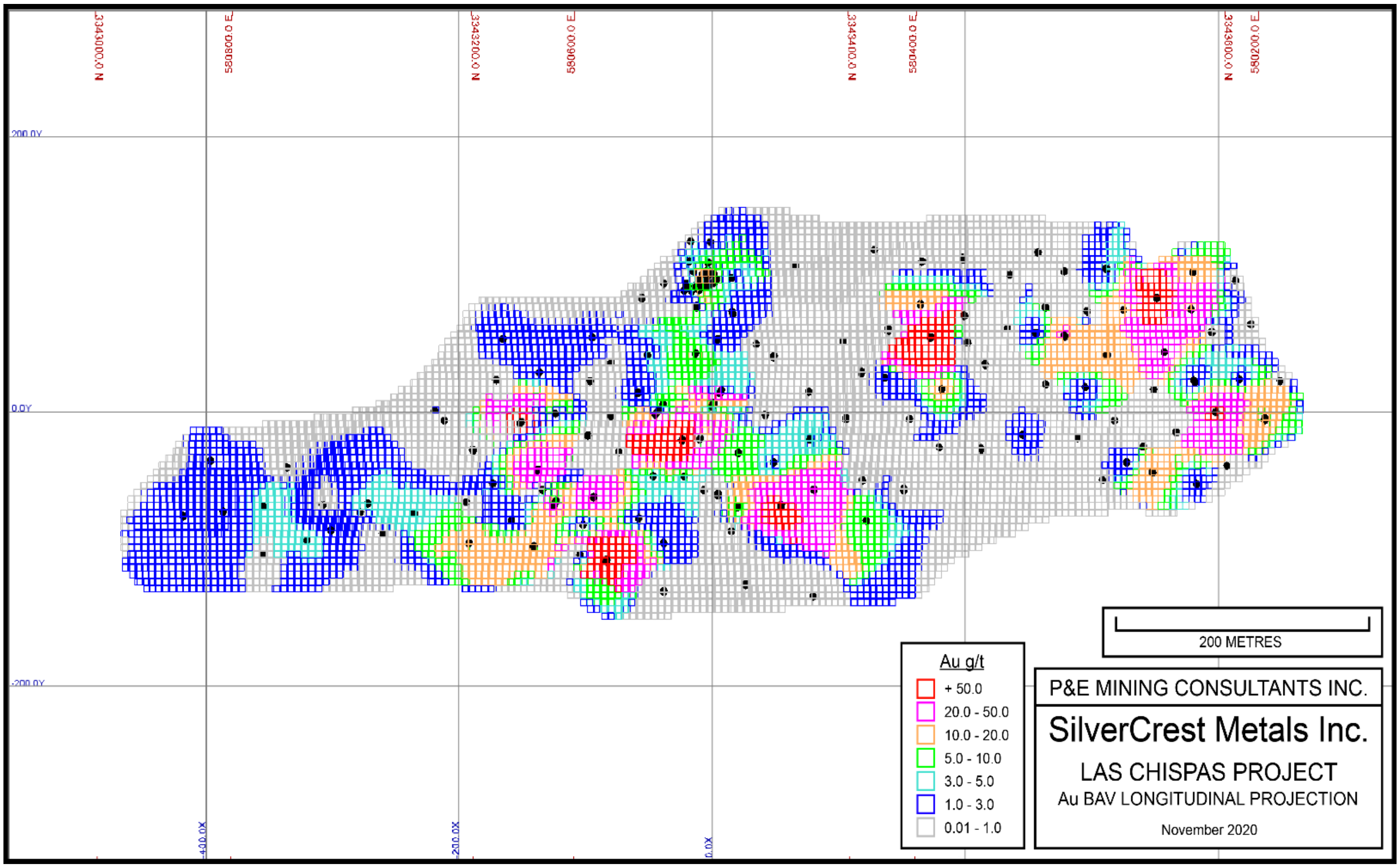

3345600.0 N
680200.0 E
3345400.0 N
680300.0 E
3345200.0 N
680400.0 E
3345000.0 N
3344800.0 N
680500.0 E
89400.0Y
89200.0Y
200 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
Ag LC LONGITUDINAL PROJECTION
November 2020
Ag g/t
+ 2000
1000 - 2000
500 - 1000
300 - 500
150 - 300
0.01 - 150
Looking Northeast
-14 08200.0X
-14 08000.0X
-14 07800.0X

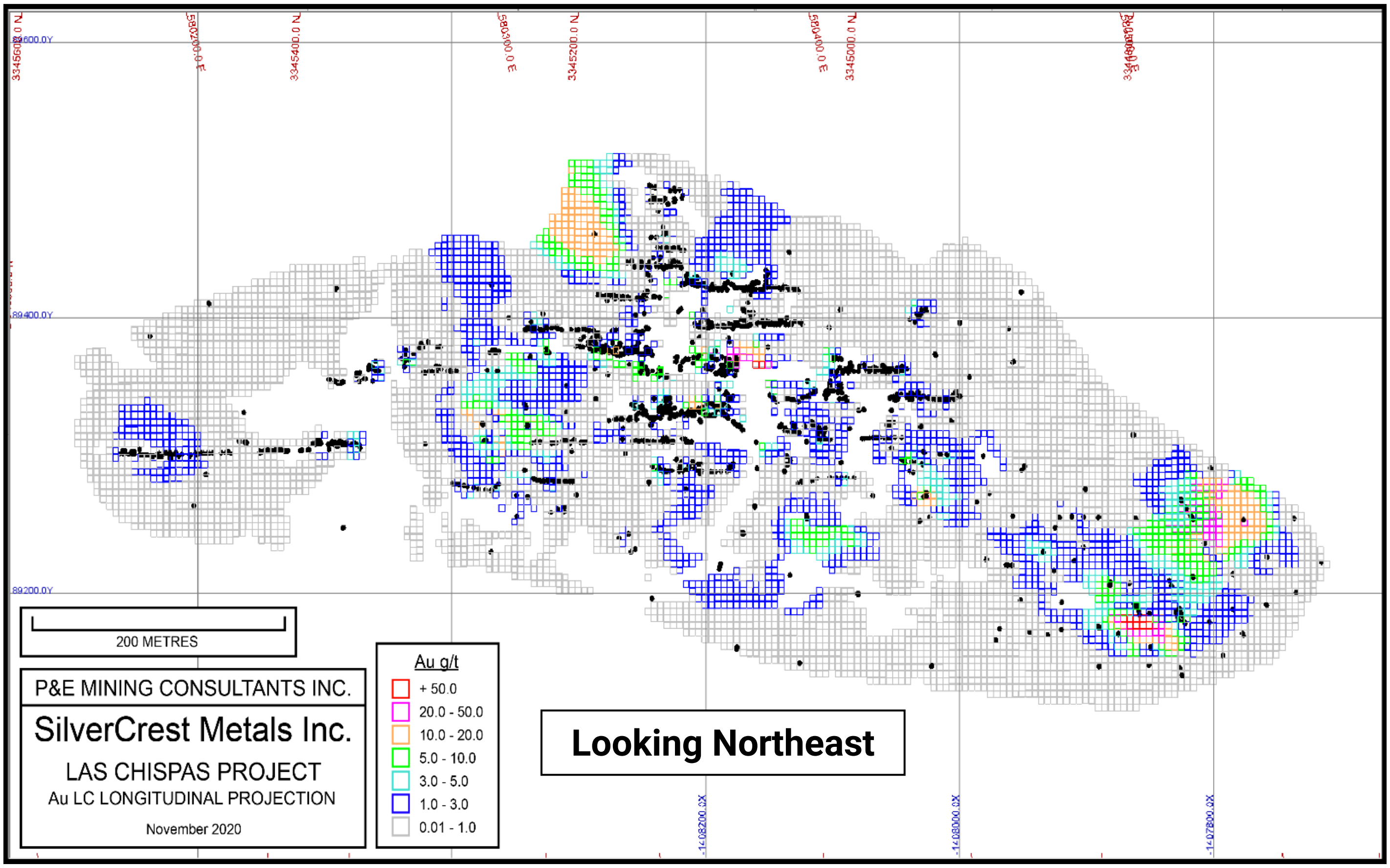
Appendix F – AU LONGITUDINAL PROJECTIONS


Looking Southwest
Au g/t
+ 50.0
20.0 - 50.0
10.0 - 20.0
5.0 - 10.0
3.0 - 5.0
1.0 - 3.0
0.01 - 1.0
200 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
Au BAM LONGITUDINAL PROJECTION
November 2020

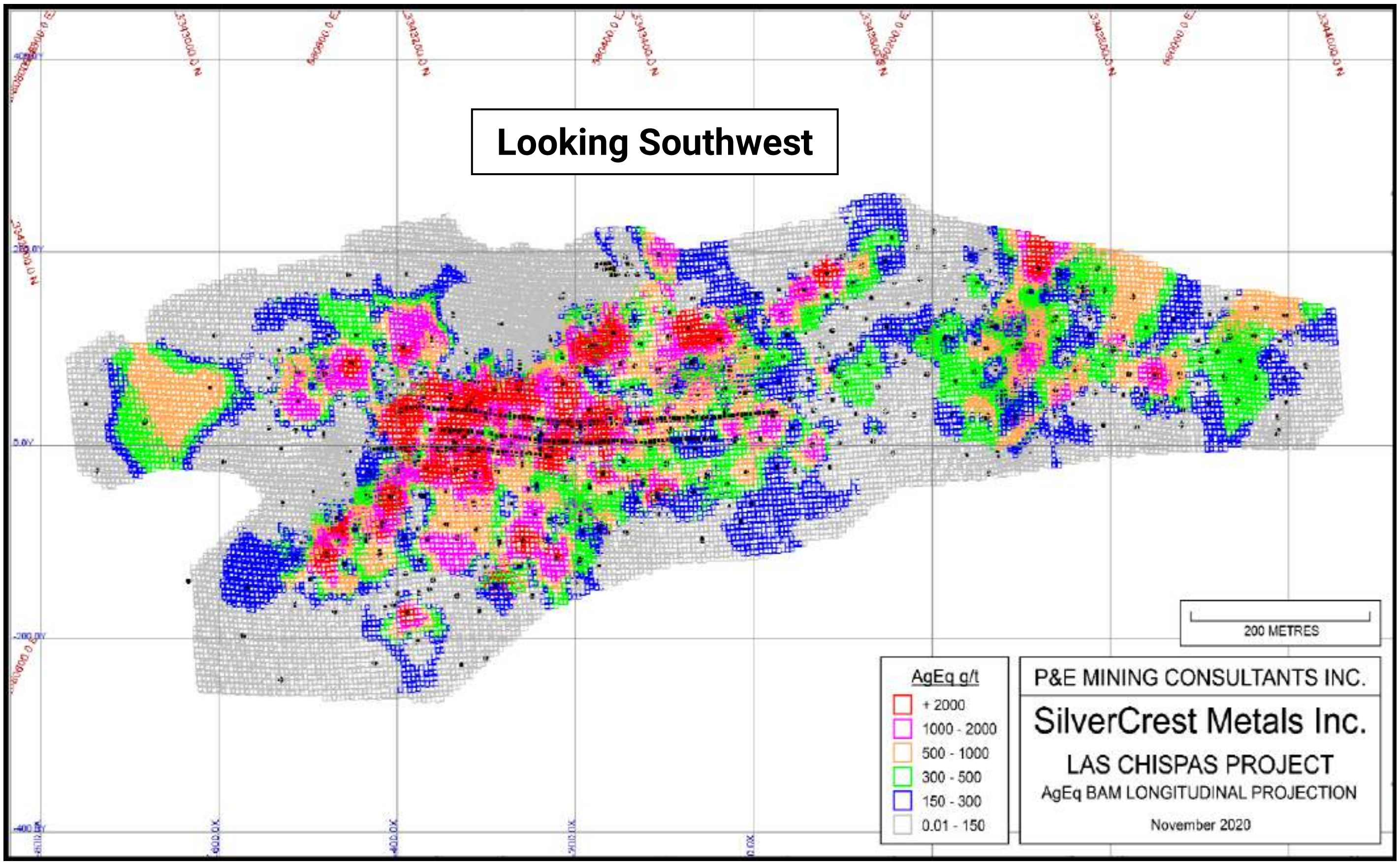

Looking Southwest
Au g/t
+ 50.0
20.0 - 50.0
10.0 - 20.0
5.0 - 10.0
3.0 - 5.0
1.0 - 3.0
0.01 - 1.0
400 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
Au BAN LONGITUDINAL PROJECTION
November 2020

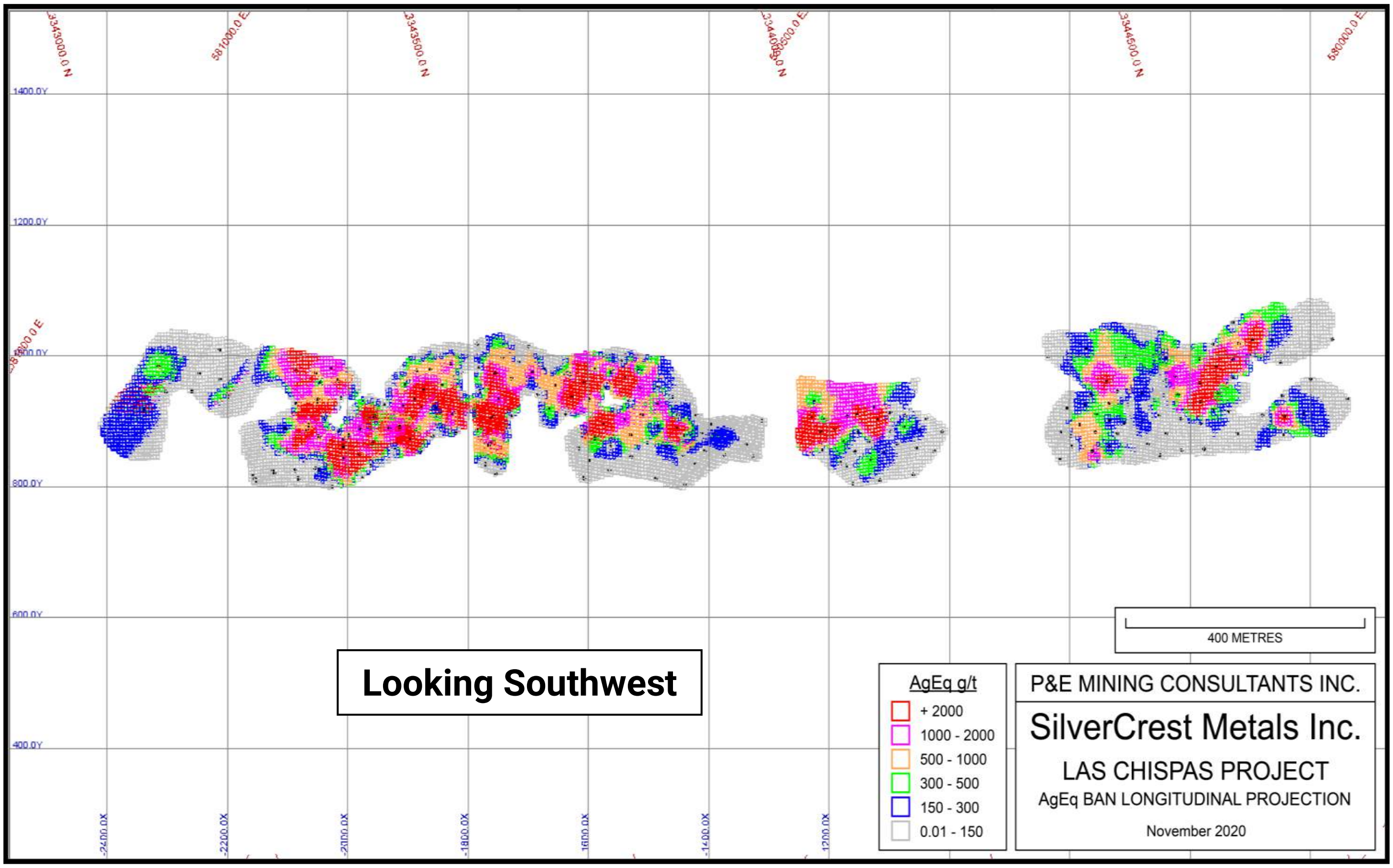

Looking Southwest
Au g/t
+ 50.0
20.0 - 50.0
10.0 - 20.0
5.0 - 10.0
3.0 - 5.0
1.0 - 3.0
0.01 - 1.0
200 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
Au BAS LONGITUDINAL PROJECTION
November 2020

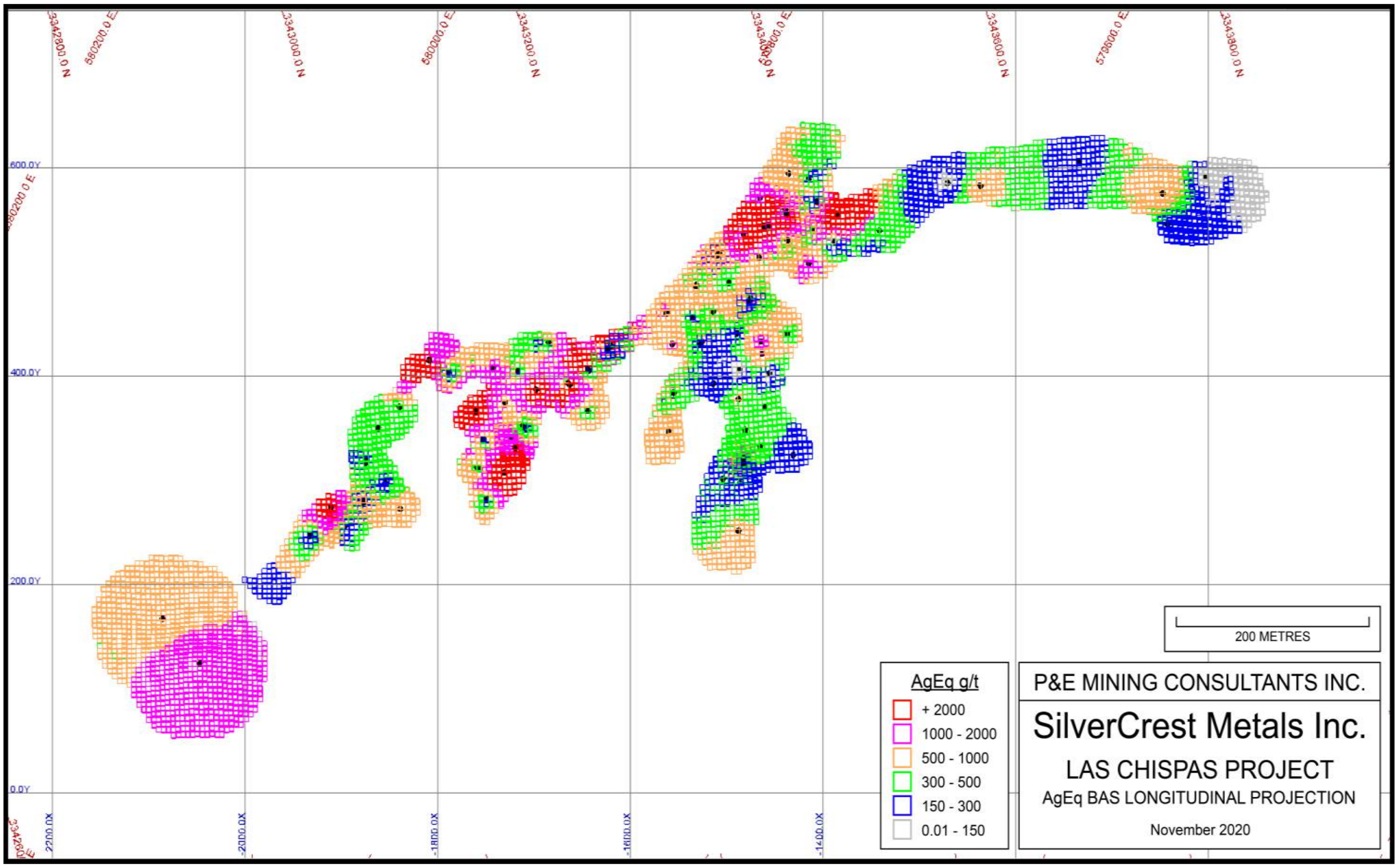

200 METRES
Au g/t
+ 50.0
20.0 - 50.0
10.0 - 20.0
5.0 - 10.0
3.0 - 5.0
1.0 - 3.0
0.01 - 1.0
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
Au BAV LONGITUDINAL PROJECTION
November 2020

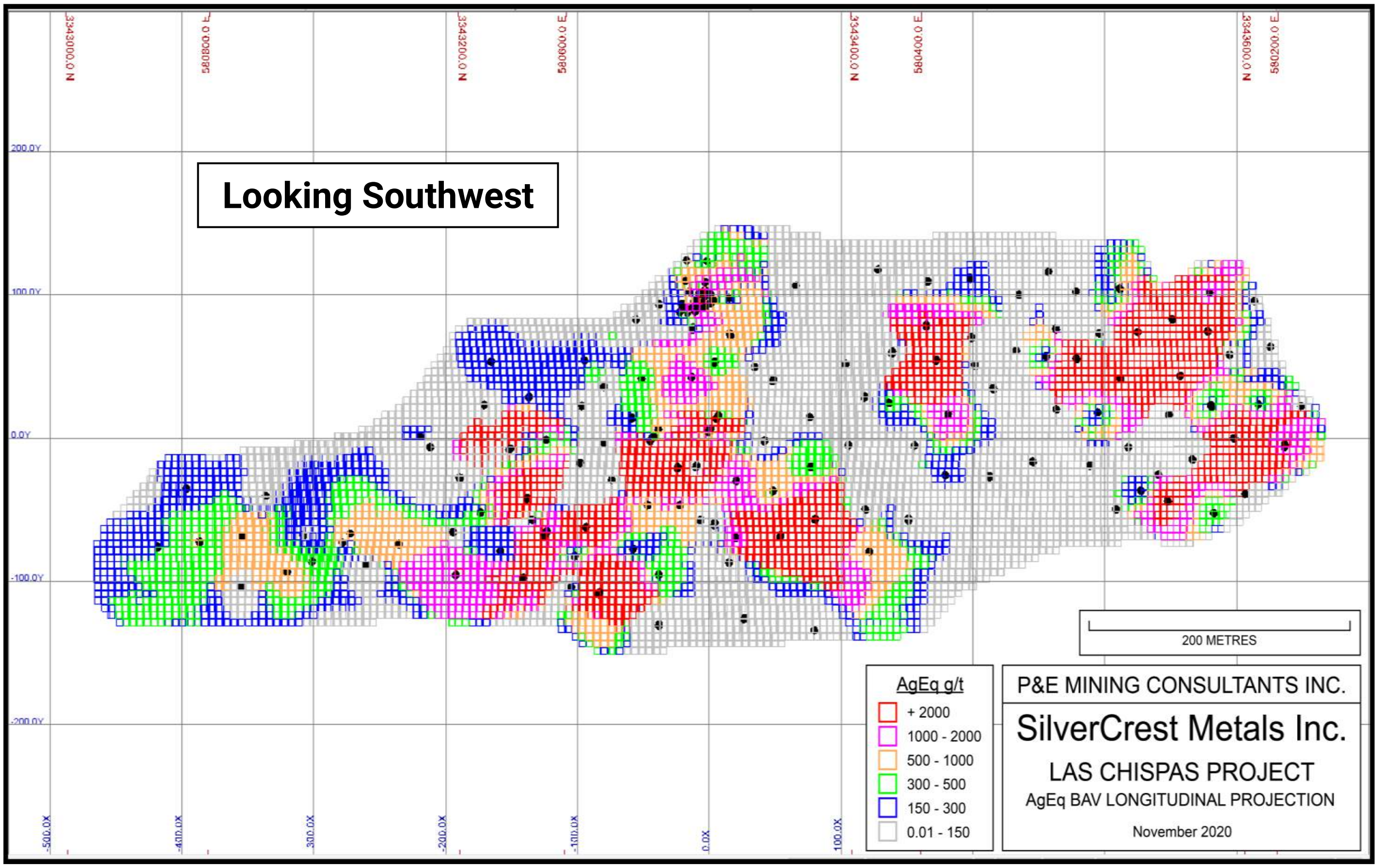

200 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
Au LC LONGITUDINAL PROJECTION
November 2020
Au g/t
+ 50.0
20.0 - 50.0
10.0 - 20.0
5.0 - 10.0
3.0 - 5.0
1.0 - 3.0
0.01 - 1.0
Looking Northeast

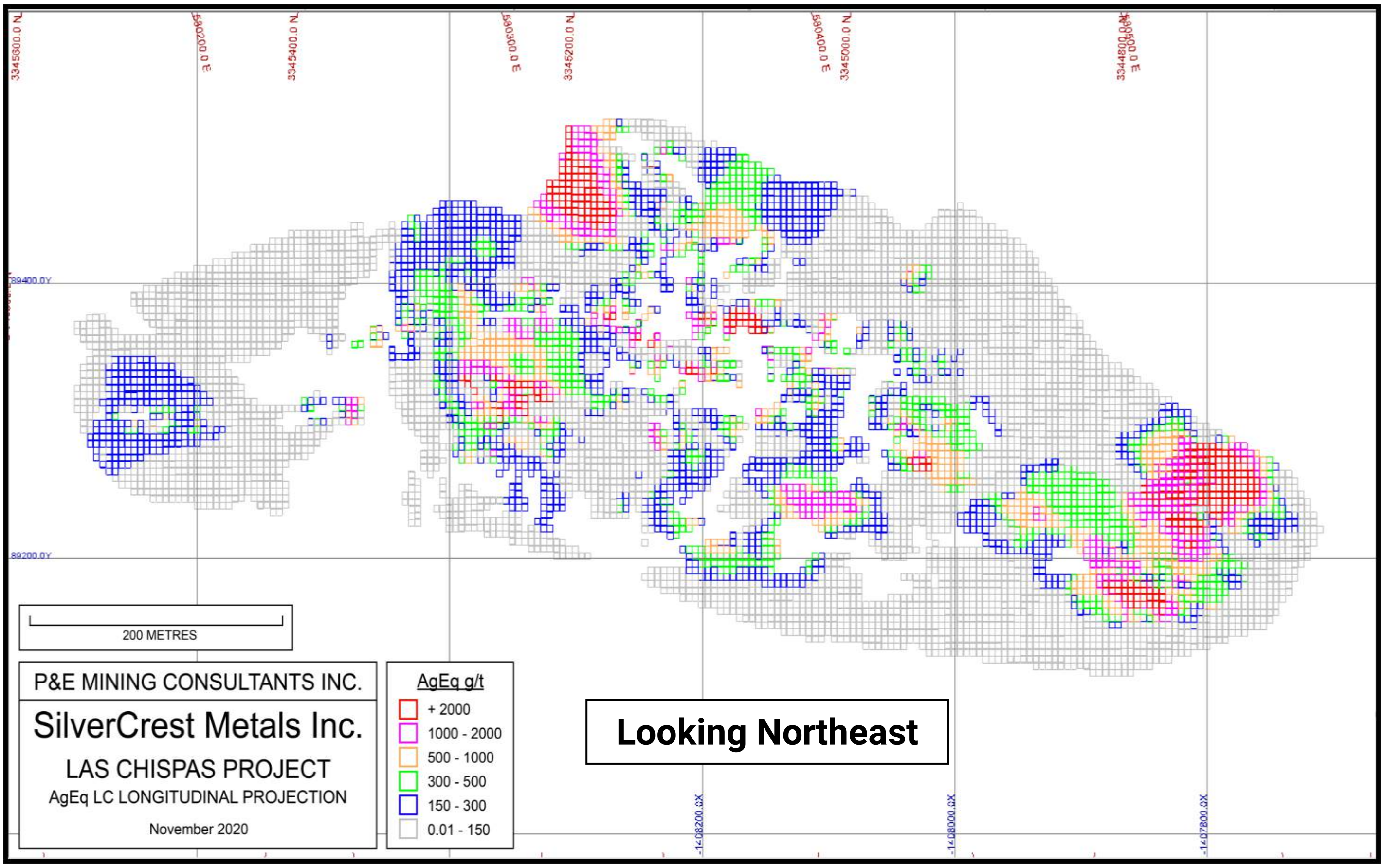
Appendix G – AGEQ LONGITUDINAL PROJECTIONS


Looking Southwest
AgEq g/t
+ 2000
1000 - 2000
500 - 1000
300 - 500
150 - 300
0.01 - 150
200 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
AgEq BAM LONGITUDINAL PROJECTION
November 2020

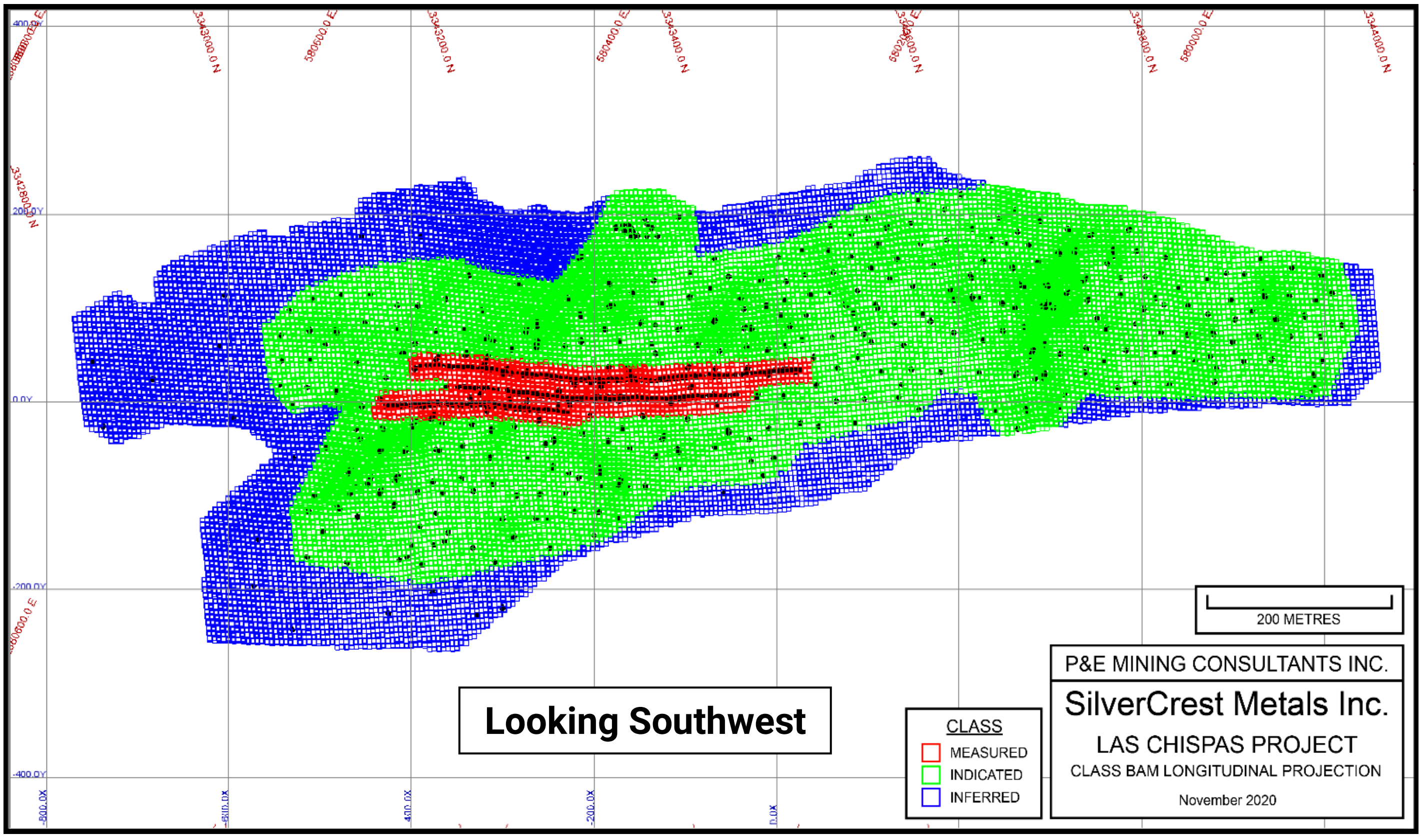

1400.0Y
1200.0Y
800.0Y
600.0Y
400.0Y
-2400.0X
-2200.0X
-2000.0X
-1800.0X
-1600.0X
-1400.0X
-1200.0X
400 METRES
Looking Southwest
AgEq g/t
+ 2000
1000 - 2000
500 - 1000
300 - 500
150 - 300
0.01 - 150
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
AgEq BAN LONGITUDINAL PROJECTION
November 2020

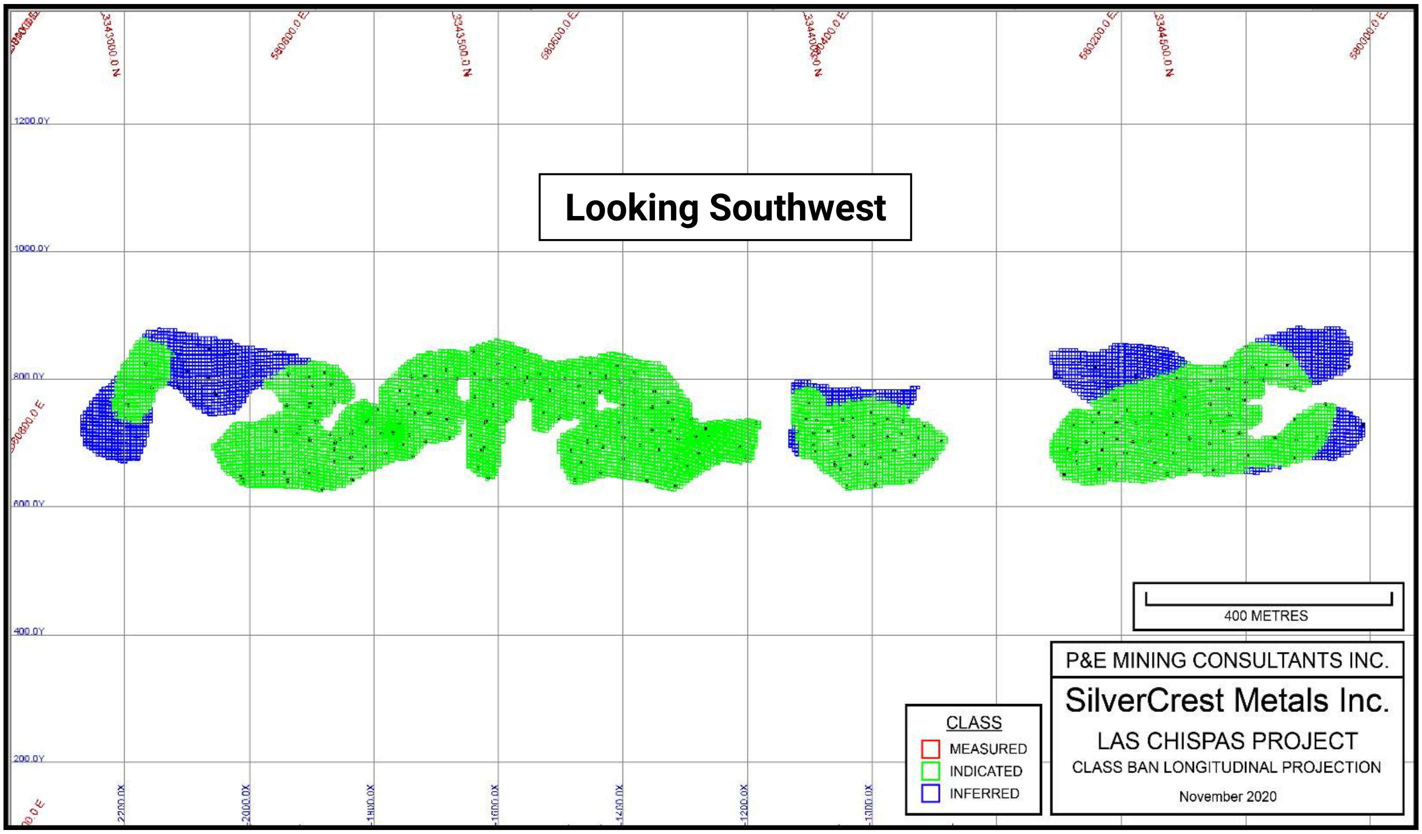

200 METRES
AgEq g/t
+ 2000
1000 - 2000
500 - 1000
300 - 500
150 - 300
0.01 - 150
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
AgEq BAS LONGITUDINAL PROJECTION
November 2020

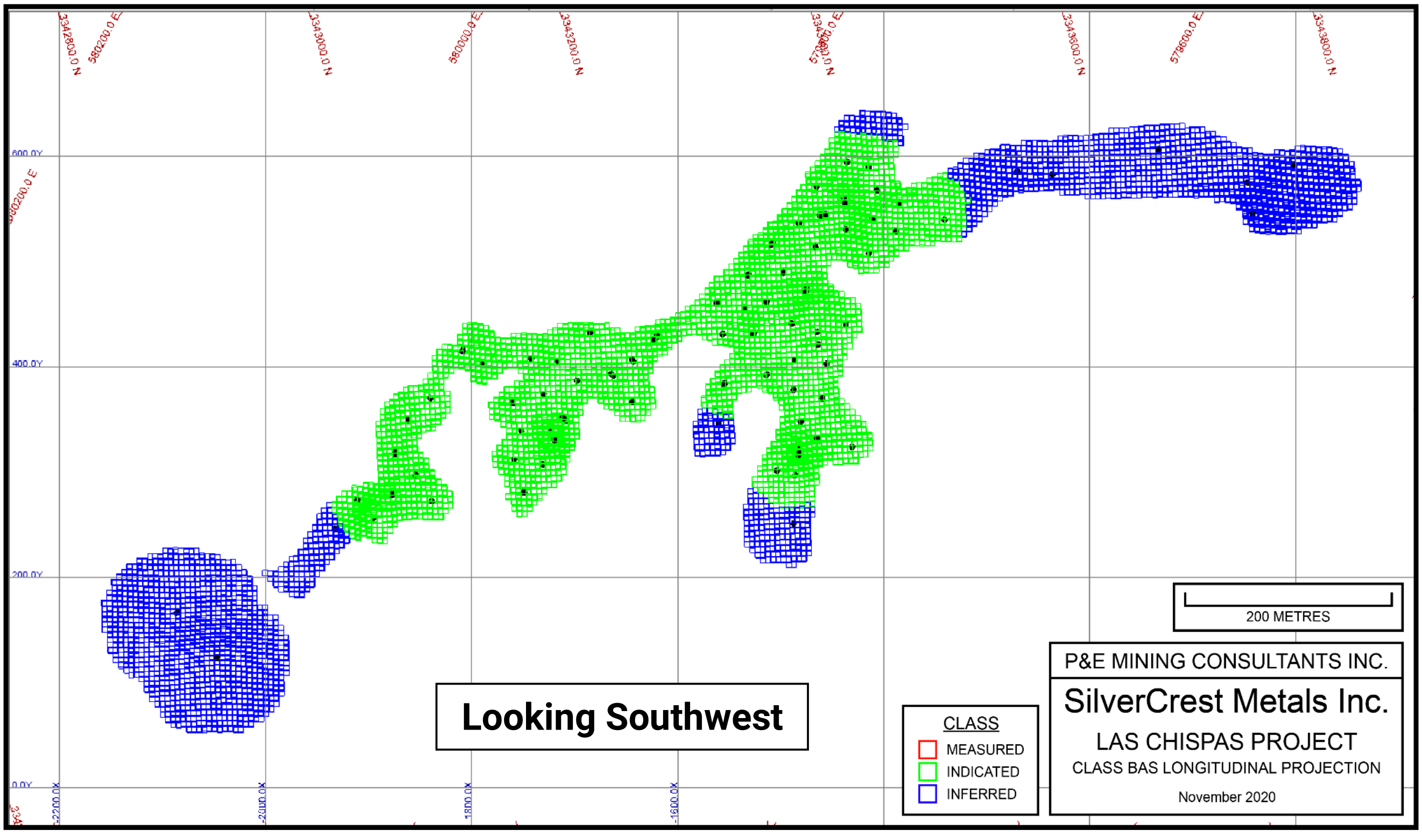

Looking Southwest
3343000.0 N
580800.0 E
3343200.0 N
580600.0 E
3343400.0 N
580400.0 E
3343600.0 N
580200.0 E
200.0Y
100.0Y
0.0Y
-100.0Y
-200.0Y
-500.0X
-400.0X
-300.0X
-200.0X
-100.0X
0.0X
100.0X
200 METRES
AgEq g/t
+ 2000
1000 - 2000
500 - 1000
300 - 500
150 - 300
0.01 - 150
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
AgEq BAV LONGITUDINAL PROJECTION
November 2020

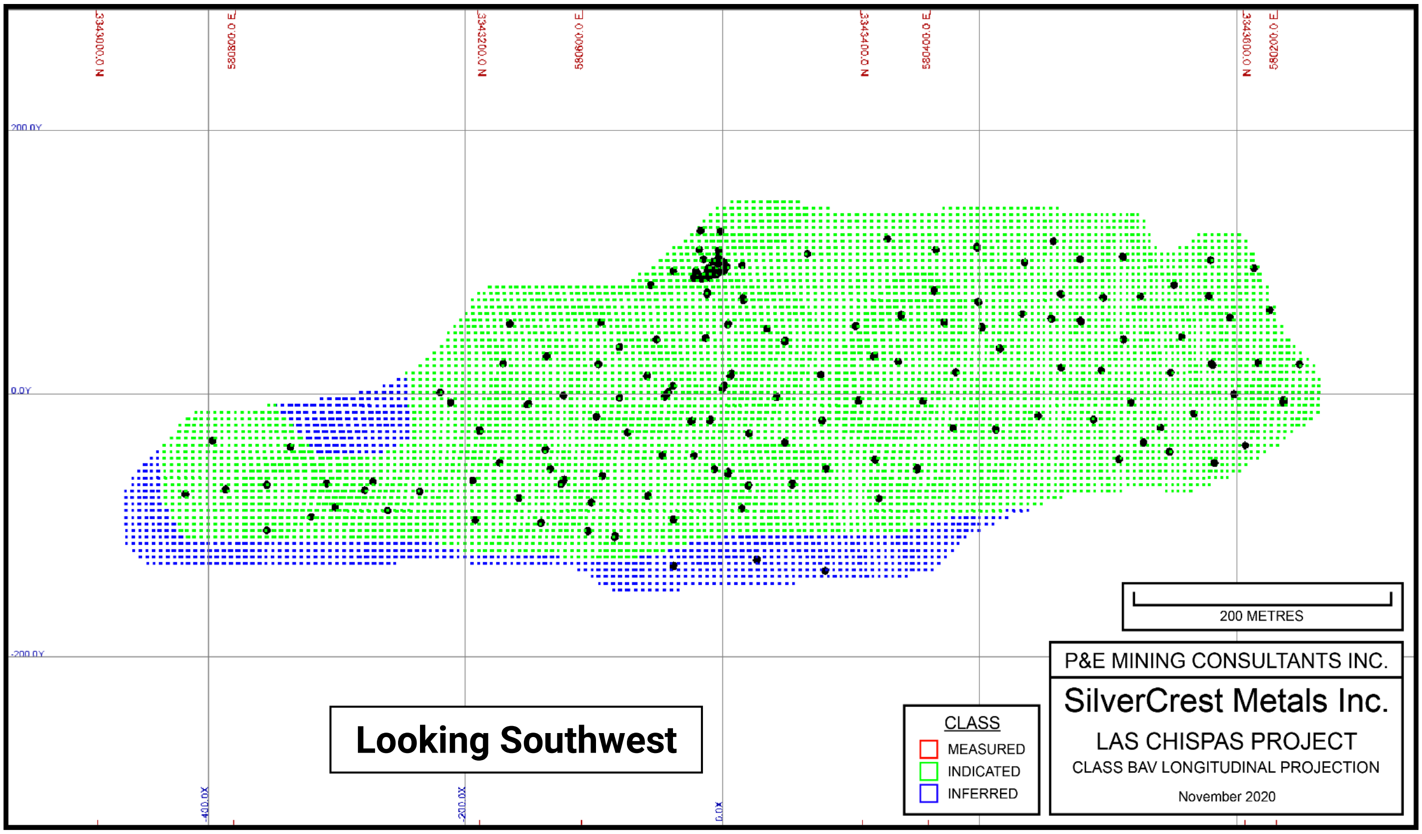

200 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
AgEq LC LONGITUDINAL PROJECTION
November 2020
AgEq g/t
+ 2000
1000 - 2000
500 - 1000
300 - 500
150 - 300
0.01 - 150
Looking Northeast

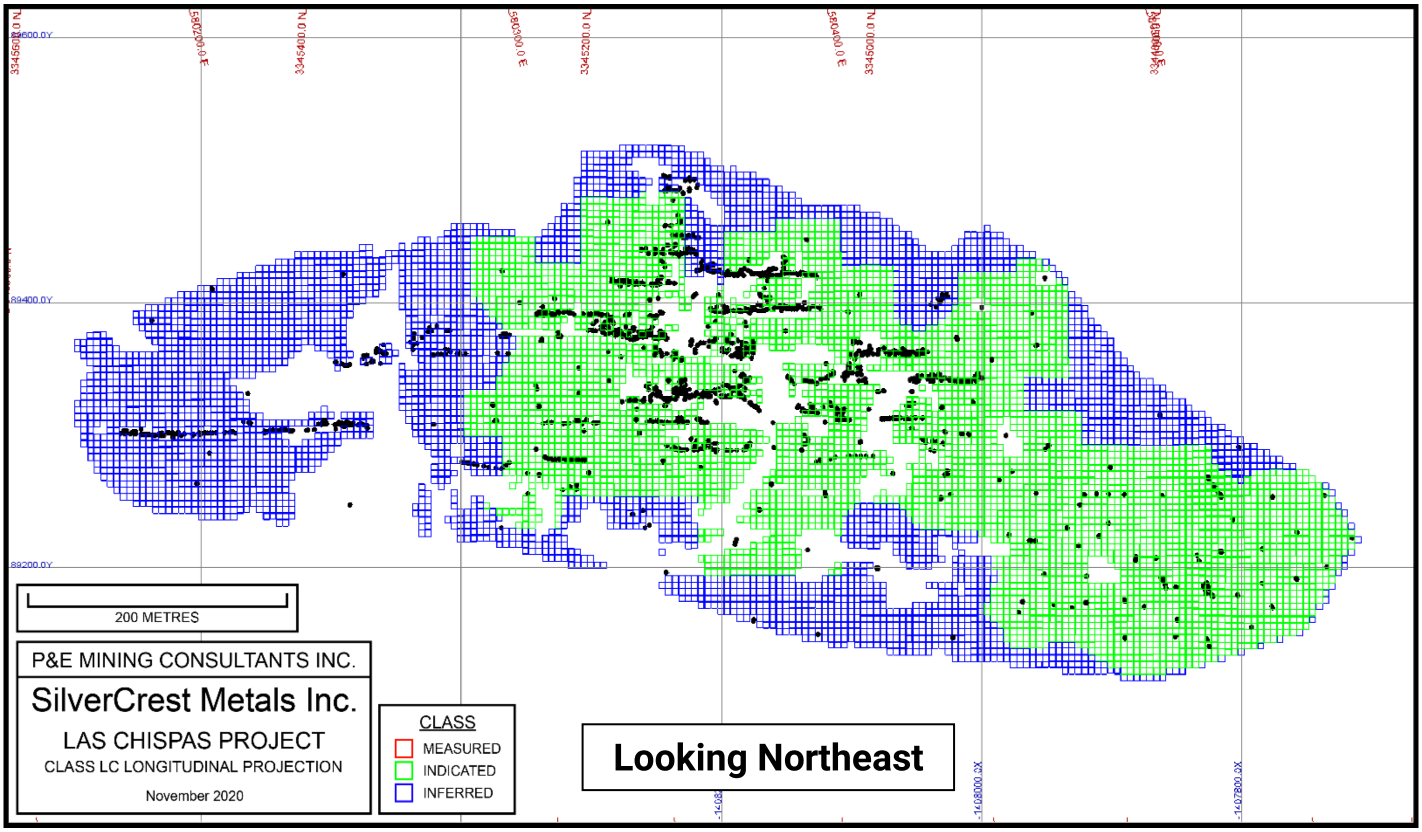
Appendix H – CLASSIFICATION LONGITUDINAL PROJECTIONS


Looking Southwest
CLASS
MEASURED
INDICATED
INFERRED
200 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
CLASS BAM LONGITUDINAL PROJECTION
November 2020


Looking Southwest
400 METRES
CLASS
MEASURED
INDICATED
INFERRED
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
CLASS BAN LONGITUDINAL PROJECTION
November 2020


Looking Southwest
CLASS
MEASURED
INDICATED
INFERRED
200 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
CLASS BAS LONGITUDINAL PROJECTION
November 2020


3343000.0 N
580800.0 E
3343200.0 N
580600.0 E
3343400.0 N
580400.0 E
3343600.0 N
580200.0 E
200.0Y
0.0Y
-200.0Y
-400.0X
-200.0X
0.0X
200 METRES
Looking Southwest
CLASS
MEASURED
INDICATED
INFERRED
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
CLASS BAV LONGITUDINAL PROJECTION
November 2020


200 METRES
P&E MINING CONSULTANTS INC.
SilverCrest Metals Inc.
LAS CHISPAS PROJECT
CLASS LC LONGITUDINAL PROJECTION
November 2020
CLASS
MEASURED
INDICATED
INFERRED
Looking Northeast