NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico

March 11, 2021

Effective Date: October 31, 2020

Prepared for: Capstone Mining Corp.

Authors:
Gregg Bush, P.Eng.
Leslie Correia, Pr. Eng., Paterson & Cooke Canada Inc.
Jenna Hardy, P.Geo., FGC, Nimbus Management Ltd.
Tucker Jensen, P.Eng., Capstone Mining Corp.
Darren Kennard, P.Eng., Golder Associates Ltd.
Garth Kirkham, P.Geo., FGC, Kirkham Geosystems Ltd.
Chris Martin, CEng MIMMM, Blue Coast Metallurgy Ltd.
Vivienne McLennan, P.Geo., Capstone Mining Corp.
Josh Moncrieff, P.Geo., Capstone Mining Corp.
Humberto Preciado, PhD, P.E., Wood, Environment & Infrastructure Solutions, Inc.

Gregg Bush, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

I, Gregg Bush, P.Eng., do hereby certify that:

1) I am self-employed as a consulting metallurgist, with a business address at 120 Milross Ave., Vancouver, BC, Canada.

2) This certificate applies to the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of October 31, 2020.

3) I am a graduate of the University of Texas at El Paso, with a Bachelor of Science degree that was conferred in 1981. I have been practicing my profession since 1981.

4) I am a Registered Member of the Engineers and Geoscientists British Columbia, P.Eng., EGBC# 50474.

5) I visited the Cozamin Mine property most recently on August 19 to 23, 2019.

6) I am responsible for Sections 1.9, 1.10, 2.3, 2.4, 2.5, 3, 12.5, 17.1-17.7, 17.9-17.10, 25.1, 26.5, and 27 of this Technical Report.

7) I have had prior involvement with the property as a non-independent qualified person for the reports entitled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", effective dates of April 30, 2020, October 24, 2018, and March 31, 2018. From 2012 to 2018, as the Chief Operating Office for Capstone, I was responsible for the Cozamin Mine as a corporate asset.

8) I am not independent of Capstone Mining Corp. as defined in Section 1.5 of National Instrument 43-101.

9) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.

10) I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the Technical Report and that, at the effective date of the Technical Report, to the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make the technical report not misleading.

11) I have read the sections for which I am responsible for and the National Instrument 43-101, Standards for Disclosure of Mineral Projects and Form 43-101F1. This technical report has been prepared in compliance with that instrument and form.

Dated this 11th day of March 2021 in Vancouver, BC, Canada

"Signed and Sealed"

Gregg Bush, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

I, Leslie Correia, Pr. Eng., do hereby certify that:

1) I am currently employed as the Engineering Manager by:

Paterson & Cooke Canada Inc.
1351-C Kelly Lake Road, Unit #2
Sudbury, Ontario, Canada, P3E 5P5

2) This certificate applies to the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of October 31, 2020.

3) I am a graduate of the University of Stellenbosch in 2005 with a Bachelor of Engineering in Chemical Engineering. I have been practicing my profession since 2008. I have been responsible for hydraulic, process and mechanical design of slurry pump and pipeline systems, backfill plant and reticulation system design, capital and operation cost estimates and project management of mining projects worldwide and have worked on or been involved in previous NI43-101 studies.

4) I am a Registered Member of the Engineering Council of South Africa (ECSA, Membership 20130236)

5) I visited the Cozamin Mine property on October 20 & 21, 2020.

6) I am responsible for portions of the following sections in the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico" with an effective date of October 31, 2020:
Sections 2.3, 2.4, 3, 16.5, 18.3.2 & 27

7) I have not had prior involvement with the property as an independent qualified person.

8) I am independent of Capstone Mining Corp. as defined in Section 1.5 of National Instrument 43-101.

9) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.

10) I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the Technical Report and that, at the effective date of the Technical Report, to the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make the technical report not misleading.

11) I have read the sections for which I am responsible for and the National Instrument 43-101, Standards for Disclosure of Mineral Projects and Form 43-101F1. This technical report has been prepared in compliance with that instrument and form.

Dated this 11th day of March 2021 in Sudbury, Ontario

"*Signed and Sealed*"

Leslie Correia, Pr. Eng.
Paterson & Cooke Canada Inc.

Jenna Hardy
Nimbus Management Ltd
535 East Tenth St
North Vancouver, BC. V7L 2E7

CERTIFICATE OF QUALIFIED PERSON

I, Jenna Hardy, P.Geo, FGC, do hereby certify that:

1) I am currently employed as the President by:
Nimbus Management Ltd
535 East Tenth St.
North Vancouver, B.C. V7L 2E7

2) This certificate applies to the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of October 31, 2020.

3) I am a graduate of the University of Toronto in Toronto, Ontario with the degrees of BSc. (Geology) and M.Sc.(Economic Geology) in 1974 and 1978, respectively, and received an M.B.A. from Simon Fraser University in Burnaby, British Columbia in 1988. I have been practicing my profession continuously since 1978 and have worked on or been involved in numerous NI 43-101 studies, including previous technical reports on the Cozamin Mine in 2007, 2009, 2014, and 2018.

4) I am a Registered P.Geo. Member of Engineers & Geoscientists BC (19446) and of the Canadian Institute of Mining & Metallurgy.

5) I visited the Cozamin Mine property most recently on August 26 to 30, 2019.

6) I am responsible for Sections 1.9, 1.10, 2.3, 2.4, 3, 12.6, 20, 25, 26.8 and 27 of this Technical Report.

7) I have had prior involvement with the property since 2005 as an independent consultant in previous technical reports, environmental and engineering studies, including as independent qualified person for the reports entitled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of April 30, 2020, October 24, 2018 and March 31, 2018.

8) I am independent of Capstone Mining Corp. as defined in Section 1.5 of National Instrument 43-101.

9) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.

10) I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the Technical Report and that, at the effective date of the Technical Report, to the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make the technical report not misleading.

11) I have read the sections for which I am responsible for and the National Instrument 43-101, Standards for Disclosure of Mineral Projects and Form 43-101F1. This technical report has been prepared in compliance with that instrument and form.

Dated this 11th day of March 2021 in the North Vancouver, BC, Canada

"Signed and Sealed"

Jenna Hardy, P.Geo.
Nimbus Management Ltd.

Suite 2100 – 510 West Georgia Street,
Vancouver, BC, V6B 0M3, Canada
Tel: 604-684-8894 Fax: 604-688-2180
www.capstonemining.com

CERTIFICATE OF QUALIFIED PERSON

I, Tucker Jensen, do hereby certify that:

1) I am currently employed as the Superintendent, Mine Operations by:
Pinto Valley Mine
Capstone Mining Corp.
P.O. Box 100, 2911 N. Forest Service Rd. 287,
Miami, AZ, 85539, USA

2) This certificate applies to the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of October 31,2020.

3) I am a graduate of the South Dakota School of Mines and Technology in Rapid City, South Dakota with a B.S. in Mining Engineering in 2013. I have been practicing my profession since 2013 and my relevant experience includes 4 years in mine planning and engineering working on open pit and underground under the mentorship of Mineral Reserve QPs and 3 years as a Professional Engineer working exclusively on the Cozamin Mine. I have worked on or been involved in previous NI 43-101 studies, including: Cozamin Mine NI 43-101 Technical Report (effective April 30, 2020), Cozamin Mine NI 43-101 Technical Report (effective October 31, 2018) and Cozamin Mine NI 43-101 Technical Report (effective March 31, 2018).

4) I am a Registered Member of Engineers and Geoscientists British Columbia, P.Eng., EGBC#204881.

5) I visited the Cozamin Mine property most recently on January 20, 2021.

6) I am responsible for Sections 1.6, 1.7, 1.9, 1.10, 2.3-2.5, 3, 12.3, 15, 16.1, 16.3, 16.4, 16.6-16.10, 25, 26.3 and 27 in the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico" with an effective date of October 31, 2020.

7) I have had prior involvement with the property as employee of Capstone Mining Corp., providing engineering guidance as Senior Mining Engineer based in Vancouver during 2018, as a Senior Technical Advisor based at the Cozamin Mine in 2019, and in an advisory capacity as Superintendent of Operations Support at the Pinto Valley Mine in 2020.

8) I am not independent of Capstone Mining Corp. as defined in Section 1.5 of National Instrument 43-101.

9) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of a Qualified Person as defined in National Instrument 43-101.

10) I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the Technical Report and that, at the effective date of the Technical Report, to the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make the technical report not misleading.

Suite 2100 – 510 West Georgia Street,
Vancouver, BC, V6B 0M3, Canada
Tel: 604-684-8894 Fax: 604-688-2180
www.capstonemining.com

11) I have read the sections for which I am responsible for and the National Instrument 43-101, Standards for Disclosure of Mineral Projects and Form 43-101F1. This technical report has been prepared in compliance with that instrument and form.

Dated this 11th day of March 2021 in Phoenix, Arizona, USA.

"*Signed and Sealed"*

Tucker Jensen, P.Eng.
Capstone Mining Corp.

CERTIFICATE OF QUALIFIED PERSON DARREN KENNARD

I, Darren Kennard, state that:

(a) I am a Principal Geotechnical Engineer at:
Golder Associates Ltd.
Suite 200 - 2920 Virtual Way,
Vancouver, BC, V5M 0C4

(b) This certificate applies to the technical report titled *NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico,* with an effective date of: October 31, 2020 (the "Technical Report").

(c) I am a "qualified person" for the purposes of National Instrument 43-101 (the "Instrument"). My qualifications as a qualified person are as follows. I am a graduate of the University of Saskatchewan, with M.Sc. Geological Engineering in Rock Mechanics, in 1998. I am a Professional Engineer in good standing in British Columbia (EGBC), Yukon (EY), and the Northwest Territories (NAPEG). My relevant experience after graduation and over 25 years for the purpose of the Technical Report includes design of ground support, mine access, stopes, pillars, portals, bulkheads, crown pillars, and pit slope configurations, numerical modelling techniques for assisting with both underground and surface mine design and gathering geotechnical and hydrogeological site investigation data and development and review.

(d) My most recent personal inspection of each property described in the Technical Report occurred on April 16-18, 2018 and was for a duration of 3 days.

(e) I was responsible for writing Sections 1.7.1, 1.9, 1.10, 2.3, 2.4, 2.5, 3, 12.4, 16.2, 26.4, 27 of the Technical Report for which I am responsible and contributions attributed to me in Table 1.3 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.
   a. Previous ground control inspections to the site.
   b. Geotechnical and rock mechanics reporting on mining operations
   c. QP responsible for writing Sections 1.7.1, 12.4, 16.2, 26.4 and contributions attributed to me in Table 1.3 of the technical report titled *NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico* with a date of: January 24, 2019
   d. QP responsible for writing Sections 1.7.1, 12.4, 16.2, 26.4 and contributions attributed to me in Table 1.3 of the technical report titled *NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico* with a date of: October 31, 2020

(h) I have read National Instrument 43-101. Sections 1.7.1, 1.9, 1.10, 2.3, 2.4, 2.5, 3, 12.4, 16.2, 26.4, 27 of the Technical Report for which I am responsible and contributions attributed to me in Table 1.3 of the Technical Report has been prepared in compliance with this Instrument; and

(i) At the effective date of the Technical Report, to the best of my knowledge, information, and belief, Sections 1.7.1, 1.9, 1.10, 2.3, 2.4, 2.5, 3, 12.4, 16.2, 26.4, 27 of the Technical Report for which I am responsible and contributions attributed to me in Table 1.3 of the Technical Report, contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Vancouver, British Columbia this 11th of March, 2021

Cozamin NI43-101 Filed Mar2021.pdf

Darren Kennard, M.Sc. Geological Engineering. P.Eng. (British Columbia, Lic. # 25639)

NI 43-101 QP Certificate_Final_2021-03-11.docx

Kirkham Geosystems Ltd.

6331 Palace Place
Burnaby, B.C.
V5E 1Z6

Phone: (604) 529-1070
gdkirkham@shaw.ca

CERTIFICATE OF QUALIFIED PERSON

I, Garth D. Kirkham, P.Geo, FGC, do hereby certify that:

1) I am currently employed as the President by:
Kirkham Geosystems Ltd.
6331 Palace Place Burnaby,
BC, V5E 1Z6

2) This certificate applies to the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of October 31, 2020.

3) I am a graduate of the University of Alberta in 1983 with a BSc. I have continuously practiced my profession since 1988. I have worked on and been involved with NI43-101 studies on the Cerro Las Minitas, Cerro Blanco, Kutcho Creek and Debarwa poly-metallic deposits.

4) I am a Professional Geoscientist, Registered Member of the Engineers and Geoscientists of British Columbia.

5) I visited the Cozamin Mine property on April 9-10, 2018.

6) I am responsible for Sections 1.4, 1.5, 1.9, 1.10, 2.3, 2.4, 2.5, 3, 7, 8, 9, 10, 12.1, 14, 25, 26.1 and 27 of this Technical Report.

7) I have had prior involvement with the property as independent qualified person for the reports entitled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with effective dates of April 30, 2020, October 24, 2018 and March 31, 2018.

8) I am independent of Capstone Mining Corp. as defined in Section 1.5 of National Instrument 43-101.

9) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.

10) I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the Technical Report and that, at the effective date of the Technical Report, to the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make the technical report not misleading.

11) I have read the sections for which I am responsible for and the National Instrument 43-101, Standards for Disclosure of Mineral Projects and Form 43-101F1. This technical report has been prepared in compliance with that instrument and form.

6331 Palace Place
Burnaby, B.C.
V5E 1Z6

Phone: (604) 529-1070
gdkirkham@shaw.ca

Dated this 11th day of March 2021 in the Burnaby, BC, Canada

“*Signed and Sealed*”

Garth Kirkham, P.Geo.
Kirkham Geosystems Ltd.

Christopher John Martin
Blue Coast Metallurgy Ltd
2-1020 Herring Gull Way
Parksville BC V9P 1R2

CERTIFICATE OF QUALIFIED PERSON

I, Christopher John Martin, CEng MIMMM, do hereby certify that:

1) I am currently employed as the President by:
Blue Coast Metallurgy Ltd.
2-1020 Herring Gull Way
Parksville, BC, V9P 1R2

2) This certificate applies to the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of October 31, 2020.

3) I am a graduate of Camborne School of Mines and McGill University in 1984 and 1988 with degrees in Mineral Processing Technology (BSc(Hons)) and Metallurgical Engineering (MEng) respectively. I have been practicing my profession since 1984 and have worked on or been involved in more than 300 flowsheet development and plant optimization studies, mostly in precious and base metal grinding and flotation. I have authored the metallurgical section in numerous NI43-101's including for many polymetallic flotation projects.

4) I am a Registered Member of the Institution of Materials, Minerals and Mining.

5) I visited the Cozamin Mine property on January 24, 2018.

6) I am responsible for Sections 1.9, 1.10, 2.3, 2.4, 3, 12.2, 13, 25, 26.2 and 27 of this Technical Report.

7) I have had prior involvement with the property as independent qualified person for the reports entitled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with effective dates of April 30, 2020 and October 24, 2018.

8) I am independent of Capstone Mining Corp. as defined in Section 1.5 of National Instrument 43-101.

9) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.

10) I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the Technical Report and that, at the effective date of the Technical Report, to the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make the technical report not misleading.

11) I have read the sections for which I am responsible for and the National Instrument 43-101, Standards for Disclosure of Mineral Projects and Form 43-101F1. This technical report has been prepared in compliance with that instrument and form.

Dated this 11th day of March 2021 in Parksville, BC, Canada.

"*Signed*"

Christopher John Martin, CEng MIMMM
Blue Coast Metallurgy Ltd.

Suite 2100 – 510 West Georgia Street,
Vancouver, BC, V6B 0M3, Canada
Tel: 604-684-8894 Fax: 604-688-2180
www.capstonemining.com

CERTIFICATE OF QUALIFIED PERSON

I, Vivienne McLennan, do hereby certify that:

1) I am currently employed as the Manager, Resource Governance by:

Capstone Mining Corp.
Suite 2100 – 510 West Georgia Street,
Vancouver, BC, V6B 0M3, Canada

2) This certificate applies to the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of October 31, 2020.

3) I am a graduate of Lakehead University of Thunder Bay, Ontario, with a Bachelor of Science - Geology. I have practicing my profession since 1999 and my relevant experience includes 9 years as a Professional Geologist working on diamond drilling campaigns in Canada, Mexico and Chile for greenfield and brownfield projects logging drill core and assessing QA/QC of the samples taken for those projects. I have worked on or been involved in previous NI43-101 studies, including: Cozamin Mine NI 43-101 Technical Report (effective April 30, 2020), Cozamin Mine NI 43-101 Technical Report (effective October 31, 2018), Cozamin Mine NI 43-101 Technical Report (effective March 31, 2018) and Cozamin Mine NI 43-101 Technical Report (effective July 18, 2014).

4) I am a Registered Member of Engineers and Geoscientists British Columbia, P.Geo., EGBC# 38708.

5) I visited the Cozamin Mine property most recently February 11 to March 7, 2020.

6) I am responsible for Sections 1.9, 1.10, 2.3, 2.4, 3, 11, 25.1 and 27 in the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico" with an effective date of October 31, 2020.

7) I have had prior involvement with the property as employee of Capstone Mining Corp., providing guidance on data handling for geology, sampling and analytical QAQC to Cozamin Mine 2010 through 2020.

8) I am not independent of Capstone Mining Corp. as defined in Section 1.5 of National Instrument 43-101.

9) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of a Qualified Person as defined in National Instrument 43-101.

10) I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the Technical Report and that, at the effective date of the Technical Report, to the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make the technical report not misleading.

11) I have read the sections for which I am responsible for and the National Instrument 43-101, Standards for Disclosure of Mineral Projects and Form 43-101F1. This technical report has been prepared in compliance with that instrument and form.

Dated this 11th day of March 2021 in Mission, British Columbia, Canada.

"Signed and Sealed"

Vivienne McLennan, P.Geo.
Capstone Mining Corp.

Suite 2100 – 510 West Georgia Street,
Vancouver, BC, V6B 0M3, Canada
Tel: 604-684-8894 Fax: 604-688-2180
www.capstonemining.com

CERTIFICATE OF QUALIFIED PERSON

I, Josh Moncrieff, do hereby certify that:

1) I am currently employed as the Director, Technical Services by:
Capstone Mining Corp.
Suite 2100 – 510 West Georgia Street,
Vancouver, BC, V6B 0M3, Canada

2) This certificate applies to the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of October 31, 2020.

3) I graduated from the University of British Columbia, Vancouver, BC, with a Bachelor of Science in Oceanography and Geophysics in 2002 and obtained an M.Sc. in Geology from the University of Calgary, Calgary, Alberta in 2006. I have been practicing my profession since 2002 and my relevant experience for the purposes of this Technical Report includes over 14 years of technical services support to open pit and underground mines, with a focus on mine water, tailings, heap leach and waste management.

4) I am a Registered Member of Engineers and Geoscientists British Columbia, P.Geo., EGBC#149625.

5) I visited the Cozamin Mine property most recently on January 20, 2020.

6) I am responsible for Sections 1.1 to 1.3,1.9, 1.10, 2 to 6, 18.1, 18.2, 18.3.1, 18.3.3, 19, and 21 to 27 in the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico" with an effective date of October 31, 2020.

7) I have had prior involvement with the property as employee of Capstone Mining Corp., guiding the technical support function and supporting tailings management at Cozamin Mine since November 2019 and as qualified person for the report entitled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of April 30, 2020.

8) I am not independent of Capstone Mining Corp. as defined in Section 1.5 of National Instrument 43-101.

9) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of a Qualified Person as defined in National Instrument 43-101.

10) I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the Technical Report and that, at the effective date of the Technical Report, to the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make the technical report not misleading.

11) I have read the sections for which I am responsible for and the National Instrument 43-101, Standards for Disclosure of Mineral Projects and Form 43-101F1. This technical report has been prepared in compliance with that instrument and form.

Dated this 11th day of March 2021 in Victoria, BC, Canada.

"Signed and sealed"

Josh Moncrieff, P.Geo.
Capstone Mining Corp.

Humberto F. Preciado, P.E.
Wood Environment & Infrastructure Solutions, Inc.
2000 South Colorado Blvd, Suite 2-1000
Denver, CO 80222-7931 USA

CERTIFICATE OF QUALIFIED PERSON

I, Humberto Preciado, do hereby certify that:

1) I am currently employed as the Senior Associate Geotechnical Engineer by:

Wood Environment & Infrastructure Solutions, Inc.
2000 South Colorado Blvd, Suite 2-1000
Denver, CO 80222-7931 USA

2) This certificate applies to the report titled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with an effective date of October 31, 2020 (the Technical Report).

3) I am a graduate of the Universidad Autonoma de Guadalajara in 1992 with a BSc in Civil Engineering, and a post-graduate of the University of British Columbia in 2005 with a PhD in Civil Engineering. I have been practicing my profession since 1992 and have worked on or been involved in previous mining studies disclosed under NI 43-101 standards, where I have been responsible for the design of tailings and waste rock storage facilities. Previous studies include, among others, the AZOD Zinc Oxide Pre-Feasibility and Ollachea Gold Feasibility Projects in Peru, and the Terronera Pre-Feasibility Study in Mexico. I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of a Qualified Person as defined in National Instrument 43-101.

4) I am a Registered Member of the Society for Mining, Metallurgy & Exploration (SME).

5) I visited the Cozamin Mine property on September 15-17, 2020.

6) I am responsible for the following sections in the Technical Report:
17.8, 18.3.4, 25.2, and 26.8 and my contributions to tailings storage and water management Sections: 1.9, 1.10, 2.3, 2.4, 25.1, and 27.

7) I have had prior involvement with the property since 2018 as Engineer of Record for the Cozamin tailings storage facility and as independent qualified person co-author of the reports entitled "NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico", with effective dates of April 30, 2020 and October 24, 2018.

8) I am independent of Capstone Mining Corp. as independence is defined in Section 1.5 of National Instrument 43-101.

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

10) That, at the effective date of the Technical Report, to the best of my knowledge, information and belief, this Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Humberto F. Preciado, P.E.
Wood Environment & Infrastructure Solutions, Inc.
2000 South Colorado Blvd, Suite 2-1000
Denver, CO 80222-7931 USA

Dated this 11th day of March, 2021 in Denver, Colorado.

"*Signed and Sealed*"

Humberto F. Preciado, PhD, PE
Wood Environment & Infrastructure Solutions, Inc.

IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 Technical Report for Capstone Mining Corp. ("Capstone") by Gregg Bush, Paterson & Cooke Canada Inc., Nimbus Management Ltd., Golder Associates Ltd., Kirkham Geosystems Ltd., Blue Coast Metallurgy Ltd., Wood, Environment & Infrastructure Solutions, Inc. and Capstone Mining Corp., 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 Capstone Mining Corp. subject to terms and conditions of the individual contracts with the Report Authors.

Table of Contents

Table of Tables

Table of Figures

1 Summary

1.1 Property Description and Location

The Cozamin Mine ("Cozamin") is located in the Municipality of Morelos of the Zacatecas Mining District, near the south-eastern boundary of the Sierra Madre Occidental Physiographic Province in north-central Mexico. The mine and processing facilities are located near coordinates 22º 48' N latitude and 102º 35' W longitude, approximately 3 km north of the city of Zacatecas in Zacatecas State.

1.2 Ownership

The Cozamin Mine is 100% owned by Capstone Gold S.A. de C.V. ("Capstone Gold"), a subsidiary of Capstone Mining Corp. ("Capstone" or the "Company"). In a press release dated October 27, 2003, Capstone announced it had entered into a Letter of Intent with Mexican mining company Grupo Minera Bacis S.A. de C.V. ("Bacis") to option five advanced exploration projects in Mexico, including Cozamin (Capstone, 2003). Capstone assumed 100% interest in Cozamin under an option agreement with Bacis in December 2003. A 3% royalty on net smelter return ("NSR") is paid to Bacis on all payable metal sold from production on the property covered by the agreement. Mineral claims acquired in September 2009 from Minera Largo S. de R.L. de C.V., a wholly owned subsidiary of Golden Minerals Company ("Golden Minerals"), are subject to future royalty payments of 1.5% on the first one million tonnes of production and of 3.0% on production in excess of one million tonnes from the acquired claims. The royalty payment on production in excess of one million tonnes also escalates by 0.5% for each $0.50 increment in copper price above $3.00 per pound of copper. In 2014, Cozamin acquired 45 additional concessions from Golden Minerals totalling 775 ha that surrounded Cozamin's existing concessions. A total of 17 of the claims are subject to a finder's fee to be paid as a 1.0% of NSR to International Mineral Development and Exploration Inc. pursuant to existing agreements on the concessions dating back to October 1994 and August 2000. Cozamin is also subject to a payment of 1% of NSR to Endeavour Silver Corp. ("EDR"), based on the concessions where mining occurs, through a mineral rights sharing agreement executed in September 2017. Also in September 2017, Cozamin purchased six concessions on the south side of the property; three were transferred to Capstone Gold immediately and three were finalized in July 2019. No royalty payments were associated with the purchase of these concessions.

1.3 Mineral Concessions, Surface Rights and Land Ownership

The Cozamin Mine comprises 93 mining concessions covering 4,260 hectares. Capstone Gold is the registered holder of 45 mining concessions (with three additional three mining concessions which were lawfully transferred to Capstone Gold, but which are pending registration with the Public Registry of Mining since August 2019), covering approximately 3,485 hectares and Mining Opco, S.A. de C.V., a wholly-owned subsidiary of Capstone, is the registered holder of 45 mining concessions covering approximately 775 hectares of land. The

90 mining concessions are listed in the Public Registry of Mining. The 93 mining concessions at Cozamin Mine are not subject to any limitations of property, claim or legal proceedings. The mining rights, with respect to each of the concessions, have been paid to date.

Capstone acquired surface rights to the lands required for mining operations and as required for exploration activities

1.4 Geology and Exploration

The Zacatecas Mining District covers a belt of epithermal and mesothermal vein deposits that contain silver, gold and base metals (copper, lead and zinc). The district is in the Southern Sierra Madre Occidental Physiographic Province near the boundary with the Mesa Central Physiographic Province in north-central Mexico. The dominant structural features that localize mineralization are of Tertiary Age, and are interpreted to be related to the development of a volcanic centre and to northerly trending basin-and-range structures. (Ponce and Clark, 1988)

In 2004, Capstone scout drilled the Mala Noche Vein (“MNV”) beneath the down dip extent of the historical mine workings of the San Roberto mine. The initial three drill sections, comprising two drillholes each, all intersected economic mineralization over true widths varying from 3.2 m to 14.9 m. These three drill sections were distributed over 550 m of strike extent beneath the historic workings. At that point, Capstone decided to drill drillholes beneath the San Roberto workings on cross-sections spaced every 100 m along strike. These holes targeted the MNV at approximately 2,150 masl, or approximately 65 m below the historical workings. This strategy resulted in the first 20 exploration holes being distributed over a strike length of 1.4 km. Of these first 20 drillholes, 17 intersected significant mineralization that averaged 6.64 m in true width and had weighted grade averages of 2.61% Cu, 91.3 g/t Ag and 1.38% Zn.

These higher copper grades and economic silver grades are associated with significant amounts of pyrrhotite. This reinforced the Company’s belief that the historic workings at San Roberto are located just above the upper reaches of a large copper-silver mineralized system of mesothermal character. Subsequent exploration drilling showed that the copper-silver dominant phase of mineralization extends below 1,865 masl, which is 350 m below the historical workings.

In late 2006, Cozamin commenced commercial production at 1,000 tonnes per day (“tpd”) with a three-year mine life in reserve, while at the same time continuing exploration.

From 2004 until late 2009, the Company focused exploration on the MNV system, where underground drilling targeted various zones within the San Roberto mine to increase confidence for resource classification. A similar approach was taken with surface drilling that focused on the San Rafael area of the MNV system, situated to the east of the San Roberto mine. Additional surface or underground step-out and infill drilling targeting copper mineralization was conducted at the MNV from 2010 to 2013 and from 2015 to 2017. In 2016 and 2017, step-out and infill drilling tested the grade and continuity of zinc mineralization at the San Roberto Zinc and San Rafael areas of the MNV.

In 2010, the Company discovered a new zone of high-grade copper-silver mineralization localized in a structure in the footwall of the MNV, splaying approximately 30° to the southeast. This zone is referred to as the Mala Noche Footwall Zone (“MNFWZ”), and currently measures more than 2,500 m along strike and between 200 m and 1000 m down dip. Additional exploration and infill drilling at the MNFWZ was executed from 2011 to 2013, from 2015 to 2017 and from 2018 through the 2020 drilling program. Drilling spanning 2017 to 2020 identified and defined significant extensions to the zone along strike and up-dip, and mineralization remains open locally up-dip, down-dip, and along strike to the east and west. Mining commenced in the MNFWZ in November 2010.

Since 2014, annual exploration drilling at Cozamin tested for mineralization in fault splays off the main zone analogous to the MNFWZ and in other parallel to sub-parallel structures. The MNFWZ was previously thought to merge to the west with the MNV and was considered closed off; re-interpretation of historical drill results in this area, called MNFWZ West target, indicates that the MNFWZ bends sub-parallel to the MNV. The MNFWZ West target will be drill tested from surface in 2021.

Mineralized zones at MNFWZ comprise:

- Copper-silver zones including the principal zone Vein 20 (“VN20”) along with Vein 18 (“VN18”) and Vein 22 (“VN22”);
- Copper-zinc zones Vein 9 (“VN09”), Vein 10 northwest (VN10-NW) and Vein 19 (“VN19”);
- Zinc-silver-lead zones Vein 8 (“VN08”), Vein 10 southeast (“VN10-SE”) and Vein 11 (“VN11”).

1.5 Mineral Resources Estimates

Measured and Indicated Mineral Resources at Cozamin are inclusive of those Mineral Resources converted to a Mineral Reserve using modifying factors, including, but not limited to mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors. Inferred Mineral Resources were not considered for conversion to a Mineral Reserve. Inferred Mineral Resources are estimated using limited geological evidence compared to Measured and Indicated Resources; this evidence is adequate to imply but not verify sufficient continuity of grade or geology. However, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration and are consistent with the definition of Mineral Resources and their confidence categories in CIM 2014.

Garth Kirkham, P.Geo., FGC, is the independent Qualified Person responsible for the Cozamin Mineral Resources.

Economic mineralization at Cozamin is polymetallic and includes copper, silver, lead and zinc. The predominant gangue minerals are quartz, calcite, pyrite and pyrrhotite. The NSR of each block in the block model was estimated using a formula that incorporates the long-term projected value of the metals at typical operational metallurgical recoveries, less the cost for concentrate transport to the smelter, confidential smelter contract terms and royalties. The NSR cut-off for reporting the Mineral Resource is $50/tonne, based on rounded average actual mining, milling, general and administrative costs. In the Mineral Resource estimate described in this Technical Report, NSR is based on updated metallurgical recoveries related to zone mineralization.

Four formulae were used to estimate NSR for Cozamin Mineral Resources in this report.

MNFWZ domains VN20, VN18 and VN22 used the copper-silver Mineral Resource NSR formula:

Cu-Ag NSR = (Cu%*$60.779 + Ag g/t*$0.485) * (1-NSRRoyalty%)

MNFW copper-silver zones used assumed metallurgical recoveries of 96% Cu and 85% Ag.

MNFWZ domains VN09, VN10-NW and VN19 plus the MNV San Roberto zone use the copper-zinc Mineral Resource NSR formula:

Cu-Zn NSR = (Cu%*$58.430 + Ag g/t*$0.416 + Zn%*$15.368 + Pb%*$7.837) * (1-NSRRoyalty%)

Copper-zinc zones used assumed metal recoveries of 92% Cu, 79% Ag, 72% Zn, and 42% Pb.

MNFWZ domains VN8, VN10-SE and VN11 used the MNFWZ zinc-silver Mineral Resource NSR formula:

MNFWZ-Zn NSR = (Ag g/t*$0.304 + Zn%*$18.323 + Pb%*$17.339) * (1-NSRRoyalty%)

MNFW zinc-silver zones used assumed metallurgical recoveries of 60% Ag, 86% Zn, and 92% Pb.

MNV San Rafael and San Roberto Zinc zones use the MNV-zinc Mineral Resource NSR formula:

MNV-Zn NSR = (Ag g/t*$0.256 + Zn%*$16.401 + Pb%*$14.977) * (1-NSRRoyalty%)

MNV zinc zones used assumed metal recoveries of 55% Ag, 77% Zn, and 80% Pb.

Projected long-term metal price assumptions used, in US$, were Cu = $3.25/lb, Ag = $20.00/oz, Zn = $1.20/lb and Pb = $1.00/lb. Current smelter contract terms and transportation costs were incorporated but are covered by confidentiality agreements. Royalty payments of 1% to 3% of NSR, due on some areas of the Cozamin Mine property, are included in the formula as required geographically.

Mineral Resources at Cozamin are estimated within the MNFWZ and MNV, including the San Roberto ("SROB"), San Roberto Zinc ("SROB-Zn") and San Rafael Zones, and are summarized in Table 1-1. Production commenced from SROB in 2006, from MNFWZ in 2010 and from

SROB-Zn in 2018. Production occurred from San Rafael from 2006 to 2009, then recommenced in 2018.

The MNFWZ Mineral Resource estimate includes information from drilling through October 31, 2020, and was developed using commercially available MineSight® software after mineralization domains were developed in Leapfrog®. Mineralization domains were split into copper rich, copper-zinc rich and zinc rich areas. An NSR was estimated for each block using the formulae for the appropriate zone. The Mineral Resource was depleted for mining activities through October 31, 2020.

The MNV Mineral Resource estimate was updated with the zone-specific NSR formulae and depleted for mining activities through October 31, 2020. The MNV mineral resource model, comprising the SROB, SROB-Zn and San Rafael zones, was updated in July 2017 to include infill drilling completed since Capstone's 2009 NI 43-101 Technical Report (SRK, 2009). Drilling included a 2017 campaign targeting zinc-rich mineralization with 49 infill drillholes at San Rafael and SROB-Zn (upper, eastern limits of the SROB). The SROB was updated with underground infill drilling from mid-2016 to July-2017 (60 drillholes). Domains separating the copper-rich SROB and zinc-rich SROB-Zn and San Rafael were generated in Leapfrog® and the mineral resource estimate was completed in Maptek™ Vulcan.

Table 1-1: Mineral Resource Estimate as of October 31, 2020 at a US$50/t NSR cut-off

Classification	Tonnes (kt)	Grade				Contained Metal			
		Cu	Ag	Zn	Pb	Cu	Ag	Zn	Pb
		(%)	(g/t)	(%)	(%)	(kt)	(koz)	(kt)	(kt)
Copper-Silver Zones (MNFWZ - VN20, VN18, VN22)									
Measured	-	-	-	-	-	-	-	-	-
Indicated	15,908	2.15	49	0.32	0.03	342	24,894	50	5
Measured + Indicated	**15,908**	**2.15**	**49**	**0.32**	**0.03**	**342**	**24,894**	**50**	**5**
Inferred	1,643	1.40	49	0.48	0.06	23	2,611	8	1
Copper-Zinc Zones (SROB and MNFW - VN09, VN10-NW, VN19)									
Measured	407	1.24	53	1.23	0.40	5	698	5	2
Indicated	7,333	1.28	37	1.15	0.21	94	8,617	84	16
Measured + Indicated	**7,740**	**1.28**	**37**	**1.16**	**0.22**	**99**	**9,315**	**89**	**17**
Inferred	5,674	0.71	37	1.57	0.23	40	6,763	89	13
Zinc-Silver-Lead Zones (SROB-Zn, San Rafael and MNFWZ - VN8, VN10-SE, VN11)									
Measured	-	-	-	-	-	-	-	-	-
Indicated	6,023	0.17	38	3.11	1.20	10	7,288	187	73
Measured + Indicated	**6,023**	**0.17**	**38**	**3.11**	**1.20**	**10**	**7,288**	**187**	**73**
Inferred	6,553	0.18	38	3.24	1.36	12	8,009	212	89
Total Mineral Resource									

Measured	407	1.24	53	1.23	0.40	5	698	5	2
Indicated	29,265	1.53	43	1.10	0.32	446	40,799	322	94
Measured + Indicated	**29,672**	**1.52**	**44**	**1.10**	**0.32**	**451**	**41,497**	**327**	**95**
Inferred	13,869	0.54	39	2.23	0.74	75	17,383	309	103

Table 1-1 notes:
1. Mineral Resources are classified according to CIM (2014) definitions, estimated following CIM (2019) guidelines and have an effective date of October 31, 2020. The Independent Qualified Person for the estimates is Mr. Garth D. Kirkham, P.Geo., FGC., of Kirkham Geosystems Ltd. Mineral Resources are reported using four formulae for NSR based on mineralization. Copper-silver dominant zones use the NSR formula: (Cu*60.779 + Ag*0.485)*(1-NSRRoyalty%). Copper-zinc zones use the NSR formula: (Cu*58.430 + Ag*0.416 + Zn*15.368 + Pb*7.837)*(1-NSRRoyalty%). MNFWZ zinc-silver dominant zones use the NSR formula: (Ag*0.304 + Zn*18.323 + Pb*17.339)*(1-NSRRoyalty%). MNV zinc-silver dominant zones use the NSR formula: (Ag*0.256 + Zn*16.401 + Pb*14.977)*(1-NSRRoyalty%). Metal price assumptions (in US$) used to calculate the NSR for all deposits are: Cu = $3.25/lb, Ag = $20.00/oz, Zn = $1.20/lb and Pb = $1.00/lb. Recoveries used in the four NSR formulae are based on mineralization. Copper-silver dominant zones use the following recoveries: 96% Cu and 85% Ag. Copper-zinc zones use the following recoveries: 92% Cu, 79% Ag, 72% Zn and 42% Pb. MNFWZ zinc-silver dominant zones use the following recoveries: 60% Ag, 86% Zn and 92% Pb. MNV zinc-silver dominant zones use the following recoveries: 55% Ag, 77% Zn and 80% Pb. The NSR formulae include confidential current smelter contract terms, transportation costs and royalty agreements from 1 to 3%, as applicable. An exchange rate of MX$20 per US$1 is assumed. Totals may not sum exactly due to rounding. The NSR cut-off of US$50/tonne is based on historical mining and milling costs plus general and administrative costs. The Mineral Resource Estimate encompasses both the MNFWZ and the MNV. Drilling campaigns from 2018 have focused on the MNFWZ and no drilling has been performed on the MNV since 2017. The Mineral Resource considers underground mining by long-hole stoping and mineral processing by flotation. No dilution is incorporated in the Mineral Resource. All metals are reported as contained. Mineral Resource estimates do not account for mining loss and dilution.
2. The last date for drilling sample data and mining activities is October 31, 2020.
3. Mineral Resources that have not been converted to Mineral Reserves do not have demonstrated economic viability.
4. Mineral Resources are reported inclusive of the Mineral Reserves.
5. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

1.6 Mineral Reserves Estimate

The Cozamin Mineral Reserves estimate is based on mineral resource block models developed by Garth Kirkham, P.Geo., FGC, Kirkham Geosystems Ltd., for the Mala Noche Footwall Zone and by Jeremy Vincent, P.Geo., formerly of Capstone Mining Corp., for the San Roberto/San Rafael Zones, and. Tucker Jensen, P.Eng., Superintendent Mine Operations at Capstone Mining Corp., is the Qualified Person for the Cozamin Mineral Reserve Estimate.

The Cozamin Mineral Reserve estimate effective as of October 31, 2020 is summarized in Table 1-2. Mineral Reserves are estimated based on a long-hole open-stoping mining method and tabulated from the interrogations of development and stope triangulations generated in Maptek Stope Optimizer software ("MSO"). These triangulations were applied to the two Mineral Resource block models listed above after the models had been depleted of past mining production and areas of geotechnical sterilization. Also factored for in the Mineral Reserve estimate are production losses and dilution. Mineral Reserves are classified as Proven and Probable in accordance with the definitions in CIM (2014).

The NSR cut-off for reporting the Mineral Reserve is based on recent mining, milling, general and administrative costs, with adjustments made to reflect an increasing proportion of low-cost LHOS. NSR cut-off varied with the year of planned extraction and based on the planned backfill method. For 2020-2022, NSR cut-off was US$48.04/t in conventionally backfilled zones. From 2023 through the rest of the LOMP, NSR cut-off was US$51.12/t in conventionally backfilled zones. In paste backfilled zones of VN20, the NSR cut-off was US$56.12/t NSR cut-off and in paste backfilled zones of VN10, the NSR cut-off was US$56.51/t NSR.

NSR in the Mineral Reserve was calculated using three formulae specific to zone mineralization. Copper-silver dominant zones use the Mineral Reserve NSR formula:

NSR21CuRSV = (Cu% * $50.476 + Ag g/t * $0.406) * (1-NSRRoyalty%)

Metal recoveries of 96% Cu, 84% Ag, 0% Pb and 0% Zn were used in the formula for Mineral Reserve copper-silver dominant zones.

MNFWZ zinc-silver zones use the Mineral Reserve NSR formula:

$NSR21ZnRSV_{FWZ}$ = (Ag g/t * $0.259 + Zn% * $15.081 + Pb% * $15.418) * (1-NSRRoyalty%)

Metal recoveries of 0% Cu, 60% Ag, 92% Pb and 86% Zn were used in MNFWZ zinc-silver dominant zones.

MNV zinc-silver dominant zones use the Mineral Reserve NSR formula:

$NSR21ZnRSV_{MNV}$ = (Ag g/t *$ 0.203 + Zn% *$13.163 + Pb% * $13.233) * (1-NSRRoyalty%)

Metal recoveries of 0% Cu, 53% Ag, 79% Pb and 75% Zn were used in MNV zinc-silver dominant zones.

The NSR formulae for Cozamin Mineral Reserves used metal price assumptions (in US$) of Cu = $2.75/lb, Ag = $17.00/oz, Pb = $0.90/lb, Zn = $1.00/lb.

Current smelter contract terms and transportation costs were incorporated in the NSR estimate formulae but are covered by confidentiality agreements. Royalty payments of 1% to 3% of NSR, due on some areas of the Cozamin Mine property, are included in the formula as required geographically.

Table 1-2: Mineral Reserves Estimate at October 31, 2020 with variable cut-off based on backfill method

Classification	Tonnes (kt)	Grade				Contained Metal			
		Cu (%)	Ag (g/t)	Zn (%)	Pb (%)	Cu (kt)	Ag (koz)	Zn (kt)	Pb (kt)
Proven	-	-	-	-	-	-	-	-	-
Probable	14,127	1.77	44	0.54	0.21	250	20,179	77	29
Proven + Probable	**14,127**	**1.77**	**44**	**0.54**	**0.21**	**250**	**20,179**	**77**	**29**

Table 1-2 Notes:

1. Tucker Jensen, P.Eng., Superintendent Mine Operations at Capstone Mining Corp., is the Qualified Person for this Cozamin Mineral Reserve estimate. Disclosure of the Cozamin Mine Mineral Reserve with an effective date of October 31, 2020 was completed using fully diluted mineable stope shapes generated by the Maptek Vulcan Mine Stope Optimizer software and estimated using the 2020 MNFWZ resource block model created by Garth Kirkham, P.Geo., FGC and the 2017 MNV resource block model created by J. Vincent, P.Geo., formerly of Capstone Mining Corp.
2. Mineral Reserves are reported at or above a US$48.04/t net smelter return ("NSR") cut-off in conventionally backfilled zones for 2020-2022, a US$51.12/t NSR cut-off in conventionally backfilled zones for 2023+, a US$56.51/t NSR cut-off in paste backfilled zones of Vein 10, and a US$56.12/t NSR cut-off in paste backfilled zones of Vein 20 using three formulae based on zone mineralization. Copper-silver dominant zones use the NSR formula: (Cu*50.476 + Ag*0.406)*(1-NSRRoyalty%). MNFWZ zinc-silver zones use the NSR formula: (Ag*0.259 + Zn*15.081 + Pb*15.418)*(1-NSRRoyalty%). MNV zinc-silver dominant zones use the NSR formula: (Ag*0.203 + Zn*13.163 + Pb*13.233)*(1-NSRRoyalty%). Metal price assumptions (in US$) of Cu = $2.75/lb, Ag = $17.00/oz, Pb = $0.90/lb, Zn = $1.00/lb and metal recoveries of 96% Cu, 84% Ag, 0% Pb and 0% Zn in copper-silver dominant zones, 0% Cu, 60% Ag, 92% Pb and 86% Zn in MNFWZ zinc-silver dominant zones, and 0% Cu, 53% Ag, 79% Pb and 75% Zn in MNV zinc-silver dominant zones. Mineral Reserve calculations consider mining by long-hole stoping and mineral processing by flotation. Tonnage and grade estimates include dilution (avg. 24.1% and 18.4% in stopes and development respectively, weighted by mass) and do not include unmined pillars. The NSR royalty rate applied varies between 1% and 3% depending on the mining concession, and royalties are treated as costs in Mineral Reserve estimation. An exchange rate of MX$20 per US$1 is assumed. All metals are reported as contained. Figures may not sum exactly due to rounding.

1.7 Life of Mine Plan

The life of mine plan ("LOMP"), which is based upon at least a prefeasibility level of study, was completed by Tucker Jensen, P.Eng. in January 2021. The LOMP forecasts mining 14.2 Mt of ore from November 1, 2020 through early 2031. Only material identified as Mineral Reserves was included in the LOMP.

Access to underground workings is obtained from two service and haulage ramps forming a connected, one-way haulage loop and a hoisting shaft. The LOMP assumes that longitudinal long-hole open stoping with paste backfill will be used for the extraction of the majority (approximately 78%) of the remaining Cozamin Mineral Reserve beginning in January 2023. Backfill with waste rock will continue to be used before 2023, and after 2023 in areas where paste backfill is not available or is sub-optimal. The average mill production increased from approximately 3,000 tpd in 2000, following completion of the Crucero de San Rafael haulage strategy in December 2020. Average mill production is expected to reach 3,780 tpd by the end of Q1 2021.

1.7.1 Geotechnical Considerations

Ground conditions in the mine are usually favourable with wide spans observed to be generally stable with ground support at the current depth and extraction ratio. Geotechnical considerations include cross-cutting fault zones perpendicular or orthogonal to veins, sub-vertical slip planes across veins, faults parallel to MNV contacts and lower intact rocks strengths in metamorphic phyllite or shale rock types. Vertical rib pillars are designed to be placed in regular intervals according to local geotechnical conditions or left in place where cross-cutting faults intersect the veins. Ground support practices are modified in areas at depth where horizons of metamorphic rock increase in waste rock. In areas to be mined with paste backfill, rib and sill pillars are not generally anticipated when mining is bottom-up (overhand). Mining underneath paste backfill will be very limited, employ high-strength paste, and engage a modified pillar strategy until more site knowledge is gained.

1.8 Economic Analysis

An economic analysis is not required to be disclosed in this Technical Report because Cozamin is a producing mine and the proposed expansion of current production is not considered material.

Josh Moncrieff, P.Geo., QP for Section 22 Economic Analysis, confirmed a positive economic outcome for the Mineral Reserves presented in this report.

1.9 Data Verification

Data verification for various types of data supporting Cozamin technical reports was completed by independent QPs, including Jenna Hardy from 2005 through 2020, Garth Kirkham from 2018 through 2020, Humberto Preciado from 2017 through 2020, Darren Kennard from 2017 through 2020 and Chris Martin from 2017 through 2020.

The authors are of the opinion that the current geological, mining and metallurgical data from Cozamin are of sufficient quality to support the Mineral Resources, Mineral Reserves and LOMP as presented in this Technical Report.

1.10 Conclusions and Recommendations

The Cozamin Mine is a viable mining operation that has been operated continuously by Capstone for 14 years. Based on the findings summarized in this technical report, the QPs believe that Cozamin is capable of sustaining production through the depletion of its current Mineral Reserve, and make the recommendations listed in Table 1-3. The Mineral Resource and Mineral Reserve estimates were performed to industry best practices as described in CIM (2019) and conform to the definitions in CIM (2014).

Capstone holds all required mining concessions, surface rights, and rights of way to support mining operations for the LOMP developed using the October 31, 2020 Mineral Reserve estimates. Permits held by Capstone are sufficient to ensure that mining activities within

Cozamin Mine are carried out within the regulatory framework required by the various levels of government. No unusual risk to permit applications and/or extensions is anticipated beyond the potential for delays in regulatory review and approval following government disruption related to COVID-19. Annual and periodic land use and compliance reports have been filed as required.

Understanding of the regional geology, lithological, structural, and alteration controls of the mineralization at Cozamin are sufficient to support estimation of mineral resources and mineral reserves. The Mineral Resource and Mineral Reserve estimates, NSR cut-off strategy, and operating and capital cost estimates were generated using industry-accepted methodologies and actual Cozamin performance standards and operating costs. Metallurgical expectations are reasonable, based on stable metallurgical results generated from actual production data and recently completed studies. Reviews of the environmental, permitting, legal, title, taxation, socio-economic, marketing and political factors for Cozamin Mine support the declaration of Mineral Reserves.

Cozamin water sources include purchase of additional water rights from the municipal authority in 2014, authorization to use treated water, water from underground mines held by various other parties, and water supply wells constructed downstream of the mine and processing facilities in 2011 and 2012. Cozamin is projected to have access to sufficient water resources to support a 4,000 tpd operation.

At present, there is capacity within the existing tailings storage facility ("TSF") to store approximately 6 Mt of additional tailings. This assumes that proper tailings management continues, including the development of competent tailings beaches to allow additional upstream embankment raises. Alternative tailings management approaches using filtered (dry stack) tailings have been developed at a conceptual level, and are currently being designed at a feasibility level. Filtered tailings storage is intended to provide additional capacity for the 14.1 Mt of Mineral Reserve, and to mitigate the risk of long-term use of the existing conventional slurry TSF. This report considers the timing and cost of the permitting, engineering, and construction of at least two filtered TSF options.

Based on current regulations and laws, Capstone has addressed Cozamin's environmental impact, in addition to certain impacts from historical mining. Closure provisions are appropriately considered in the LOMP. There are no known significant environmental, social or permitting issues that are expected to prevent continued mining at Cozamin Mine.

Table 1-3: Summary of Recommendations

Recommendations – overall implementation cost estimated at US$11.1 million
As further exploration and infill drilling continues, and empirical understanding of the physical characteristics of the orebody develops, continued revision of mining methods to optimize safety and economics is necessary. [1]
Complete the next phase of exploration and infilling drilling from surface and underground; incorporate two exploration drifts into planned mining access for precise underground infill drilling.[6]

Evaluation of the effect of blending copper ores with the zinc-silver-lead ores through further metallurgical testwork. [3]
Ongoing geotechnical work, including: • Continued development of a formal ground control management plan that summarises different mine design (stope and pillar) and ground control requirements in different geotechnical domains, to be updated as performance information becomes available. [4] • Assessments of variable mining methods for upper MNFWZ domain 3a and provision of mine design guidelines. [4] • Continued improvements to recording geotechnical data including mapping of the rock mass conditions underground and in drillcore logging, validation of ground support performance, stope and pillar sizes, rock mass characterization, definition of regional field characteristics to aid reliable stress modelling, development of a 3D geomechanical domain model. [4] • Continued training of personnel in geotechnical mapping and to identify poor rock conditions and execute remediation ground control work where needed. • Continued systematic bolting in new headings and adjust ground support in areas of weaker rock mass conditions or in higher ground stress zones. [4] • Upgrade ground support to current standards in permanent active areas such as ramps, main drifts and underground shops. [4] • Optimization of paste fill practices including paste fill mix specific to vertical exposure once the paste plant is operational and effectively producing a quality product. [4] • Prior to execution, review of vertical offsets at ramp accesses in high level mine plans for stopes to be mined underneath. [4] • A test mining area where crews can gain experience mining underneath paste fill away from other mining zones or other critical sections of the mine. [4] • Review the requirement for half stope-height rib pillars between stopes for stopes mined underneath previously paste-filled stopes once significant operational experience is achieved.
Redesign the upper areas of Cozamin Reserves to ore pass use (truckless headings), increasing safety and efficiency, while improving air quality and decreasing ventilation requirements in these areas. [1]
Complete planned upgrades to existing plant facilities and install modified mill discharge head Ball Mill 1, as scheduled, before June 2021 to ensure LOMP production rates can be consistently achieved. Other upgrades include the purchase of spare sets of mantles and bowls for the secondary and tertiary crushing circuits to reduce maintenance downtime.[7]
Evaluate the installation of an additional concentrate filter to reduce the risk of unplanned outages caused by filtration upsets and to improve filtered concentrate moisture contents, with the aim of ensuring maximum mill availability.[7]
Assess future regional power demands and begin the permitting process to further increase line power supply based on final filter plant designs, adding considerations for the potential for paste backfill or other backfill alternative. Continue to monitor peak power draw and assess means for smoothing demand peaks. This work should be completed by Cozamin technical staff in the course of their normal duties. [1]
Development of a stochastic water balance model.[8]
Complete feasibility level design of the two preferred filtered tailings storage options to allow for continued expansion of Mineral Reserves, a refinement and potential reduction of closing, rehabilitation and remediation costs, and risk management. [5]

A spillway has been designed and recommended for construction from Stage 10 and onwards, which will prevent a large storm event from undermining the specified minimum beach width as the TSF raises progressively move closer to the reclaim pond. [5]
To maintain and improve understanding of environmental and community impacts: • Continue to actively engage in community assistance and development programs with surrounding communities to ensure Capstone retains its social licence. [2] • Design an effective sampling and monitoring plan to further characterize current conditions of waste and tailings. This will support design of waste and tailings management plans and assist in the evaluation of alternatives for tailings and waste rock disposal during operations and into closure.[2] • Assess whether buffer zones at the edges of the existing mine property are appropriately sized to ensure design and operational flexibility for proposed ancillary infrastructure with completion of feasibility level design for the selected filtered or dry stack tailings option. [2]

Table 1-3 Notes:
1. QP Tucker Jensen, P.Eng.
2. QP Jenna Hardy, P.Geo., FGC
3. QP Chris Martin, CEng MIMMM
4. QP Darren Kennard, P.Eng.
5. QP Humberto Preciado, PhD, PE
6. QP Garth Kirkham, P.Geo., FGC
7. QP Gregg Bush, P.Eng.
8. QP Josh Moncrieff, P.Geo.

Opportunities identified for Cozamin by the QPs are presented in Table 1-4.

Table 1-4: Summary of Opportunities

Opportunities
Future exploration targets may be identified from the 2021 drill program testing open areas west and east of the current Mineral Resources at MNFWZ.[4]
A trade-off study between the current mining method and alternative mining methods should be completed by the Cozamin technical staff as part of their regular duties in order to optimize the value of the ore within domain 3a. The trade-off study should be completed before 2022 to allow for potential changes before mining is planned in the domain.[1]
Further optimization of reserve shapes may be possible by adding additional plane points where applicable; a considerable amount of the Mineral Reserve volume is planned to be mined using fan drilling in the stoping procedure.[1]
Study possibilities to optimize mining methods to reduce dilution and costs, leading to potential conversion of Mineral Resource to Mineral Reserve. Possible alternatives include: • Alternative mining techniques such as Cut-and-Fill, Drift-and-Fill and Long-hole Open Stoping with ore sorting technology.[1] • Rapid implementation of a Cemented Rock Fill (CRF) system to allow the safe and economic recovery of pillars in areas mined prior to the planned start of paste backfilling in 2023, and areas where it is not economic to deliver paste.[1] • Identification of areas where overhand mining with gob backfill may allow the option to leave no sill pillars.[1] • Recovery of pillars from areas mined in the past is being investigated using paste fill and other salvage techniques.[1]

Reduce dilution site-wide through improved engineering, planning, long-hole drill control and optimized explosives design guided by a team of consultants and site experts.[1]
Determine whether the timeline of filter plant construction could be shortened after assessing a package of used tailings filters, facilitating a much earlier start to paste backfilling.[1]
Identify opportunities for capital and operating cost savings and increased pillar recovery in the Paste Backfill Feasibility Study, currently underway, where conservative estimates for equipment and costs of materials, geotechnical stability and other factors could be improved by additional laboratory testing, more detailed system design and an optimized mine plan.

Table 1-4 Notes:
1. QP Tucker Jensen, P.Eng.
2. QP Jenna Hardy, P.Geo., FGC
3. QP Chris Martin, CEng MIMMM
4. QP Garth Kirkham, P.Geo., FGC

Risks to Cozamin identified by the QPs are summarized in Table 1-5.

Table 1-5: Summary of Risks

Risks
Exchange rates, off-site costs and, in particular, metal prices all have the potential to affect the economic results of the mine. Negative variances to assumptions made in the budget forecasts would reduce the profitability of the mine, thereby impacting the mine plan.[1]
The Mineral Resources estimate could be materially impacted by changes in continuity of grade and in interpretation of mineralized zones after further exploration and mining, and by uncertainty of assumptions underlying the consideration of reasonable prospects of economic extraction, such as commodity price, exchange rate, geotechnical and hydrogeological aspects, operating and capital costs, metal recoveries, concentrate grade and smelting/refining terms.[2]
Mexican regulatory expectations for environmental and social responsibility continue to evolve. Since the first environmental impact assessment, Capstone's property ownership has increased beyond the area of active mining and processing operations to encompass additional areas of historical mining and processing operations, particularly in the Chiripa area. The regulatory path forward for remediating these types of environmental liabilities is not yet certain and may result in increased expectations and regulatory requirements. This has the potential to increase costs for final closure and/or post closure monitoring which cannot be quantified at this time.[3]
The construction method for the upstream tailings dam raise is highly dependent on tailings management to keep the reclaim pond as small and as far as possible from the dam crest for proper tailings beach construction. This dependency has the potential to jeopardize the feasibility of subsequent upstream raises and limit the future total tailings storage capacity. These risks are currently mitigated with continuous tailings management, monitoring performance of the tailings storage facility, frequent site characterizations to monitor the progression of tailings beach strength and audits from independent consultants. Additionally, two filtered tailings options are being developed to meet the required storage capacity and have the flexibility to switch the tailings management technology should it be desirable before the anticipated end of storage capacity in the existing conventional slurry TSF. [4]

Table 1-5 Notes:
1. QP Tucker Jensen, P.Eng.
2. QP Garth Kirkham, P.Geo., FGC
3. QP Jenna Hardy, P.Geo., FGC
4. QP Humberto Preciado, PhD, PE

2 Introduction

2.1 Description of the Issuer

This Technical Report was prepared by Capstone to disclose updated Mineral Resources and Mineral Reserves at the Cozamin Mine in Zacatecas, Mexico. Cozamin Mine is an operating underground copper-silver-zinc-lead mine with a 3,980 tonne per day milling capacity.

Capstone owns 100% of Cozamin Mine through its subsidiaries Capstone Gold S.A. de C.V. (99.9% ownership) and Capstone Mexico Mining Corp. (0.01% ownership).

This Technical Report was prepared by Capstone employees Tucker Jensen, P.Eng., Vivienne McLennan, P.Geo., and Josh Moncrieff, P.Geo, and includes content that is the responsibility of the following firms and consultants: Gregg Bush, P.Eng., Leslie Correia, Pr. Eng., Paterson & Cooke Canada Inc., Jenna Hardy, P.Geo., FGC, Nimbus Management Ltd., Darren Kennard, P.Eng., Golder Associates Ltd., Garth Kirkham, P.Geo., FGC, Kirkham Geosystems Ltd., Chris Martin, CEng MIMMM, Blue Coast Metallurgy Ltd., Humberto Preciado, PhD, P.E., Wood, Environment & Infrastructure Solutions, Inc.

2.2 Terms of Reference

This Technical Report supports Capstone's news release dated January 27, 2021 entitled "Capstone Cozamin Mine to Average Over 51 Mlbs Cu for 10 Years; Initiates "Impact23" Project for Further Growth". This news release disclosed updated Mineral Resources and Mineral Reserves at the Cozamin Mine, summarized plans for improvements to the existing mining operation and updated investors with current information. The Mineral Reserves presented in this Technical Report are materially different than those of the Technical Report filed October 23, 2020 with an effective date of April 30, 2020.

Preparation of this Technical Report followed National Instrument 43-101, Standards of Disclosure for Mineral Projects ("NI 43-101") and the report was written in accordance with Form 43-101F1. Estimates of Mineral Resources and Mineral Reserves follow industry best practices as defined by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM, 2019). Classification of Mineral Resources and Mineral Reserves conform to CIM Definition Standards (CIM, 2014). The effective date of this Technical Report is October 31, 2020.

2.3 Qualified Persons

QPs for this Technical Report are listed in Table 2-1.

Table 2-1: Qualified Persons for this Technical Report

Qualified Persons
Gregg Bush, P.Eng., former COO of Capstone Mining Corp., not Independent within the meaning of NI 43-101.
Jenna Hardy, P.Geo., FGC, Principal, Nimbus Management Ltd
Leslie Correia, Pr. Eng., Paterson & Cooke Canada Inc.
Tucker Jensen, P.Eng., Superintendent Mine Operations, Capstone Mining Corp., not Independent within the meaning of NI 43-101.
Darren Kennard, P.Eng., Principal, Senior Mining Geotechnical Engineer, Golder Associates Ltd.
Garth Kirkham, P.Geo., FGC, Kirkham Geosystems Ltd.
Chris Martin, CEng MIMMM, President and Principal Metallurgist, Blue Coast Metallurgy Ltd.
Vivienne McLennan, P.Geo., Manager, Resource Governance, Capstone Mining Corp., not Independent within the meaning of NI 43-101.
Josh Moncrieff, P.Geo., Director, Technical Services, Capstone Mining Corp., not Independent within the meaning of NI 43-101.
Humberto Preciado, PhD, PE, Senior Associate Geotechnical Engineer, Wood

2.4 Qualified Person Site Visits

Site inspections have been undertaken by each of the QPs as outlined in Table 2-2. Dates listed do not include travel time to and from the Cozamin Mine.

Table 2-2: Site Inspection Details of Qualified Persons

Qualified Person	Date (Excluding Travel)	Scope of Site Inspection
Gregg Bush	June 25-29, 2018 August 19-23, 2019	Review of mill operating data, process circuits, and equipment. Evaluation of potential alternatives for tailings storage sites.
Leslie Correia	October 21 – 22, 2020	Reconnaissance to refine scope of paste backfill study requirements including assessment of possible locations for the filtration and paste plants, plus observation of surface and mining conditions.
Jenna Hardy	August 26-30, 2019	Environmental and regulatory review with site personnel, permit conformance inspection of tailings and historical mines as well as closure and reclamation planning.

Tucker Jensen	February 20 – June 28, 2019 September 23–27, 2019 November 9-14, 2019 December 2-6, 2019 January 27 - February 4, 2020 March 8-13, 2020 January 20, 2021	Long range mine planning and mineral reserve estimation. Review mining methods, mine planning and schedule, mining operations performance, mining costs (both operating and capital), dilution and ore loss, and reconciliation.
Darren Kennard	April 16-18, 2018	Geotechnical assessment.
Garth Kirkham	April 9-10, 2018	Estimation of mineral resources, review of data supporting the geological model as well as sample collection, preparation and analysis, QAQC, bulk density measurements and mineralization in situ.
Chris Martin	January 24, 2018	Metallurgical test work.
Vivienne McLennan	February 14-24, 2018 April 9-20, 2018 August 6-11, 2018 Oct 22- Nov 2, 2018 August 27-30, 2019 Feb 11-Mar 7, 2020	Review of data handling for drilling and exploration information including mineral tenures, drillcore, QAQC, and database verification.
Josh Moncrieff	December 2-6, 2019 September 14-17, 2020 October 12-15, 2020 October 21-23, 2020 January 20, 2021	Site infrastructure review covering current procedures, proposed tailings storage alternatives and future capacity requirements.
Humberto Preciado	September 15-17, 2020	Tailings storage facility, proposed new TSF locations, existing waste dump and associated water management infrastructure inspection.

2.5 Information Sources, Effective Dates and References

The effective date of this report is based on the Mineral Resource and Mineral Reserves estimates dated October 31, 2020.

The technical information used to develop the Mineral Resource and Mineral Reserves estimates was collected over a number of years, dating back to 2004. All sample information was acquired by Capstone personnel.

Sources of data for the report and the corresponding effective dates are as follows:

- Diamond drilling information including collar surveys, downhole surveys, geological and geotechnical logging for holes drilled from 2004 up until October 12, 2020 and assays up to October 31, 2020
- Production and processing information, from historical operators pre-2004 and collected by Capstone from 2004 through October 31, 2020, including the month-end production survey dated October 31, 2020 used in reporting the Mineral Resource and Mineral Reserve estimates
- Mineral Resource and Mineral Reserve estimates: October 31, 2020
- Environmental, regulatory and social or community aspects to February 15, 2021
- Infrastructure information to February 15, 2021
- Maintenance of mining concessions to January 31, 2021
- Metallurgical testwork to February 22, 2021
- Geotechnical inputs including stope performance data, geotechnical core logging data, core photographs, laboratory strength testing, geotechnical standard operating procedures and ground control design procedures, 2017 to January 14, 2021

In addition, other reports, opinions and statements of lawyers and other experts are discussed in Section 3.

All units in this report are based on the metric SI system (Système International d'Unités - International System of Units), except for some units which are deemed industry standards, such as troy ounces (oz) for precious metals and pounds (lb) for base metals. All currency values are in US dollars (“$”) unless otherwise noted.

The following defined terms have been used in this Technical Report.

Table 2-3: Acronyms

Acronym	Expanded Form
Acme	Acme Analytical Laboratories Ltd.
Actlabs	Activation Laboratories Ltd.
AIF	Annual Information Form
ALS	ALS Geochemistry
Assayers Canada	Mineral Environments Laboratories Ltd
Bacis	Grupo Minera Bacis S.A. de C.V.
Base Metals	Copper, lead, zinc
C&F	Cut and fill
CAPEX	Capital costs
Capstone	Capstone Mining Corp.
Capstone Gold	Capstone Gold S.A. de C.V.
CCS	Chip-channel sample
CEMEFI	Mexican Centre for Philanthropy
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CML	Cozamin Mine Laboratory
COG	Cut-off grade
Contrafrente	Lateral drift system
Copper-Silver Zone	Mala Noche Footwall copper-silver zones Vein 18, Vein 20 and Vein 22
Copper-Zinc Zone	San Roberto and Mala Noche Footwall copper-zinc zones Vein 9, Vein 10 northwest and Vein 19
CoV	Coefficient of Variation
Cozamin	Cozamin Mine
CRIP	Complex Resistivity Induced Polarization
CRM	Certified Reference Material
CSAMT	Controlled Source Audio Magnetotellurics
CuEq	Copper Equivalent
CUSTF	Cambio de Uso de Suelos en Terrenos Forestales
DDH	Diamond drillhole
DTU	Documento Técnico Unificado
Eco Tech	Eco Tech Laboratories Ltd.
EDA	Exploratory Data Analysis
EDR	Endeavour Silver Corp.
Ejido	Mexican state-owned communal agricultural lands
ELOS	Equivalent Linear Overbreak Slough
ER	Estudio Riesgo
ETJ	Estudio Técnico Justificativo de Cambio de Uso de Suelos
EW	East-West
G&A	General and Administrative

Acronym	Expanded Form
GPS	Global Positioning System
GU	General Use cement
GGIBFS	Ground Granulated Iron Blast Furnace Slag
HARD	Half Absolute Relative Difference
HDPE	High-density polyethylene
ICP	Inductively coupled plasma method of ionizing sample material
ID^2	Inverse Distance, squared estimation method
INEGI	Instituto Nacional de Estadística y Geografía
INSECAMI	Ingeneria y Servicios en Control Ambiental Industrial S.A. de C.V.
Inspectorate	Bureau Veritas Inspectorate Laboratory
IRR	Internal Rate of Return
IVA	Value Added Tax (Mexican)
LAU	Licencia Única Ambiental
LGEEPA	Ley General de Equilibrio Ecológico y la Protección al Ambiente
LGGC	Lions Gate Geological Consulting Inc.
LH	Long-hole
LHD	Load-haul-dump mining equipment
LHOS	Long-hole open stope
LME	London Metal Exchange
LOM	Life of mine
LOMP	Life of mine plan
mi	Parameter required to estimate strength of rock materials
M+I	Measured and Indicated Mineral Resources
MEX or MX$	Mexican Peso
MHS	Material Handling Study
MIA	Manifestación de Impacto Ambiental
Minzone	Mineralized zone
ML/ARD	Metal leaching/acid rock drainage
MNFWZ	Mala Noche Footwall Zone
MNV	Mala Noche Vein
MSO	Maptek Stope Optimizer software
NSAMT	Natural Source Audio Magnetotellurics
NE	Northeast
NI 43-101	National Instrument 43-101 Standards of Disclosure for Mineral Projects
NN	Nearest Neighbour estimation method
NNE	North-North-East
NSR	Net Smelter Return
NW	Northwest
OK	Ordinary Kriging estimation method
OPEX	Operating costs

Acronym	Expanded Form
PAG	Potentially acid generating
Peñoles	Industrias Peñoles S.A. de C.V.
PFS	Preliminary Feasibility Study
Precious Metals	Gold, silver, platinum
PROFEPA	Procuraduría Federal de Protección al Ambiente en el Estado de Zacatecas
Property	Cozamin Mine and the surrounding contiguous block of mining concessions
Q'	Q' value for rock mass classification using Q-system
QAQC	Quality Assurance/Quality Control
RM	Reference Material
RMR	Rock Mass Rating
ROM	Run of Mine
RQD	Rock Quality Designation
SE	Southeast
SEMARNAT	Secretaría de Medio Ambiente y Recursos Naturales
SGS	SGS Canada Inc.
SMU	Selective Mining Unit
SRK	SRK Mining Consultants
SROB	San Roberto zone (Copper)
SROB-Zn	San Roberto Zinc zone
Supervisor	Snowden Technologies Pty Ltd *Supervisor* software
SVOL	Search volume, numbered by pass in a multi-pass search strategy
TDIP	Time domain induced polarization
TSF	Tailings Storage Facility
UCS	Uniaxial compressive strength
US$	United States Dollar
VN	Vein
WNW	West-North-West
X, Y, Z	Cartesian Coordinates, also "Easting", "Northing", and "Elevation"
Zinc-Silver-Lead Zone	San Rafael, San Roberto Zinc zone, Mala Noche Footwall Zinc-Silver-Lead zones Vein 8, Vein 10 southeast and Vein 11

Table 2-4: Abbreviations

Abbreviation	Unit or Term	Abbreviation	Unit or Term
Distance		**Mass**	
µm	micron (micrometre)	kg	kilogram
mm	millimetre	g	gram
cm	centimetre	t	metric tonne
m	metre	kt	kilotonne
km	kilometre	lb	pound
” or in	inch	Mt	megatonne or million tonnes
’ or ft	foot	oz	troy ounce
Power		wmt	wet metric tonne
MW	megawatt	dmt	dry metric tonne
HP	horsepower	tpd	tonnes per day
		tph	tonnes per hour
Area		**Pressure**	
m^2	square metre	psi	pounds per square inch
km^2	square kilometre	Pa	Pascal
ac	acre	kPa	kilopascal
ha	hectare	MPa	megapascal
Volume		**Elements and Compounds**	
l	litre	Au	gold
m^3	cubic metre	Ag	silver
ft^3	cubic foot	Cu	copper
USg	US gallon	Pb	lead
LCM	loose cubic metre	Zn	zinc
MLCM	million lcm	$CaCO_3$	calcium carbonate
BCM	bank cubic metre	ANFO	ammonium nitrate/fuel oil
MBCM	million bcm	**Bulk Density and Specific Gravity**	
CFM	Cubic feet per minute	BD/SG	g/cm^3

Table 2-5: Conversion Factors

Conversion Factors	
1 tonne	2204.62 lb
1 oz (troy)	31.1035 g

2.6 Previous Technical Reports

Capstone has previously filed the following Technical Reports on Cozamin:

- Bush, G., Hardy, J., Jensen, T., Kennard, D., Kirkham, G., Martin, C., McLennan, V., Moncrieff, J., Preciado, H., 2020: NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico: technical report prepared by Nimbus Management Ltd., Golder Associates Ltd., Kirkham Geosystems Ltd., Blue Coast Metallurgy Ltd. and Wood Environment & Infrastructure Solutions, Inc. for Capstone Mining Corp., effective Date: October 23, 2020
- Bush, G., Hardy, J., Jensen, T., Kennard, D., Kirkham, G., Martin, C., McLennan, V., Preciado, H., 2018: NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico: technical report prepared by Nimbus Management Ltd., Golder Associates Ltd., Kirkham Geosystems Ltd., Blue Coast Metallurgy Ltd. and Wood Environment & Infrastructure Solutions, Inc. for Capstone Mining Corp., effective Date: October 24, 2018
- Bush, G., Hardy, J., Jensen, T., Kirkham, G., Martin, C., McLennan, V., Mohseni, P., Preciado, H., 2018: NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico: technical report prepared by Nimbus Management Ltd., Kirkham Geosystems Ltd., Blue Coast Metallurgy Ltd. and Wood Environment & Infrastructure Solutions, Inc. for Capstone Mining Corp., effective Date: July 19, 2018
- Andrieux, P., Hallman, D., Hardy, J., Lawson, M., Major, K., McLennan, V., Schappert, A., Shahkar, A., Sim, R., Skeeles, B., Vincent, J., 2014: NI 43-101 Technical Report on the Cozamin Mine, Zacatecas, Mexico: technical report prepared by Itasca Consulting Group, Inc. Tetra Tech, Inc., Nimbus Management Ltd., Stantec Consulting International LLC, KWM Consulting Inc., Lions Gate Geological Consulting Inc. and Sim Geological Inc. for Capstone Mining Corp., effective Date: July 18, 2014
- Doerksen, G., Hardy, J., Sim, R., Woods, J., 2009: Technical Report Cozamin Mine, Zacatecas, Mexico: technical report prepared by SRK Consulting for Capstone Mining Corp., effective date March 31, 2009
- Stone, M.S., Barnes, R.B., and Hardy, J., 2007: Technical Report on the Cozamin Project, Zacatecas State, Mexico, October 31, 2007: technical report prepared for Capstone Mining Corp.

3 Reliance on Other Experts

In preparing this Technical Report, the authors have fully relied upon certain work, opinions and statements of lawyers and other experts. The authors consider the reliance on other experts, as described in this section, as being reasonable based on their knowledge, experience and qualifications. The independent QPs that authored this Technical Report disclaim responsibility for the expert report content used in the following sections:

- Rafael Cereceres Ronquillo, Cereceres Estudio Legal, S.C., for a legal opinion pertaining to the ownership of mining concessions by Capstone Gold S.A. de C.V. and Mining Opco, S.A. de C.V. in Section 4.5 (May 21, 2020).
- L.C. José de Jesús Espino Zapata, Gerente Administrativo, Capstone Gold S.A de C.V., for Mexican taxation information throughout the report, including Section 4.4.
- Ashley Woodhouse, Marketing Manager of Capstone Mining Corp., for specialized commodity market knowledge summarized in Section 19.
- Reina Isadora Rodriguez Chavez, Supervisor de Contratos of Capstone Gold S.A. de C.V. for specialized contract knowledge summarized in Section 19.
- Lic. Maria del Rosario Torres Aldana, Jefa de Medio Ambiente of Capstone Gold S.A. de C.V. for environmental and regulatory considerations detailed in Section 20.

4 Property Description and Location

The Cozamin Mine is located in the Municipality of Morelos in the Zacatecas Mining District near the southeastern boundary of the Sierra Madre Occidental Physiographic Province in north-central Mexico (Figure 4-1). The mine and processing facilities are located near coordinates 22º 48’ N latitude and 102º 35’ W longitude on 1:250,000 Zacatecas topographic map sheet F13-6.

Figure 4-1: Cozamin Mine Location (Capstone, 2014)

4.1 Mining Concessions

Cozamin comprises 93 mining concessions covering approximately 4,260 ha (Figure 4-2 and Figure 4-3). Capstone Gold is the registered holder of 45 mining concessions (with three additional mining concessions which were lawfully transferred to Capstone Gold and are pending registration with the Public Registry of Mining since August 2019, and with an additional pending mining concession) covering approximately 3,485 ha; Mining Opco, a wholly-owned subsidiary of Capstone, is the registered holder of 45 mining concessions covering approximately 775 ha. The 90 mining concessions are listed in the Public Registry of Mining. The 93 mining concessions are not subject to any limitations of property, claim or legal proceedings. The mining rights, with respect to each of the concessions, have been paid to date. The mine is 100% owned by Capstone subject to a 3% NSR royalty payable to Bacis and a 1% NSR royalty payable to EDR, based on the concessions where mining occurs.

Table 4-1: Cozamin Mining Concessions Summary – held by Capstone Gold S.A. de C.V.

Description / Name	Title No.	Claim Classification	Validity		Claim Area (ha)
			From	To	
001 Plateros	188806	Exploitation	1990-11-29	2040-11-28	9
002 Santa Lucia	195187	Exploitation	1992-08-25	2042-08-24	18.7267
003 San Nicolás	200150	Exploitation	1994-07-15	2044-07-14	5.3697
004 San Jacinto Fracc. 1	202437	Exploitation	1995-11-24	2045-11-23	78.7955
005 San Jacinto Fracc. 2	202438	Exploitation	1995-11-24	2045-11-23	17.7846
006 Santa Bárbara Fracc. 4	202628	Exploitation	1995-12-08	2045-12-07	0.4585
007 Santa Bárbara Fracc. 2	235867	Exploitation	2010-03-24	2060-03-23	16.5589
008 Gabriela II	203364	Exploitation	1996-07-19	2046-07-18	18.9438
009 Plateros Dos	208838	Exploitation	1998-12-15	2048-12-14	50
010 La Liga	217237	Exploitation	2002-07-02	2052-07-01	20.1817
011 San Bonifacio	217858	Exploitation	2002-08-27	2052-07-26	40.8518
012 Santa Bárbara Fracc. 1	218259	Exploitation	2002-10-17	2052-10-16	82.9691
013 La Secadora	219630	Exploitation	2003-03-26	2053-03-25	9
014 La Providencia	223954	Exploitation	2005-03-15	2055-03-14	60
015 Unificación Carlos	235574	Exploitation	2010-01-20	2060-01-19	542.5265
016 Orlando	225620	Exploitation	2005-09-23	2055-09-22	11.7899
017 San Luis I	223325	Exploitation	2004-12-02	2054-12-01	290.6121
018 San Luis II	224466	Exploitation	2005-05-13	2055-05-12	133.8409
019 San Luis II Fracc. I	224467	Exploitation	2005-05-13	2055-05-12	2.1713
020 San Luis II Fracc. II	224468	Exploitation	2005-05-13	2055-05-12	2.4654
021 Acueducto	224469	Exploitation	2005-05-13	2055-05-12	13.559
022 Acueducto Fracc. 1	224470	Exploitation	2005-05-13	2055-05-12	9.598
023 La Parroquia	224471	Exploitation	2005-05-13	2055-05-12	1.2601
024 La Gloria	224474	Exploitation	2005-05-13	2055-05-12	4.1372
025 La Sierpe	224503	Exploitation	2005-05-13	2055-05-12	4.2638
026 La Sierpe Fracc. 1	224504	Exploitation	2005-05-13	2055-05-12	0.0108

Description / Name	Title No.	Claim Classification	Validity		Claim Area (ha)
			From	To	
027 San Judas	226699	Exploitation	2006-02-17	2056-02-16	14.5989
029 Lorena	227712	Exploitation	2006-07-28	2056-07-27	318.5825
030 Sara	228086	Exploitation	2006-09-29	2056-09-28	231.9436
031 El Ranchito	228343	Exploitation	2006-11-08	2056-11-07	11.2997
032 El Ranchito Fracc 1	228344	Exploitation	2006-11-08	2056-11-07	0.6189
033 La Veta	228345	Exploitation	2006-11-08	2056-11-07	1.4533
034 Anabel	229238	Exploitation	2007-03-27	2057-03-26	310.771
035 Cecilia	230921	Exploitation	2007-11-09	2057-11-08	425.6022
036 Ximena	234713	Exploitation	2009-08-04	2059-08-03	400.5854
037 Los Amigos	223270	Exploitation	2004-11-18	2054-11-17	30
038 San Francisco	203270	Exploitation	1996-06-28	2046-06-27	17.2735
039 Santa Rita	183882	Exploitation	1988-11-23	2038-11-22	12.3809
040 La Esperanza	214768	Exploitation	2001-11-29	2051-11-28	29.5678
041 San Benito	239550	Exploitation	2011-12-16	2061-12-15	9
042 Sandra	238171	Exploitation	2011-08-09	2061-08-08	127.3809
043 La Capilla	240517	Exploitation	2012-06-12	2062-06-11	2.198
044 La Fortuna	*Pending*	*Exploitation*	-	-	*Approx. (9.0000)*
045 Unificación El Cobre	170677	Exploitation	1982-06-11	2032-06-10	31.4914
046 Parroquia Dos	165880	Exploitation	1979-12-13	2029-12-12	1
047 Parroquia Tres	175518	Exploitation	1985-07-31	2035-07-30	6.0063
048 Jimena	220242	Exploitation	2003-06-25	2053-06-24	2.999
049 Los Chatos	220816	Exploitation	2003-10-08	2053-10-07	9.2157
050 Portree 1	218209	Exploitation	2002-10-11	2052-10-10	46.1784
				Total (excl. 044) [1]	3,339.6722 ha

Table 4-1 Notes:
1.La Fortuna (044) was solicited in 2010 and is pending approval.

Table 4-2: Cozamin Mining Concessions Summary – held by Mining Opco, S.A. de C.V.

Description / Name	Title Number	Claim Classification	Validity		Claim Area (ha)
			From	To	
051 Diez de Mayo	151926	Exploitation	2019-10-06	2069-10-05	26.5725
052 Aries	194829	Exploitation	1992-07-30	2042-07-29	59.6032
053 Adriana	196151	Exploitation	1993-07-16	2043-07-15	15.0000
054 11 de Mayo	211770	Exploitation	2000-07-28	2050-07-27	29.1756
055 Largo III Fracción III	219050	Exploitation	2003-02-04	2053-02-03	4.3593
056 Largo III Fracción I	219196	Exploitation	2003-02-18	2053-02-17	28.2972
057 Largo III Fracción II	219197	Exploitation	2003-02-18	2053-02-17	1.3226
058 Eureka	116153	Exploitation	1961-12-05	2061-12-04	13.9232
059 Segunda A. al Patrocinio	156645	Exploitation	1972-04-12	2072-04-11	7.6662

Description / Name	Title Number	Claim Classification	Validity		Claim Area (ha)
			From	To	
060 Cuarta A. al Patrocinio	156646	Exploitation	1972-04-12	2072-04-11	8.0840
061 Lucia Numero Tres	169353	Exploitation	1981-11-11	2031-11-10	31.0000
062 Lucia Numero Dos	185481	Exploitation	1989-12-14	2039-12-13	5.9975
063 Santa Lucia	210729	Exploitation	1999-11-26	2049-11-25	51.4051
064 Los Clarines	210800	Exploitation	1999-11-26	2049-11-25	74.0235
065 Santa Clara	217768	Exploitation	2002-08-13	2052-08-12	4.2124
066 Manuelito	211809	Exploitation	2000-07-28	2050-07-27	22.7023
067 Mexicapan	212562	Exploitation	2000-11-07	2050-11-06	40.9755
068 Nueva Santa Clara	213110	Exploitation	2001-03-16	2051-03-15	0.6141
069 Chicosantos	215669	Exploitation	2002-03-05	2052-03-04	24.4870
070 Santa Fe	216458	Exploitation	2002-05-17	2052-05-16	10.5408
071 Santo Tomas	217327	Exploitation	2002-07-02	2052-07-01	4.9781
072 La Azteca II	211768	Exploitation	2000-07-28	2050-07-27	9.3218
073 La Fe 2	218080	Exploitation	2002-10-03	2052-10-02	68.0829
074 Largo V	219199	Exploitation	2003-02-18	2053-02-17	10.8878
075 Emma	220995	Exploitation	2003-11-11	2053-11-10	11.1661
076 Angustias II	222293	Exploitation	2004-06-22	2054-06-21	14.7323
077 Libra	223407	Exploitation	2004-12-10	2054-12-09	11.9969
078 El Descuido	223408	Exploitation	2004-12-10	2054-12-09	4.9761
079 Angustias I	223409	Exploitation	2004-12-10	2054-12-09	7.4914
080 Largo VI Fracción IX	224327	Exploitation	2005-04-22	2055-04-21	1.2270
081 Providencia	227729	Exploitation	2006-08-10	2056-08-09	0.7511
082 La Esperanza 3	238676	Exploitation	2011-10-11	2061-10-10	0.4848
083 La Esperanza 3 Fracc. 1	238677	Exploitation	2011-10-11	2061-10-10	0.0097
084 La Bonanza	178542	Exploitation	1986-08-11	2036-08-10	26.9273
085 La Escondida	179318	Exploitation	1986-12-08	2036-12-07	14.0000
086 San Felipe	190210	Exploitation	1990-12-06	2040-12-05	11.2822
087 San Jorge	196316	Exploitation	1993-07-16	2043-07-15	14.9090
088 El Cristo No. 2	213216	Exploitation	2001-04-06	2051-04-05	11.5746
089 Patrocinio	214120	Exploitation	2001-08-10	2051-08-09	9.0000
090 San Pedro De Hercules	214190	Exploitation	2001-08-10	2051-08-09	18.1049
091 La Chiquita	219104	Exploitation	2003-02-04	2053-02-03	1.1148
092 Largo I	219194	Exploitation	2003-02-18	2053-02-17	3.1148
093 Leo	220455	Exploitation	2003-07-29	2053-07-28	52.3500
094 Ana	220992	Exploitation	2003-11-11	2053-11-10	2.3929
095 San Lazaro 2	235676	Exploitation	2010-02-12	2060-02-11	3.7536
				Total	774.5921 ha

In a press release dated October 27, 2003, Capstone announced that it had entered into a Letter of Intent with Bacis to option five advanced exploration projects in Mexico, including Cozamin (Capstone, 2003). On December 1, 2005, Capstone Gold earned a 90% interest in Cozamin wherein Bacis held a 1.5% NSR royalty and 10% carried interest. On June 30, 2006, Bacis converted its 10% interest in Cozamin to an additional 1.5% NSR royalty, leaving Bacis with a 3% NSR royalty on Cozamin (Capstone, 2005).

Three mineral claims acquired in September 2009 from Minera Largo S. de R.L. de C.V., a wholly owned subsidiary of Golden Minerals, are subject to future cash payments of 1.5% of NSR on the first one million tonnes of production and cash payments equivalent to 3.0% of NSR on production in excess of one million tonnes from the acquired claims. The payment on production over one million tonnes also escalates by 0.5% for each $0.50 increment in copper price above $3.00 per pound of copper.

In 2014, Capstone acquired 45 additional concessions from Golden Minerals totalling 775 ha that surround the Cozamin Mine's existing concessions. Seventeen of the claims are subject to a finder's fee to be paid as 1.0% of NSR, or Gross Proceeds Royalty, to International Mineral Development and Exploration Inc., pursuant to existing agreements on the concessions dating back to October 1994 and August 2000.

In September 2017, Capstone executed an agreement to purchase six concessions on the south side of the property, with transfer of ownership of three concessions completed immediately and three concessions finalized in July 2019. No NSR royalty is associated the purchase of these six concessions.

Capstone also entered into a mineral rights sharing agreement with EDR for concessions that abut the southern boundary of the Cozamin Mine property in 2017. The mineral rights sharing agreement provides Capstone with exploration and exploitation rights on seven EDR concessions deeper than 2,000 meters above sea level ("masl"), a depth where copper-rich mineralization has been historically found and mined by Capstone, and provides EDR with exploration and exploitation rights on Capstone concessions above 2,000 masl. Exceptions to these rights are as follows:

- If Capstone's exploration suggests possible continuation of a mineralized domain where base metals contribute more than 60% of the estimated NSR value above 2,000 masl, Capstone will be entitled to conduct exploration above 2,000 masl upon a minimum 30 days notice to EDR, provided the exploration does not interfere with EDR's current or future mining activities;
- If EDR's exploration suggests possible continuation of a mineralized domain where precious metals contribute more than 60% of the estimated NSR value below 2,000 masl, Capstone will be entitled to conduct exploration above 2,000 masl upon a minimum 30 days notice to EDR, provided the exploration does not interfere with Capstone's current or future mining activities.

Capstone granted EDR a 1% NSR royalty on its base metal production on EDR property, and EDR granted Capstone a 1% NSR royalty on EDR precious metal production on Capstone property.

4.2 Surface Rights

Capstone acquired surface rights to the lands required for mining operations and as required for exploration activities (Figure 4-3 and Figure 4-4).

4.3 Environmental Liabilities and Permit Requirements

As of the effective date of this Technical Report, environmental liabilities and issues of environmental concern are limited to those that are expected to be associated with an underground base metal mining operation with mineral processing by flotation. Facilities include an underground mine and associated infrastructure, access roads and surface infrastructure, including the process plant and waste and tailings storage facilities situated within an area of extensive disturbance due to historical mining and processing activities. The mine environmental setting, environmental/regulatory considerations, permit requirements and current environmental liabilities are discussed in Section 18 and Section 20.

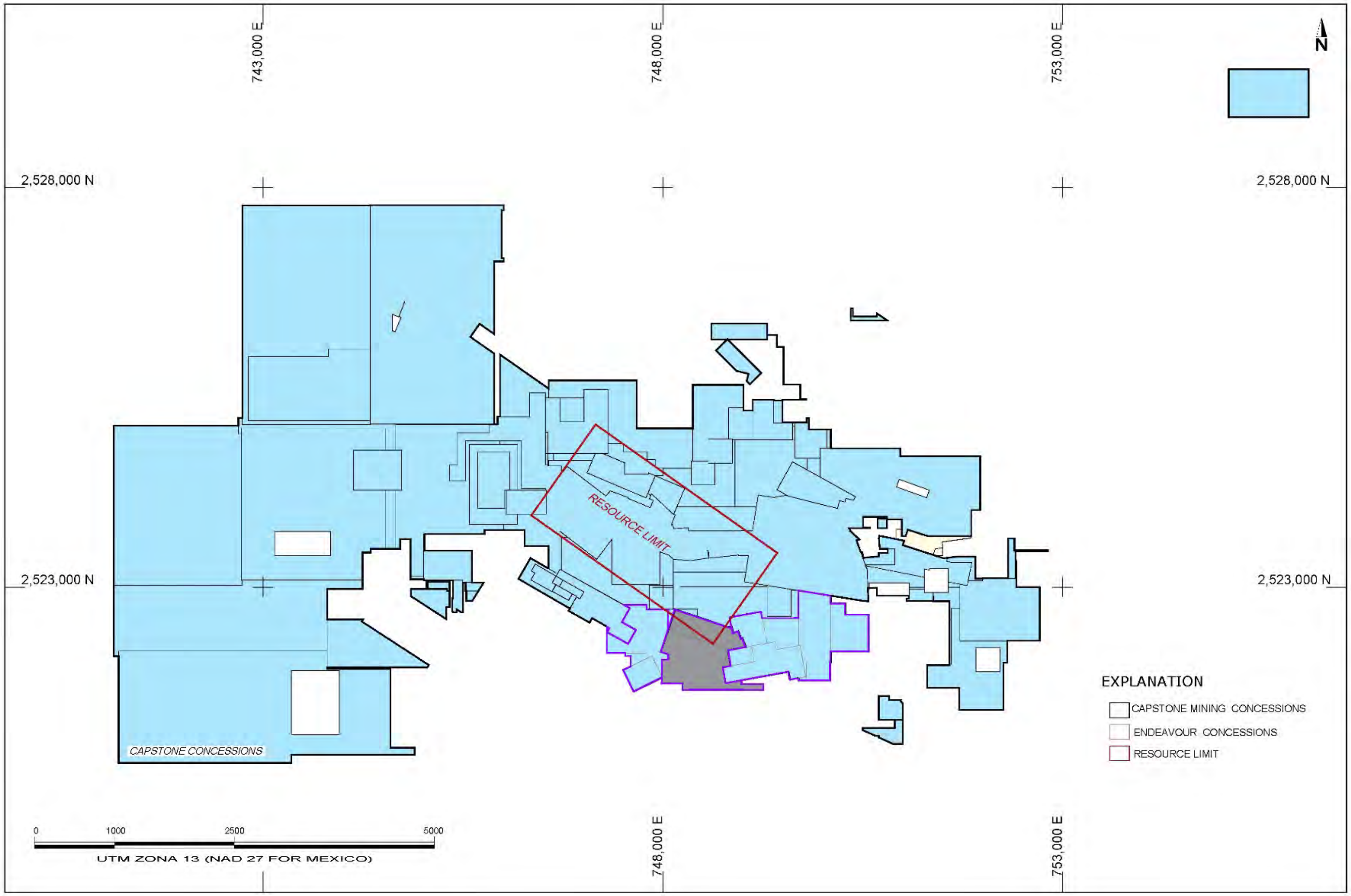

Figure 4-2: Cozamin Mining Concessions; Capstone Gold and Mining OpCo (blue), EDR agreement claims (purple outline with EDR concessions in grey), approximate area of estimated Mineral Resource models (red) and withdrawn concession in processing (yellow) (Capstone, 2019)

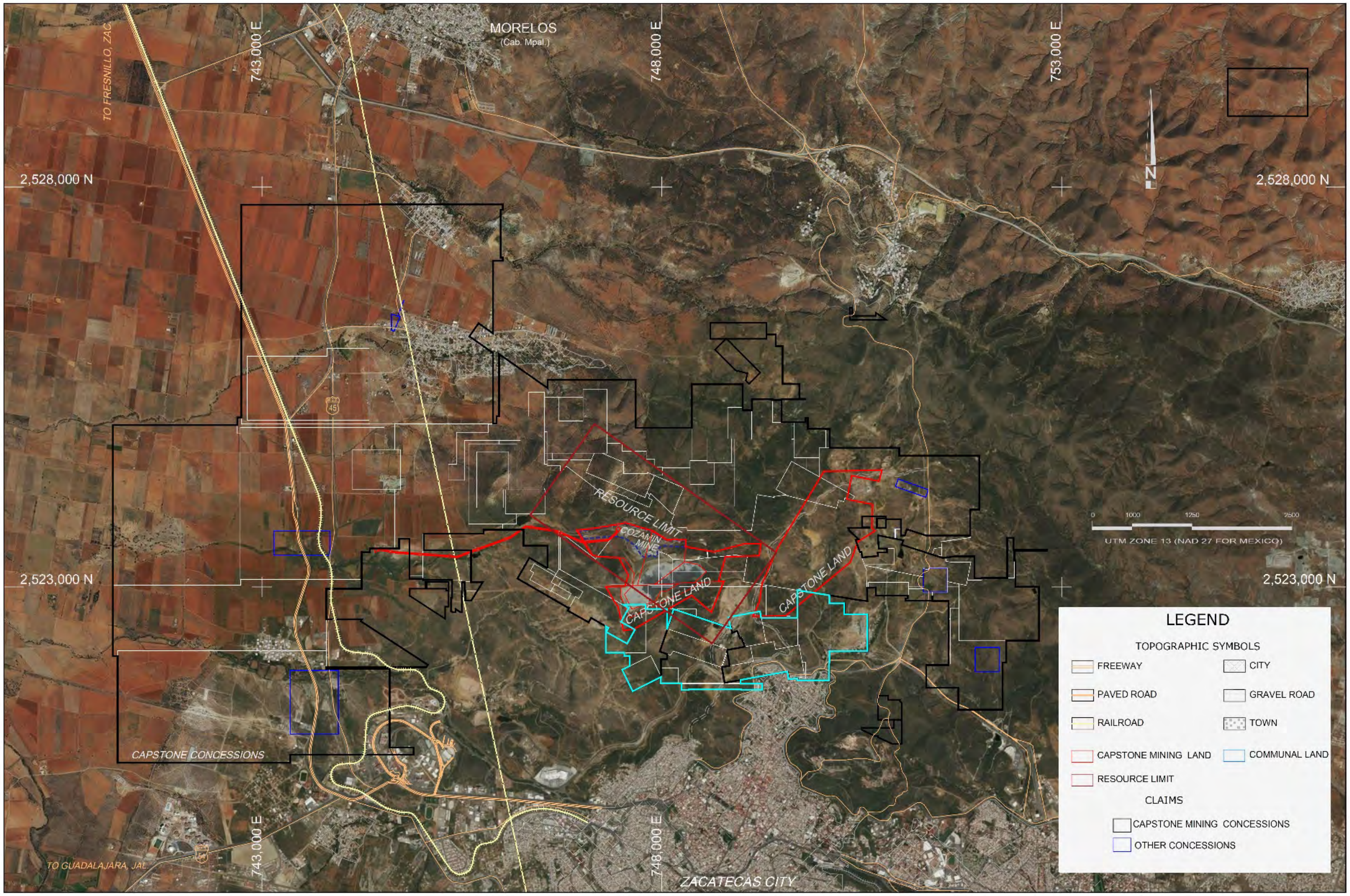

Figure 4-3: Cozamin Surface Rights; Cozamin mining concessions (black) with Endeavour agreement concessions (cyan) and third party concessions (dark blue), Cozamin surface rights (red), Ejido Land (purple), Communal Land (dark blue) Roads, Infrastructure and municipalities (grey) (Capstone, 2020)

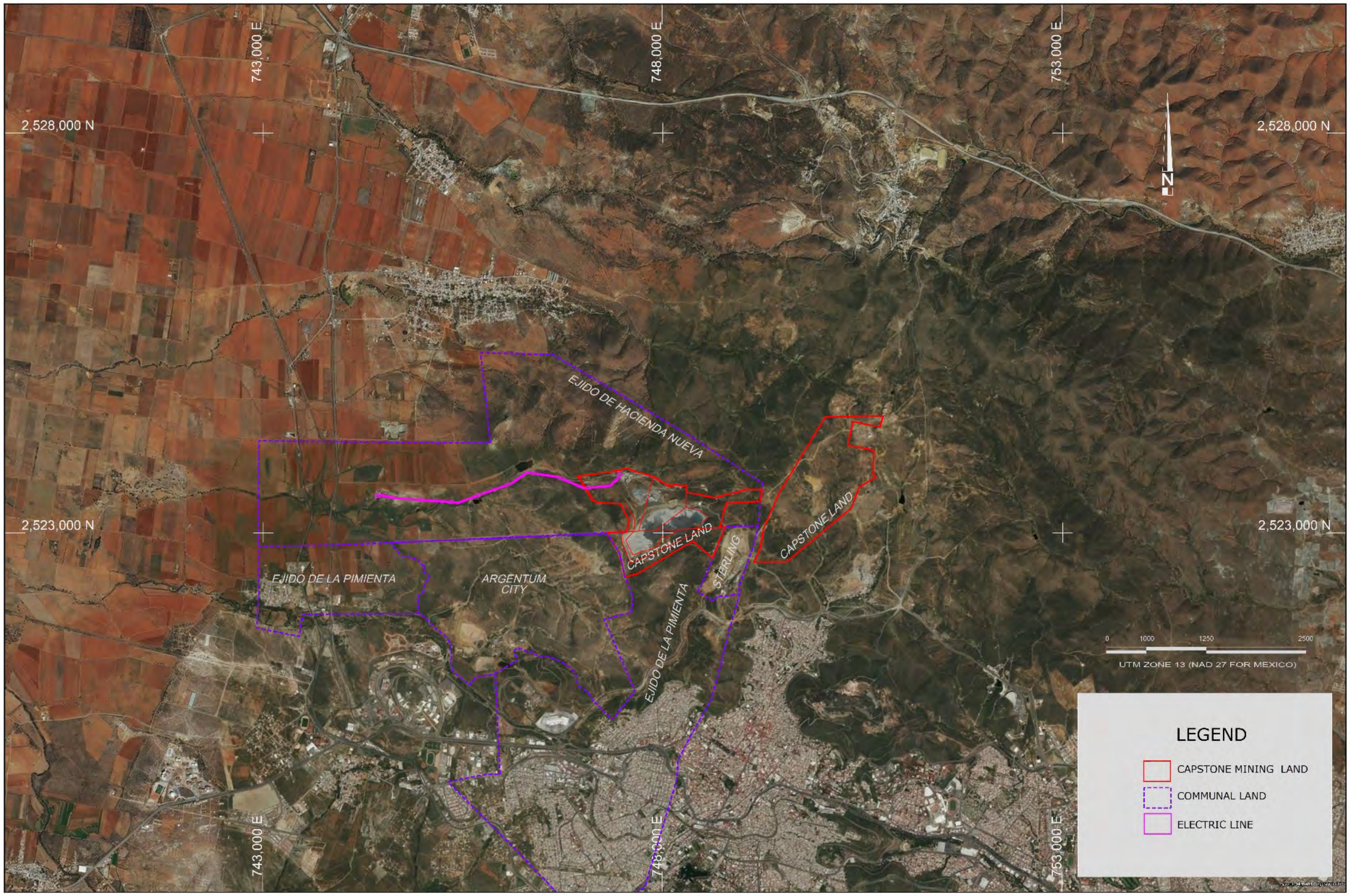

Figure 4-4: Cozamin Surface Rights and Surrounding Ejido Boundaries (Capstone, 2020)

4.4 Obligations to Retain the Property

Several obligations must be met to maintain a mining concession in good standing, including the following:

- Carrying out the exploitation of minerals expressly subject to the applicability of the mining law;
- Performance and filing of evidence of assessment work; and
- Payment of mining duties (taxes).

The regulations establish minimum amounts that must be invested in the concessions. Minimum expenditures may be satisfied through sales of minerals from the mine for an equivalent amount. A report must be filed each year that details the work undertaken during the previous calendar year.

Mining duties must be paid to the Secretaria de Economía in advance in January and July of each year, and are determined on an annual basis under the Mexican Federal Rights Law. Duties are based on the surface area of the concession, and the number of years since the mining concession was issued. Mining duties totaled $77,726 in 2018, $91,889 in 2019 and $86,202 in 2020.

Permits to conduct mining work at Cozamin have been obtained. Existing permits will require updates or extensions based on the LOMP outlined in this report, and additional permits will be necessary should the method of tailings storage change. The mine is subject to risk factors common to most mining operations in Mexico, and Capstone has an internal process in place to study and mitigate those risks that can reasonably be mitigated. No known factors or unusual risks affect access, title or the ability to conduct mining. Specific exploration activities are authorized into 2021.

4.5 Legal Title

Capstone obtained a legal opinion on the mining concession titles from Rafael Cereceres Ronquillo, Abogado, with a business address of C. Centro Ejecutivo 5500 5°Piso Fracc. Desarrollo el Saucito C.P., 31125, Chihuahua, Chihuahua, dated May 21, 2020, which confirmed the mining concessions are registered in the *Public Registry of Mining* naming Capstone Gold, S.A. de C.V and Mining Opco, S.A. de C.V. as titleholders (or assignment of title to Capstone is in progress for six concessions per binding agreements), the mining concessions are valid and should remain in effect provided the titleholders continue to comply with the required obligations.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Cozamin Mine is located in the Sierra Madre Occidental physiographic province near the boundary with the Mesa Central province (Mexican Plateau). The Zacatecas area is characterized by rounded northwest trending mountains with the Sierra Veta Grande to the north and the Sierra de Zacatecas to the south. Elevations at Cozamin vary from 2,400 masl to 2,600 masl.

Maximum temperatures reach approximately 30°C during the summer and freezing conditions and occasional snow can occur in the winter. The rainy season extends from June until September, with average annual precipitation totaling approximately 500 mm. The Zacatecas area is located between forested and sub-tropical regions to the southwest, and desert conditions to the northeast. The climate in the region is semi-arid. Vegetation consists of natural grasses, mesquite or huizache and crasicaule bushes. Standing bodies of water are dammed as most streams are intermittent. The mine operates year-round and has sufficient water.

Cozamin is located approximately 3.5 km to the north-northeast of the city of Zacatecas, the Zacatecas state capital, and operates year-round. The municipality of Zacatecas has a population of approximately 146,000 people and, to the east, the adjacent city of Guadalupe has a population of approximately 188,000. Other communities in the immediate vicinity of the mine include Hacienda Nueva (3 km west), Morelos (5 km northwest) and Veta Grande (5 km north). The mine area falls within the Hacienda Nueva and La Pimienta Ejidos. Staff and operators are sourced from Zacatecas and other nearby communities. There is minimal presence of foreign staff at the mine.

Cozamin is accessible via paved roads to the mine area boundary. All-weather roads in good condition continue thereafter to provide access to the mine and most of the surrounding area. Excellent surrounding infrastructure includes schools, hospitals, railroads and electrical power.

The Cozamin mine is connected to the national power grid with current approval to draw 7.5 megawatts (“MW”). A permit has been received pending CENACE approval to raise this to 9.5 MW, anticipated late in the first quarter of 2021. On-site generators, both operating and back-up, have a capacity of 1.0 MW. Figure 5-1 depicts the mine site layout and building infrastructure.

The Cozamin Tailings Storage Facility is located on the south side of the property. The Stage 9 lift was completed in August 2020. This lift adds approximately 1.6 Mt of storage, which will provide sufficient storage for approximately 1.5 years of mining. Subsequent raises up to a Stage 12 have been designed and have the capacity to store approximately 4.4 Mt of additional tailings. Regulatory approval for construction of Stages 10 and 11 was received in January 2021. Cozamin has engaged consultants to advance feasibility engineering of two potential filtered tailings storage facilities, as well as a tailings filtration plant and a paste backfill system that would return a portion of tailings underground. See Section 18.3 for more detail.

The mine sources its process mill and mine water supply from seasonal rainfall, permitted wells, groundwater inflow from abandoned mines and a local municipal water treatment plant. The existing baseline information suggests that the current water sources and water conservation/management strategy will provide sufficient water for the LOMP.

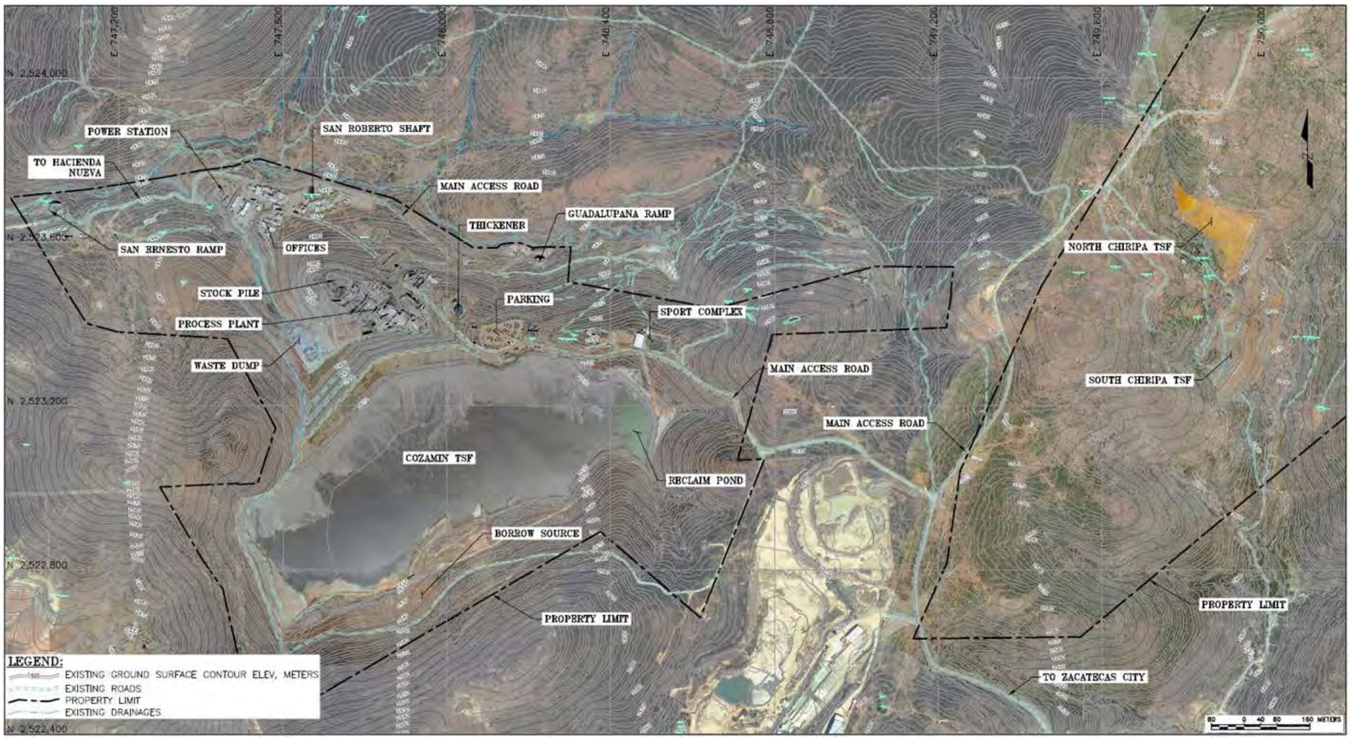

Figure 5-1: Surface Layout of the Cozamin Mine Facilities (Wood, 2020)

6 History

In pre-Hispanic times, the area was inhabited by the Huichol people, who mined native silver from the oxidized zone of argentiferous vein deposits in the Zacatecas Mining District. In 1546, Juan de Tolosa, guided by a local Huichol person, arrived in Zacatecas (then Lomas de Bracho) to examine argentiferous occurrences. In 1548, production commenced at three mines: the Albarrada mine on the Veta Grande system, and the San Bernabe mine and Los Tajos del Panuco on the MNV system. The initial operations worked only the oxides for silver and some gold, and later the sulphide zones were worked for base and precious metals.

During the Mexican Revolution (1910-1917), mining was essentially halted by numerous floods and cave-ins, limiting access for some time thereafter. Foreign companies worked mines in the district for base metals from 1936 to 1948, but the lack of electric power, labour problems and low metal prices resulted in closure of unprofitable mines. From 1972, Consejo de Recursos Minerales worked mines in the El Bote, La Purisima and La Valencia zones.

A number of old workings are located throughout the mine area, but accurate records of early production are not available. Historical production from the Zacatecas district is estimated by Consejo de Recursos Minerales (Cardenas et al 1992) to be 750 million ounces of silver from 20 million tonnes grading over 900 g/t silver and approximately 2.5 g/t gold. Lead, zinc and copper have also been recovered but neither metal production nor ore grades were estimated at that time.

Minera Cozamin was established in 1982 by Jacek Zaniewicki, who consolidated concession holdings over much of the MNV and operated the San Roberto mine and plant at 250 tpd until October 1996. During this period, Industrias Peñoles S.A. de C.V. ("Peñoles") undertook exploration in the district but did not purchase any significant concessions. In all, it is estimated that 1.2 Mt of ore were mined and processed at Cozamin prior to October 1996.

In October 1996, Zaniewicki sold the Cozamin Mine for US$6.8 million to Minera Argenta, a subsidiary of Bacis. In 1997, Bacis expanded the mill to a 750 tpd flotation plant, and processed material from 1997 to the end of 1999, mainly from shallow, oxide zone workings (Capstone, 2007). Bacis developed resources principally by drifting along and then raising up on the MNV within the San Roberto mine.

Diamond drilling was only used as an exploration tool to identify areas with mineralization peripheral to the developed mine workings. These results influenced the location of Capstone's 2004 drillhole locations. The sample collection, preparation and analysis procedures followed for these drillholes are unknown and Capstone has not used any data from these drillholes in the Mineral Resources estimated presented herein.

Near the end of 1998, Bacis closed the Cozamin Mine due to low metal prices and under-capitalization of the asset. Poor grade control in the mine and poor recovery in the plant were also contributing factors to the closure. Diamond drillholes completed by Peñoles and Bacis suggested that the average grade of copper in the mine might increase with depth, but these results were not followed up with further exploration.

On December 1, 2005, Capstone Gold earned a 90% interest in Cozamin wherein Bacis held a royalty of 1.5% on NSR and 10% carried interest. On June 30, 2006, Bacis converted its 10% interest in Cozamin to an additional 1.5% NSR royalty, thus leaving Bacis with a 3% NSR royalty regarding Cozamin (Capstone Gold, 2005).

Cozamin Mine declared commercial production August 31, 2006 (Capstone, 2006) and operated continuously since that time. Production is summarized in Table 6-1.

Table 6-1: Production Summary

Operating Statistics[1]	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008[2]
Production (contained metal)													
Copper (000's pounds)	37,926	35,841	36,155	36,888	31,542	34,502	43,680	45,515	46,909	41,212	35,552	36,121	26,372
Silver (000s ounces)	1,204	1,366	1,164	1,001	1,001	1,287	1,615	1,682	1,576	1,566	1,403	1,521	1,299
Zinc (000's pounds)	14,587	18,463	14,900	9,330	9,244	12,919	14,350	17,825	17,221	18,035	17,348	15,476	9,710
Lead (000's pounds)	-	-	3,150	109	287	1,508	2,531	2,728	2,891	3,960	9,142	10,134	6,442
Mining – Underground													
Ore (000s tonnes)	1,083	1,143	989	912	996	1,079	1,216	1,209	1,171	1,110	979	973	826
Milling													
Milled (000s tonnes)	1,079	1,146	986	912	1,001	1,080	1,228	1,206	1,173	1,098	982	976	833
Tonnes per day	2,949	3,140	2,702	2,499	2,736	2,958	3,365	3,305	3,205	3,008	2,690	2,673	2,282
Copper grade (%)	1.67	1.50	1.75	1.91	1.51	1.56	1.74	1.86	1.95	1.84	1.80	1.84	1.63
Silver grade (g/t)	43	47	48	43	43	53	58	61	59	61	62	66	65
Zinc grade (%)	0.92	1.07	1.04	0.71	0.66	0.84	0.85	1.12	1.03	1.09	1.27	1.17	1.31
Lead grade (%)	-	-	0.28	0.07	0.07	0.14	0.18	0.19	0.20	0.25	0.63	0.69	0.55
Recoveries													
Copper (%)	95.4	94.4	95.0	96.1	94.8	93.0	92.7	92.1	93.0	92.8	91.2	91.2	88.3
Silver (%)	80.1	77.7	77.2	78.7	72.4	69.6	70.8	71.1	71.0	72.5	71.7	73.1	74.2
Zinc (%)	66.4	68.2	65.6	65.5	63.0	64.6	62.0	60.1	64.9	68.2	63.0	61.7	40.3
Lead (%)	-	-	51.1	8.0	18.7	44.2	52.5	54.5	55.8	64.2	67.6	68.4	63.7
Concentrate Production													
Copper (dmt)	62,705	61,270	62,949	61,473	53,744	60,826	77,734	81,351	81,305	70,650	64,356	66,977	53,293
Copper (%)	27.4	26.5	26.1	27.2	26.6	25.7	25.5	25.4	26.2	26.5	25.1	24.5	22.4
Silver (g/t)	553	607	508	502	566	598	583	574	540	602	536	571	572
Zinc (dmt)	13,548	17,297	14,300	8,919	8,866	12,453	14,100	16,928	16,057	16,720	16,448	15,008	10,610
Zinc (%)	48.8	48.4	47.3	47.5	47.3	47.1	46.2	47.8	48.6	48.9	47.8	46.8	41.5
Lead (dmt)	-	-	2,305	81	222	1,166	1,950	2,205	2,216	2,796	6,282	6,575	4,705
Lead (%)	-	-	62.0	61.7	58.4	58.6	58.8	56.1	59.2	64.2	66.0	69.9	62.1
Silver (g/t)	-	-	1,842	2,996	3,155	3,112	2,504	2,541	2,324	2,216	1,391	1,382	1,801

Notes:
1. Source of the operating statistics is Capstone's Form 51-102F1 Management Discussion & Analysis from December 2007 to February 2021.
2. From August 2006 to December 2007, Cozamin mined 736 kt tons and milled 723 kt of ore at 1.66% copper, 70 g/t silver, 1.39% zinc and 0.56% lead. Recoveries were 86% copper, 73% silver, 44% zinc and 52% lead.

7 Geological Setting and Mineralization

7.1 Geological Setting

The Zacatecas Mining District covers a belt of epithermal and mesothermal vein deposits that contain silver, gold and base metals (copper, lead and zinc). The district is in the Southern Sierra Madre Occidental Physiographic Province near the boundary with the Mesa Central Physiographic Province in north-central Mexico. The dominant structural features that localize mineralization are of Tertiary Age, and are interpreted to be related to the development of a volcanic centre and to northerly trending basin-and-range structures. (Ponce and Clark, 1988)

The Zacatecas Mining District occurs in a structurally complex setting, associated with siliceous subvolcanic and volcanic rocks underlain by sedimentary and meta-sedimentary rocks.

Geologic units of the Zacatecas area include Triassic metamorphic rocks of the Zacatecas Formation and overlying basic volcanic rocks of the Upper Jurassic or Lower Cretaceous Chilitos Formation. The Tertiary rocks consists mainly of a red conglomerate unit deposited in Paleocene and/or Eocene times and overlying rhyolitic tuff and intercalated flows that were deposited from Eocene to Oligocene times. Some Tertiary rhyolite bodies cut the Mesozoic and Tertiary units and have the appearance of flow domes.

7.1.1 Zacatecas Formation

The Zacatecas Formation represents the oldest rocks in the district and appears to be equivalent to the Pimienta Metasediments of Ponce and Clark (1988). It is an Upper Triassic marine unit, comprising pelitic sediments and carbonate rock that have been metamorphosed to sericite schists, phyllites, slates, quartzites, metasandstone, flint, metaconglomerate and recrystallized limestone. The unit hosts the El Bote and Pimienta vein systems to the west of the city of Zacatecas.

7.1.2 Chilitos Formation

The Upper Jurassic to Lower Cretaceous Chilitos Formation is composed of andesitic to basaltic volcanic rocks with pillow structures and some limestone lenses deposited in a marine setting. The units are referred to as greenstone of the Zacatecas area and as the Zacatecas microdiorite by Ponce and Clark (1988).

7.1.3 Zacatecas Red Conglomerate

The red conglomerate contains fragments of Chilitos and Zacatecas Formation rocks and is probably of Early Tertiary (Paleocene-Eocene) age. The unit is deposited south of the La Cantera fault in the structural zone situated in the city of Zacatecas.

7.1.4 Tertiary Volcanic and Volcaniclastic Rocks

Tertiary volcanic rocks are generally associated with and deposited south of the Zacatecas caldera. They are described by Consejo de Recursos Minerales (Cardenas et al, 1992) as rhyolitic tuffs with flow intercalations of rhyolite composition that were extruded during the

Oligocene to Eocene. The rhyolitic rocks are reported to have moderate to high silica content and high potassium content.

A very small group of epiclastic deposits occur in a road cut near the Bufa flow dome and small areas of chemical sediments are present in the western flank of the Zacatecas caldera (Ponce and Clark, 1988).

7.1.5 Rhyolitic Subvolcanic Bodies

Ponce and Clark (1988) suggest that subvolcanic intrusive phases include silicic subvolcanic bodies, lava-flow domes, tuffs, ignimbrite bodies, pipes and autoclastic breccias. The rhyolitic subvolcanic bodies, generally dikes and subvolcanic bodies, are structurally controlled by radial or concentric faults and fractures of the caldera structure. The subvolcanic rhyolitic bodies are concentrated in the central part of the Zacatecas district in a northwest-southeast trending zone.

Rhyolite flows and dikes are spatially associated with the San Roberto mine. Cerro La Sierpe (500 m north-northwest of the San Roberto shaft), Cerro San Gil (1.5 km west-northwest of the San Roberto shaft) and Cerro El Grillo (750 m south-southwest of the San Roberto shaft) are all rhyolite flow domes that, together, surround the western third of the MNV. To date, economically significant copper mineralization has only been found within this sector of the MNV system. Rhyolite dikes are difficult to distinguish from massive rhyolite flows, however some of the best cross-cutting quartz veins and veinlets at Cozamin occur within massive rhyolite bodies that do not display the fluidal textures and polymictic inclusions common in most of the other rhyolite bodies.

The host rocks for the MNV are intercalated carbonaceous meta-sedimentary rocks and andesitic volcanic rocks ranging in age from Triassic to Cretaceous, and Tertiary rhyolite intrusive rocks and flows (Figure 7-1). Mineralization in the MNV appears to have been episodic. A copper-silver dominant phase is interpreted as the first stage of mineralization and is considered to be the most important phase of mineralization at Cozamin. In general, this copper-silver phase was emplaced then enveloped, overprinted or brecciated by moderate to strong zinc-lead-silver mineralization. Thus, the host lithology to the vein does not appear to have influenced the strength of the copper-silver phase of mineralization which is typically enveloped by younger vein material. Local rheology contrasts between rock units may have some control on vein emplacement, as well as metal content. For example, the Mala Noche Footwall Zone ("MNFWZ") is intimately associated with several rhyolitic dikes where mineralized veins often crosscut or follow dike contacts with the country rock.

The close association of the western third of the MNV and the entire MNFWZ with rhyolite flow domes and the strength of contained copper mineralization in this sector of the vein support the hypothesis that the copper mineralization in the San Roberto mine at Cozamin is relatively close to volcanic to sub-volcanic magmatic centre(s). Figure 7-2 shows the spatial association of the San Roberto mine with the significant complex of rhyolite flow domes mapped in the area.

Alternatively, other rheology contrasts may localize faulting along the contact of the phyllites with the more competent andesites and shales. One kilometre to the south of the MNV, mineralization in the Parroquia mine is hosted by gneissic rocks that are mapped by the Consejo de Recursos Minerales as Upper Jurassic, Zacatecas Formation.

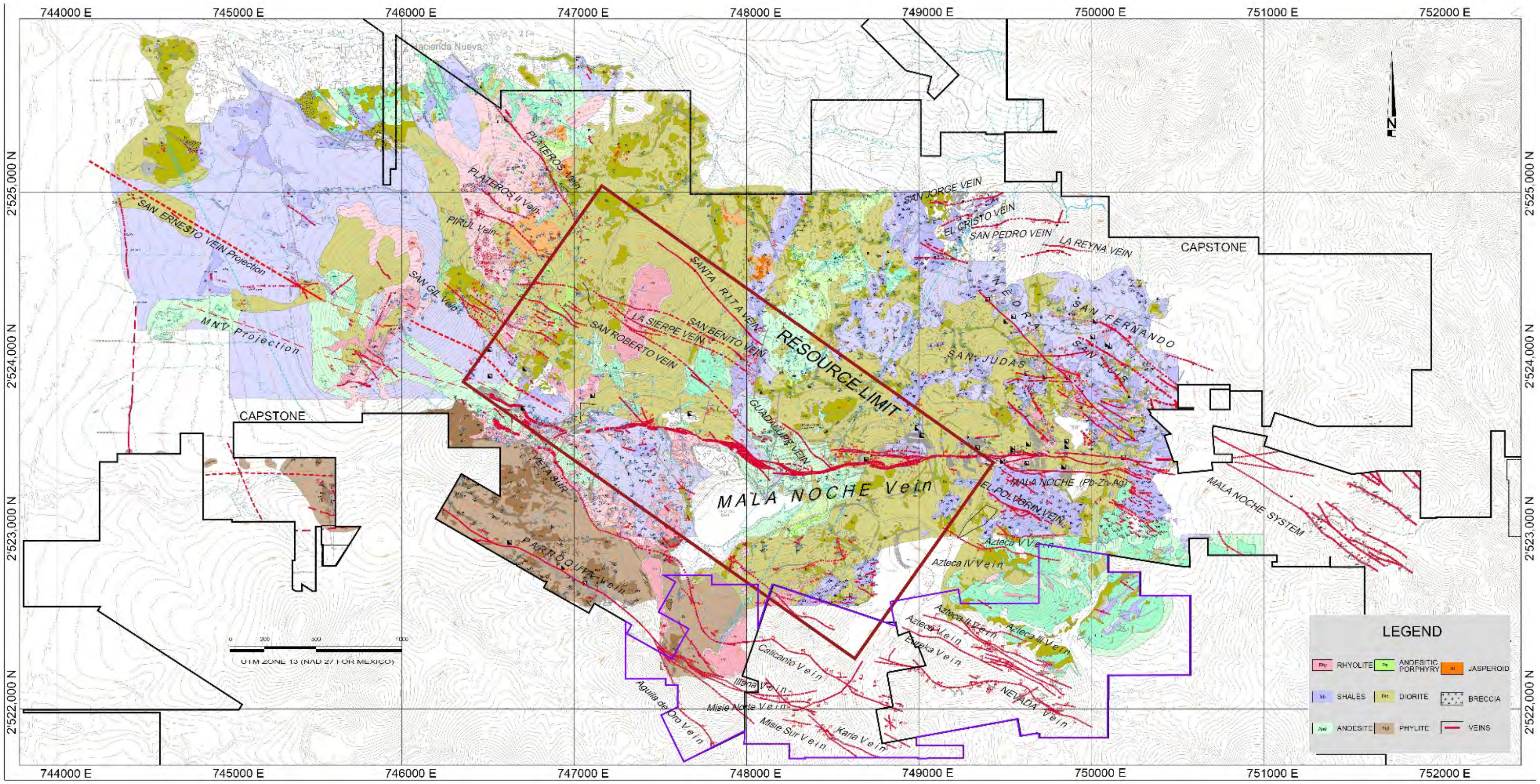

Figure 7-1: Mapped Geology of the Cozamin mining concessions (Source: Capstone, 2020)

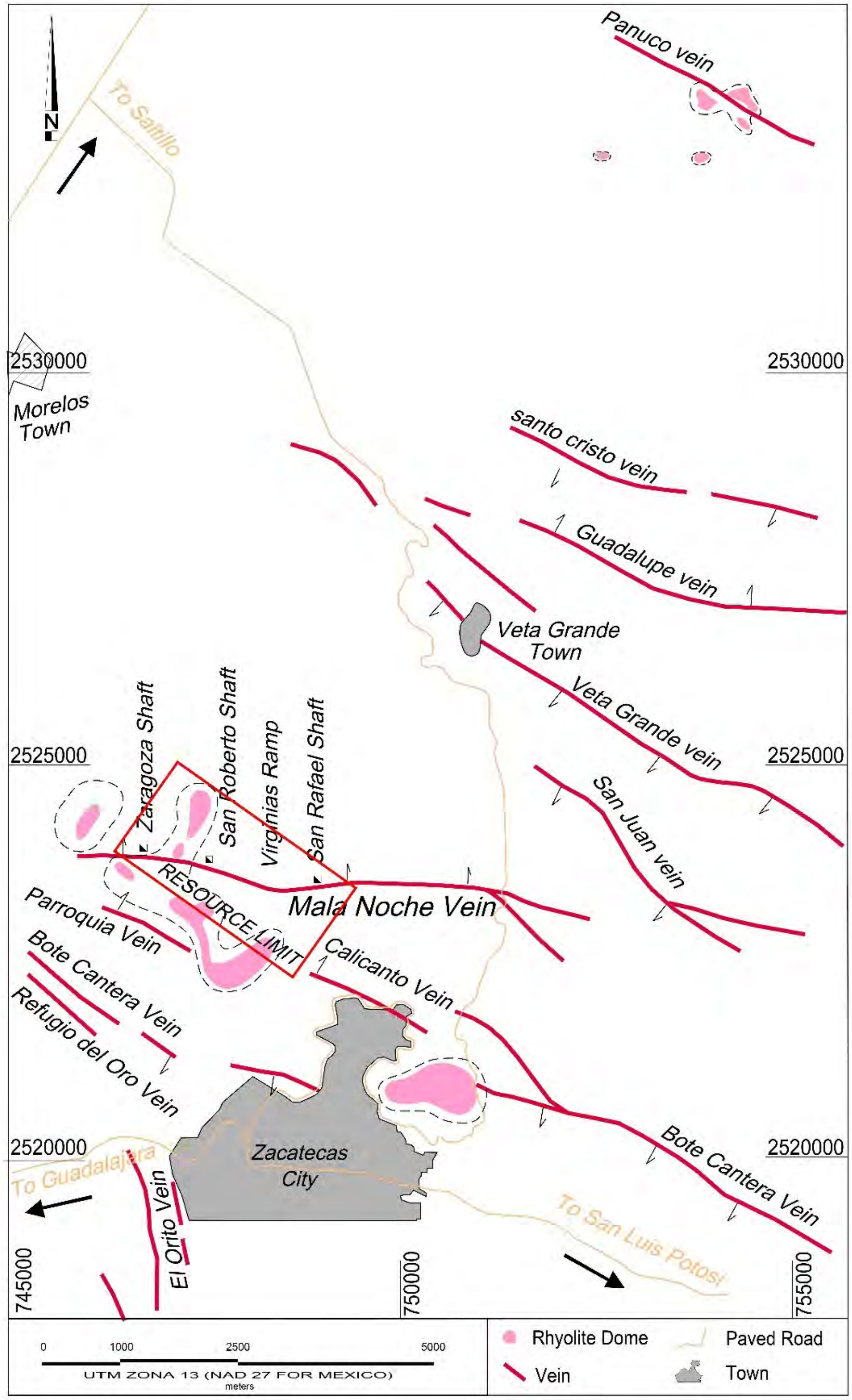

Figure 7-2: Plan Showing the Distribution of Mineralized Veins near Zacatecas (Source: Capstone, 2020)

7.2 Faulting

Rock textures suggest the MNV is infilling open spaces controlled by brittle faulting along the Mala Noche Fault System. This system of faults is named for the principal fault associated with mineralization at Cozamin but other subsets of faults also host mineralization, including El Abra, Rosita, San Ernesto and the MNFWZ.

In the San Roberto mine, the MNV strikes west-northwest ("WNW") (N70-80W) and the dip varies from 38° to 90° to the north. There is a clear association of higher copper grades with steeper dips of the Mala Noche fault. Where the MNV is weakly copper mineralized, it appears that the principal style of alteration in the fault is mostly quartz-pyrite.

Mineralized cross faults at Cozamin include:

- El Abra fault is closely associated with the Mala Noche fault with which it forms an anastomosing set in both strike and dip directions. Grades in the San Roberto mine are strongest where the two faults coalesce. The dominant alteration associated with the El Abra fault is silica-calcite-pyrite. On Level 8 immediately east of the shaft, the drift roof had to be stabilized where the El Abra fault meets the Mala Noche fault/vein.
- Rosita fault is also sub-parallel to the Mala Noche but mostly lies to the north in the hangingwall on the MNV. The principal alteration associated with the Rosita fault is coarse crystalline calcite, suggesting that this fault is possibly post mineralization and quite open.
- San Ernesto fault is best known in the San Ernesto shaft which was sunk 60 m on the fault in the hangingwall to the Mala Noche at the west end of the San Roberto mine. The fault strikes WNW and dips at about 60° to the north-northeast ("NNE"). Mineralization encountered in the fault to date has been zinc and lead dominant. This fault and associated mineralization may be related to lenses of hangingwall zinc found in the western sector of the San Roberto mine.
- MNFWZ, the principal structure hosting Cozamin Mineral Reserves, is located in a fault-splay off the Mala Noche Fault System, striking approximately 30° oblique to the MNV at approximately 145° with an average dip of 54°. Mineralized veins and rhyolite dikes both exploit and closely follow the structure.

Other cross faults include:

- Margarita Fault is located about 100 m west of the shaft on Level 8., striking NNE and dipping at 70° to the WSW. Minor argillic alteration.
- Josefina fault is found on Level 8 about 50 m west of the shaft. The fault strikes southeast ("SE") and dips at about 55° to the northeast ("NE"). Minor argillic alteration.
- Lorena fault is located about 25 m west of the shaft on Level 8. This fault strikes NE and dips at about 70° to the SE. The intersection of the Lorena and Josefina faults on Level 8 resulted in poor roof stability in the area of a prior electrical substation 35 m west of the shaft. Weak argillic alteration.

- Anabel Fault is found 155 m east of the shaft on Level 8. The fault strikes NNE and dips east at about 60°. The projection of the MNV is offset about 10 m horizontally along this fault. Mineralization west of this fault is strongly diminished. Alteration is silicification.
- Lupita fault is located 255 m east of the shaft on Level 8. The fault strikes NE and dips at about 65° to the SE. Minor silicification.
- Karla fault is located 465 m east of the shaft on Level 8 and was mapped only on Level 8. Its strike is NE and the fault dips 65° to the SE. No alteration.

The principal cross faults in the San Roberto mine area displayed on Level 8 and are presented in Figure 7-3.

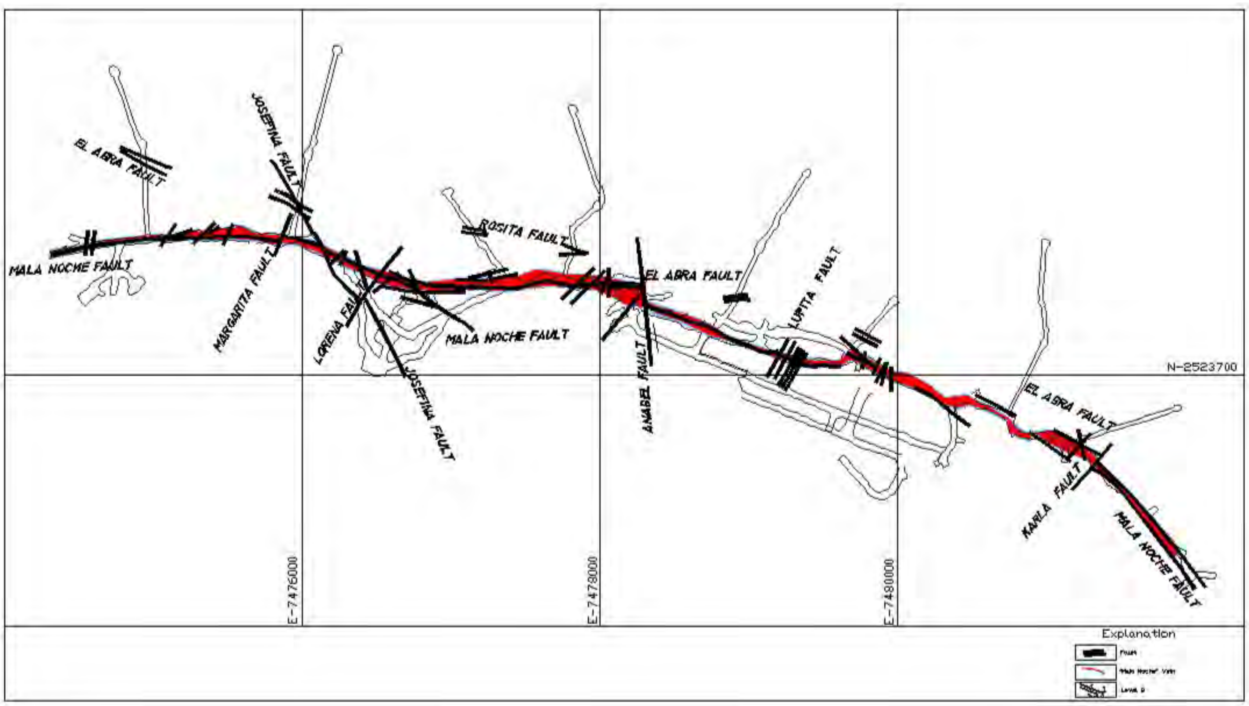

Figure 7-3: Cross faults (black heavy line) with Mala Noche fault (red) and Level 8 development (fine black lines) at San Roberto area of Cozamin (Capstone, 2009)

7.3 Mineralization

Cozamin's dominant mineralized vein systems include the MNV and the MNFWZ. On surface, the MNV was mapped for 5.5 km across the property. It strikes approximately EW and dips on average at 60° to the N. There are several shafts that provide access to the historical workings at Cozamin. The largest historical mined area is San Roberto with a strike length of 1.4 km, and the second largest mined area is San Rafael mine with a strike length of 0.5 km. Mineralization peripheral to these workings was the principal target of Capstone's early exploration programs at Cozamin. The MNFWZ is not exposed at surface, principally because the majority of the strike extent lies beneath the tailings pond. However, based on drilling it strikes approximately 145° over a length of more than 2.2 km and dips on average 54° to the NE.

The MNV system occupies a system of anastomosing faults. The mineralized bodies within the Mala Noche Fault System appear to be strongest where the individual faults coalesce into a single fault zone. Results from exploration and mine development to date indicate that some of the strongest mineralization in the San Roberto mine on the MNV system plunges to the west at approximately -50° within the vein. Post mineralization offsets of the MNV are minimal and occur along high angle, normal faults that strike northeast. The MNFWZ comprises multiple veins in close spatial association with rhyolite dikes and locally cross-cut the intrusions themselves. The strongest mineralization at the MNFWZ plunges to the northwest at approximately -10° within the vein. The relative age of the copper mineralization ranges from contemporaneous with to perhaps slightly post the rhyolite magmatism. Similar to the MNV, post mineralization offsets at the MNFWZ are minimal and occur along high angle normal faults.

Mineralization in the MNV at Cozamin appears to have been episodic. Intermediate sulphidation pyrite-pyrrhotite-chalcopyrite dominant mineralization is enveloped, overprinted or brecciated by younger sphalerite dominant intermediate sulphidation epithermal alteration and mineralization in a telescoped, intrusive related hydrothermal system. Well-banded quartz, or quartz-carbonate veins, best classified as low sulphidation are also observed but are generally volumetrically insignificant in the area of the mine. These veins have open space filling textures with quartz druse vug linings. The MNV in the San Roberto mine workings shows contained sulphides to occur as disseminations, bands and masses. The San Roberto area hosts both the copper dominant and zinc dominant epithermal events, whereas the San Rafael area is only associated with the zinc dominant epithermal event. Both events are also present at MNFWZ. Conclusions about mineralization styles are based on observations in drill core and the exposure of the copper-silver phase of mineralization in mine workings, however a large portion of the upper parts of the mine are not accessible.

Pyrite is the dominant vein sulphide and typically comprises approximately 15% of the MNV in the San Roberto mine. It occurs as fine disseminations and veinlets, coarse crystalline replacements, and pseudomorphs of epithermal textured carbonate minerals and possible barite. Arsenopyrite locally occurs as minor, microscopic inclusions in pyrite. Pyrite content in the MNFWZ veins is typically greater than 20%.

Pyrrhotite is the second most common sulphide mineral but is present only in the intermediate and deeper levels of the San Roberto mine, and the up-dip portion of the MNFWZ. It occurs as replacement masses, pseudomorphs of platy masses and acicular replacements probably after amphibole. Pyrrhotite commonly occurs as an envelope to, or intermixed with, strong chalcopyrite mineralization. Pyrrhotite ranges from monoclinic to hexagonal, or a combination of these polytypes.

Chalcopyrite is the only copper sulphide recognized visually at Cozamin. Like pyrrhotite, it is more common at the intermediate and deeper levels of the mine. It occurs as disseminations, veinlets and replacement masses. These masses appear to be fractured and brecciated at intermediate levels in the mine. Mineralization at the MNFWZ in the copper dominant veins is chalcopyrite dominant in contrast to the polymetallic nature of the main MNV.

Sphalerite is the most common economic sulphide in the zinc-dominant areas of MNFWZ, such as Vein 10-southeast, and in MNV's San Roberto-Zinc zone and San Rafael. Most of the sphalerite is marmatitic. It occurs as disseminations and coarse crystalline masses and is commonly marginal to the chalcopyrite-dominant portion of the vein. Sphalerite is locally present in the MNFWZ copper dominant veins, shifting to the dominant sulphide in the zinc dominant veins.

Franklinite, a zinc oxide in the spinel group of minerals, accounts for some of the zinc mineralization in the MNV. Recovery of zinc is lower in areas of franklinite mineralization.

Galena is less common than sphalerite but is generally associated with it. Where it is abundant, it occurs as coarse crystalline replacement masses. Both coarse and fine crystalline masses of galena are argentiferous.

Argentite is the most common silver mineral. It has been identified microscopically occurring as inclusions in chalcopyrite and pyrite. Assays indicate that silver is also probably present in sphalerite and galena. Bismuth and silver selenides occur as inclusions predominantly in chalcopyrite and pyrite.

At MNV and MNFWZ, moderate propylitic wall rock alteration is generally limited to 3 m into the hangingwall and footwall. The main gangue minerals are quartz and calcite, and in some cases rhodochrosite, gypsum, barite, or ilvaite. The quartz occurs as coarse-grained druse crystalline masses, and cross-cutting quartz veinlets.

8 Deposit Types

All mineralization at Cozamin occurs in veins, and fracture-controlled systems of veinlets. Currently mined mineralization at Cozamin is best described as intermediate sulphidation. The copper-rich intermediate sulphidation mineralization is an early phase that is enveloped, overprinted or brecciated by zinc-rich intermediate sulphidation mineralization. The copper veins are inferred to be higher temperature, have significantly fewer vugs and can be massive pyrrhotite-pyrite-chalcopyrite with little gangue. Zinc-rich veins also tend to be sulphide rich, like the copper-rich ones, but with slightly more gangue. Well-banded quartz, or quartz-carbonate veins are inferred to be lower temperature and best classified as low sulphidation. They often have open space filling textures with quartz druse vug linings and typically gold and silver rich with lesser base metals and are generally not being mined today, but were historically important.

This transition from intermediate sulphidation copper-dominant mineralization to intermediate sulphidation zinc-dominant mineralization is thought to be the result of an evolving, telescoped hydrothermal system. Blocks or fragments of massive chalcopyrite-pyrite-pyrrhotite mineralization enveloped by zinc-dominant mineralization are observed in drill core and in mine workings. This telescoping system is closely associated with the district’s largest center of rhyolite flow domes which may be the shallow expression of a hidden, inferred buried felsic stock.

9 Exploration

9.1 Geological Mapping

Cozamin exploration geologists have systematically mapped a total of 1,694 ha throughout the Cozamin property at scales of 1:1,000 or 1:2,000 since 2004. Mapped Cozamin geology is illustrated in Section 7.1 (Figure 7-1).

9.2 Surface Channel Samples and Chip Specimens

At surface, channel sampling was used as part of r exploration along the strike of the MNV system from 2004 to 2013. Channel samples were obtained using a combination of hammer, chisel, and diamond saw cutting. Channel samples total approximately 2 kg in mass and have approximate dimensions of 50-150 cm in length, 5 cm in width and 3 cm in depth. Capstone considers these surface channel samples to be fully representative of the vein material.

The surface chips, by definition, are specimens not samples, and thus are not representative of the material from which they have been extracted. The goal of the surface chip sampling is to quickly ascertain the presence or absence of anomalous geochemical values, which would support the decision to conduct additional exploration. Capstone has collected chip specimens from outcrops on a 25 m by 25 m grid from several areas on the property (

Table 9-1). Chipped material is collected on a blanket and split into smaller pieces. The specimen is then split into four parts, with approximately 2 kg placed into the sample bag as the specimen for analysis. The remaining material is left at the sample site.

All surface channel sample and chip specimen locations were obtained using GPS and are stored in Capstone's database. All material is photographed and logged for lithology, alteration and mineralization. Quality control samples including certified reference material, sample blank, or duplicate samples were not inserted into the sample stream. Preparation and analysis procedures for channel samples and chip specimens follow the same procedures described in Section 11 pertaining to the analysis of drill core samples. Details of Cozamin's surface channel and chip sampling programs since 2004 are summarized in Table 9-1. Cozamin used the assay results from these programs to assist with exploration drillhole planning, but they are not included in resource estimation. Exploration drilling after 2014 is guided by 3D geological modelling not surface sampling.

Table 9-1: Cozamin Surface Channel and Chip Program details

Year	Surface Channel Samples	Surface Chip Specimens
2004	2,250 from 66 sample lines spaced 15 m apart along 1,000 m of the MNV system.	None
2005	1,350 from 40 sample lines spaced 20 m apart along 800 m of the MNV system.	None

Year	Surface Channel Samples	Surface Chip Specimens
2006	1,200 from 40 sample lines spaced 25 m apart along 1,000 m of the MNV system.	None
2007	1,200 from 40 sample lines spaced 25 m apart along 1,000 m of the MNV system.	None
2008	None	300 from outcrops where veinlets, cross-cutting quartz veins, and alteration were observed. Specific area was not defined.
2009	No exploration conducted.	
2010	708 from 20 sample lines spaced 50 m apart along 1,000 m of the Mala MNV vein system.	1,118 from Rondaneras covering an area of 700 m by 800 m.
2011	135 from 27 sample lines spaced 10 m apart along 300 m of the El Polvorín vein.	276 from El Polvorín, covering an area of 300 m X 400 m.
2012	None	None
2013	185 from 37 sample lines spaced 10 m apart along 400 m of the Parroquia vein. 235 from 15 sample lines spaced 20 m apart along the Manto San Eduardo system.	359 from La Parroquia, covering an area of 500 m X 400 m.
2014 to 2020	None	None

9.3 Geophysical Surveys

9.3.1 Ground Magnetic Survey

In the summer of 2004, Zonge Engineering and Research Organization conducted a ground magnetics survey over the MNV system including 24 north oriented lines, 25 m station spacing, for a total of 24.3 line-km. The field data was processed to produce only total magnetic field, however this was sufficient to map the linear east-west orientation of the MNV system as well as other intrusive features.

9.3.2 Aeromagnetic Survey

In the summer of 2009, New Sense Geophysics Limited conducted an aeromagnetic survey at Cozamin including a main survey block covering the entire property and an extension block to the northeast. The main block was flown at 50 m line separation with the magnetic sensor draped at 30 m above the terrain at an azimuth of N30°E. This orientation allowed the survey to cross the east-west vein trends as well as the northerly trending basin and range faults. Physical obstructions such as power and telephone lines and small villages required the terrain clearance to be increased locally. Control lines were flown east-west at 1 km spacing. The extension block was flown with the same parameters as the main block but with 600 m line spacing; the extension block was added to the survey to determine the extent of a broad northwest trending magnetic high identified while flying the main block. A total of 1,733 line-km was flown in the main block and 90 line-km in the extension block. New Sense delivered the final leveled magnetic data, while EGC Inc. was responsible for project quality control, development of the processed grids and images (total magnetic field only), and interpretation.

In 2013, the 2009 aeromagnetic survey data was reprocessed in-house to generate first vertical derivative (total field and reduced to pole), analytical signal and magnetic tilt products, as well as a 3D inversion using UBC code. The interpretation of the reprocessed data has been useful for tracking infrastructure such as power lines and pipelines, the general structural and vein trends of the MNV system, and in some cases has been used as a secondary tool to help guide exploration drill planning in new target areas.

9.3.3 Resistivity Study and Ground Induced Polarization Surveys

Zonge Engineering and Research Organization was contracted by Capstone in 2004 to undertake a resistivity study through measurement of magnetic response using CSAMT (Controlled Source Audio Magnetotellurics) over 8 line-kilometres and NSAMT (Natural Source Audio Magnetotellurics) (Zonge, 2004) over 16 line-kilometres. The survey indicated the presence of sulphide mineralization at depth along the MNV structure below known mineralized extents. These were used to assist with exploration drillhole planning.

From October 2009 until January 2010, Zonge conducted a dipole-dipole complex resistivity induced polarization (“CRIP”) survey on 13 lines and 391 stations covering a total of 58.7 line-km (Zonge, 2010). In comparison to conventional induced polarization (“IP”) data, CRIP penetrates deeper into the ground, is able to better discriminate between certain minerals (e.g., sulphide bearing versus barren rock), and provides a higher quality dataset with contaminated data and the effects of coupling removed. Zonge noted the quality of the data to be good despite the proximity of the study to the city of Zacatecas and radiofrequency interference sources (power lines, metal pipelines, metal fences and buildings, etc.). The results from the study however, proved inconclusive with respect to identifying further exploration targets.

In 2010, a pole-dipole time domain induced polarization (“TDIP-resistivity”) geophysical survey was carried out at Cozamin on 39 lines covering a total of 70.3 line-km by in-house staff. The survey was conducted using rental equipment including a TSQ-3 Scintrex transmitter and IPR-12 Scintrex receiver. Interpex and Geosoft software were used to process and evaluate the field data which was then displayed in AutoCAD. The program focused on four specific areas including MNV West, Hacienda Nueva South, MNV North and MNV East. Identified resultant chargeability (± coincident resistivity and/or magnetics) anomalies were tested by diamond drilling spanning from 2010 to 2012 in a total of four surface drillholes (CG-10-153, CG-11-S156, GC-11-S162 and CG-11-S183). These exploration holes returned overwhelmingly negative results intercepting predominantly pyrite-bearing, black shale units. These highly pyritic and graphitic rocks are thought to be the source of the anomalies.

10 Drilling

Capstone commenced exploration drill planning at Cozamin in 2003, along with engineering examinations. Two rock chip samples were collected from the Virginias mine decline and 24 splits of half core from mineralized intervals in diamond drillholes ("DDHs") previously drilled by Bacis. These samples were submitted to Acme Analytical Laboratories Ltd. in Vancouver for copper, lead, zinc, gold and silver assays, and multi-element analysis by inductively coupled plasma ("ICP"). The assay results confirmed Bacis' records and the Phase I drilling program commenced in March 2004 under the supervision of Capstone. Preliminary underground sampling was not completed because most of the mineralized underground workings were flooded.

Drilling has been carried out by Capstone almost continuously since March 2004 on the MNV system (San Roberto and San Rafael mines) and related splays such as the MNFWZ. In all, 1135 surface and underground exploration drillholes have been completed. Drillholes are located by Capstone staff using total station TRIMBLE model S6 or LEICA instruments. Downhole survey readings were recorded using Eastman Single Shot, FLEXIT SensIT or Reflex EZ-Shot instruments (Table 10-1).

The Cozamin mine has been actively producing from the San Roberto and San Rafael zones since 2006 and from the MNFWZ since 2010. Additionally, as previously stated, drilling has been carried out almost continuously since March 2004 on the MNV system (San Roberto and San Rafael zones) and since 2010 at the MNFWZ. For the most part, drilling has been directed toward resource definition, delineation and increasing confidence for classification. It is significant but not unexpected that the success rate for the drilling campaigns is high given that the location of the veins is known and they tend to be continuous.

10.1 Drilling Programs

Capstone's surface and underground drilling programs from 2004 to October 2020 are summarized in Table 10-1. Longitudinal sections of drilling pierce points from surface and underground drilling for the MNV and MNFWZ, from all exploration drilling as of October 2020, are presented in Figure 10-1, Figure 10-2 and Figure 10-3. Figure 14-3 presents an interpretation of the drilling of the MNV in cross section; Figure 14-10 presents an interpretation of drilling of the MNFWZ in plan view. Historical DDH recovery has generally been very good. Recovery from 2018 to October 2020 averages 98.9%. No obvious drilling, sampling or recovery factors materially affect the reliability of the samples.

Table 10-1: Capstone Drilling Program Details from 2004 to April 2020

Phase	Date	Hole ID	Total (m)	Core Size	Target	Total Program Budget ($US Millions)
I	Apr 2004 to Aug 2004	Surface: CG-04-01 to CG-04-20	7,849	NQ	MNV	1.0
II	Sep 2004 to Mar 2005	Surface: CG-04-21 to CG-04-37	10,119	NQ	MNV at 1,900-2,050 masl	2.5
III	Mar 2005 to Mar 2006	Underground: CG-U01 to CG-U114	17,750	NQ	MNV	4.5
IV/V	Sep 2006 to Jul 2007	Surface: CG-06-38 to CG-06-39, CG-07-40 to CG-07-42	4,825	NQ/HQ /PQ	MNV at 600 to 700 m below surface	6.0
		Underground: CG-06-U115 to CG-06-U124, CG-07-U125 to CG-07-U177	20,061	NQ	MNV infill and extension of previous holes	
VI	Aug 2007 to Oct 2008	Surface: CG-08-43 to CG-08-150	30,391	HQ/NQ	San Rafael and east San Roberto	5.0
		Underground: CG-07-U178 to CG-08-U217	14,435	NQ	Increase confidence in classification and add resources at depth	
VII	May 2010 to Dec 2010	Surface: CG-10-S151 to CG-10-S158	4,467	HQ/NQ	San Rafael deep exploration and MNV west	3.5
		Underground: CG-10-U218 to CG-10-U253	11,752	NQ	Avoca Extension and MNFWZ	
VIII	Jan 2011 to Dec 2011	Surface: CG-11-S159 to CG-11-S180	20,329	HQ/NQ	MNV infill and MNFWZ	7.3
		Underground: CG-11-U254 to CG-11-U294	21,340	NQ	MNFWZ infill and extension	

Phase	Date	Hole ID	Total (m)	Core Size	Target	Total Program Budget ($US Millions)
IX	Jan 2012 to Nov 2012	Surface: CG-12-S181 to CG-12-S185	5,061	HQ/NQ	Exploration targets along main MNV structure	6.5
		Underground: CG-12-U295 to CG-12-U340	26,825	HQ/NQ	MNFWZ	
X	Jan 2013 to Dec 2013	Underground: CG-13-U341 to CG-13-U373	19,836	HQ/NQ	MNV and MNFWZ infill and extension	4.9
XI	Jan 2014 to Dec 2014	Surface: CG-14-S186 to CG-14-S206	10,422	HQ/NQ	Exploration targets along main MNV splays or other sub-parallel targets	3.0
XII	Jan 2015 to Dec 2015	Surface: CG-15-S207 to CG-15-S214	4,117	HQ/NQ	MNV infill and extension	5.7
		Underground: CG-15-U374 to CG-5-U415	17,733	HQ	MNFWZ infill and extension	
XIII	Jan 2016 to Dec 2016	Surface: CG-16-S215 to CG-16-S238 and 240	8,601	HQ/NQ	MNV infill and extension	2.9
		Underground: CG-16-U416 to CG-16-U432 and CG-16-UGIN146 to CG-16-UGIN185	12,659	HQ/BQ	MNV and MNFWZ infill and extension	
XIV	Jan 2017 to Dec 2017	Surface: CG-17-S239 and CG-17-S241 to CG-17-S304	29,937	HQ/NQ	MNV and MNFWZ infill and extension	5.9
		Underground: CG-17-U433 to CG-17-U459 and CG-17-UGIN186 to	19,072	HQ/BQ	MNFWZ infill and extension	

Phase	Date	Hole ID	Total (m)	Core Size	Target	Total Program Budget ($US Millions)
		CG-17-UGIN204				
XV	Jan 2018 to Mar 2018	Surface: CG-18-S305 to CG-18-S313	7,544	HQ	MNV and MNFWZ infill and extension	1.3
		Underground: CG-18-U460 to CG-18-U463	2,668	HQ	MNFWZ infill and extension	
XVI	Apr 2018 to Oct 2018	Surface: CG-18-S314 to CG-18-S366 and CG-18-S368 to CG-18-S369	39,288	HQ	MNFWZ infill and extension	5.6
		Underground: CG-18-U464 to CG-18-U481 and CG-18-UGIN205 to CG-18-UGIN224	14,855	HQ/BQ	MNFWZ infill and extension	
XVII	Nov 2018 to Dec 2018	Surface: CG-18-S367, CG-18-S370 to CG-18-S383	9,997	HQ/BQ	MNFWZ infill and extension	1.4
		Underground: CG-18-U482 to CG-18-U487 and CG-18-UGIN225 to CG-18-UGIN230	4,678	HQ/BQ	MNFWZ infill and extension	
XVIII	Jan 2019 to Dec 2019	Surface: CG-19-S384 to CG-19-S457	48,076	HQ	MNFWZ infill and extension	6.1
		Underground: CG-19-U488 to CG-19-U506 and CG-19-UGIN231 to CG-19-UGIN282	16,474	HQ/BQ	MNFWZ infill and extension	

Phase	Date	Hole ID	Total (m)	Core Size	Target	Total Program Budget ($US Millions)
XIX	Jan 2020 to Oct 2020	Surface: CG-20-S458 to CG-20-S515, S517-S518	36,366	HQ	MNFWZ infill and extension	5.3
		Underground: CG-20-U507 to CG-20-U513 and CG-20-UGIN283 to CG-20-UGIN298	6,268	HQ/BQ	MNFWZ infill and extension	

Table notes:
Core sizes describe the diameter of rock extracted by diamond drilling. PQ core has a diameter of 85mm, HQ core has a diameter of 63.5mm, NQ core has a diameter of 47.6mm and BQ core has a diameter of 36.5mm.

Table 10-2: Drilling History from 2004 to October 2020

Contractor/Company	Phase	Year	Holes Drilled	Metres Drilled	Downhole Survey Instrument
Surface					
Britton Brothers Diamond Drilling, Ltd. ("Britton Brothers")	I/II	2004-2005	37	17,967	Eastman Single Shot
Major Drilling Group International Inc. ("Major Drilling")	V	2006-2007	5	4,825	FLEXIT SensIT
Major Drilling	VI	2008	108	30,391	Reflex EZ-Shot
Landrill International Mexico, S.A. de C.V. ("Landrill")	VII	2010	8	4,467	Reflex EZ-Shot
Driftwood Diamond Drilling Mexico S.A. de C.V. ("Driftwood")	VIII	2011	22	20,329	Reflex EZ Shot
Driftwood	IX	2012	5	5,061	Reflex EZ Shot
Driftwood	XI	2014	21	10,422	Reflex EZ Shot
Patpa Distribuciones S. de R.L. de C.V. ("Patpa")	XII	2015	8	4,117	Reflex EZ Shot
Patpa	XIII	2016	24	8,601	Reflex EZ Shot
Patpa	XIV	2017	65	29,937	Reflex EZ Shot
Patpa	XV/XVI/XVII	2018	80	56,829	Reflex EZ Shot
Patpa	XVIII	2019	74	48,076	Reflex EZ Shot
Patpa	XIX	2020	36	19,690	Reflex EZ Shot

Contractor/Company	Phase	Year	Holes Drilled	Metres Drilled	Downhole Survey Instrument
Underground					
Canrock Drilling Services S.A. de C.V. (“Canrock”)	III	2005-2006	77	9,812	Reflex EZ-Shot
Globexplore Drilling S.A. de C.V.	III	2005	1	306	Reflex EZ-Shot
Tecmin Servicios S.A. de C.V. (“Tecmin”)	III	2005-2006	36	7,632	Reflex EZ-Shot
Tecmin	IV	2006-2007	80	25,516	Reflex EZ-Shot
Tecmin	VI	2008	20	7,888	Reflex EZ-Shot
Britton Brothers	VI	2008	2	1,092	Eastman Single Shot
Tecmin	VII	2010	25	8,272	Reflex EZ-Shot
Landrill	VII	2010	11	3,481	Reflex EZ-Shot
Tecmin	VIII	2011	5	2,569	Reflex EZ-Shot
Landrill	VIII	2011	3	1,593	Reflex EZ-Shot
Driftwood	VIII	2011	33	17,178	Reflex EZ-Shot
Driftwood	IX	2012	46	26,825	Reflex EZ-Shot
Driftwood	X	2013	34	19,836	Reflex EZ-Shot
Patpa	XII	2015	42	17,733	Reflex EZ-Shot
Patpa	XIII	2016	17	8,397	Reflex EZ-Shot
Capstone Gold S.A. de C.V.	XIII	2016	40	4,262	Reflex EZ-Shot
Patpa	XIV	2017	27	17,076	Reflex EZ-Shot
Capstone Gold S.A. de C.V.	XIV	2017	19	1,996	Reflex EZ-Shot
Patpa	XV/XVI/ XVII	2018	48	21,504	Reflex EZ-Shot
Capstone Gold S.A. de C.V.	XVII	2018	6	697	Reflex EZ-Shot
Patpa	XVIII	2019	19	10,567	Reflex EZ-Shot
Capstone Gold S.A. de C.V.	XVIII	2019	52	5,907	Reflex EZ-Shot
Patpa	XIX	2020	64	37,877	Reflex EZ-Shot
Capstone Gold S.A. de C.V.	XIX	2020	16	2,530	Reflex EZ-Shot

10.2 Recommendations and Opportunities

The QP recommends that exploration drifts be incorporated into planned mining access for more precise infill drilling from underground, particularly in areas of deep mineralization drilled only from surface. The estimated cost to complete an exploration drift west of the current Mineral Resource is estimated at US$1.8 million, and US$2.0 million to complete an exploration drift east of the current Mineral Resource.

Exploration expansion potential at MNFWZ remains open both west and east of the current Mineral Resource. The 2021 exploration budget of US$5 million for 40,000 m of surface drilling will primarily target expansion drilling in the newly recognized west target area, with additional infill drilling in the down-dip southeast portion of Vein 20, and initial testing of new brownfield targets on adjacent vein systems. Development capacity in 2021 is limited to driving one non-production drift, thus the east exploration drift has been delayed to 2022. Development of the new west exploration drift and cross-cuts is planned to start in Q1 2021 with an estimated cost of US$1.8 million in addition to the drilling program budget.

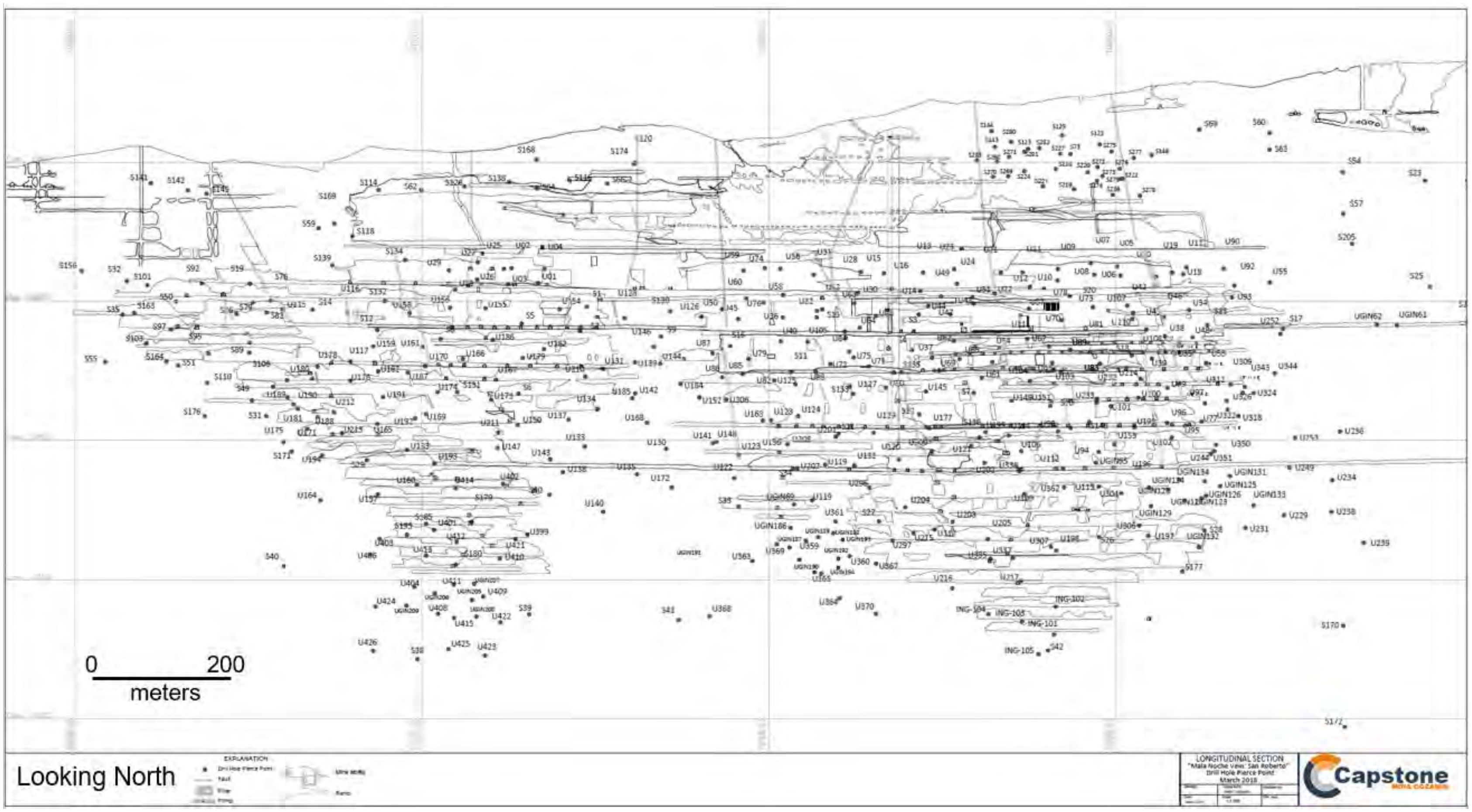

Figure 10-1: Longitudinal Section of Drilling Pierce Points in San Roberto zone of the Mala Noche Vein (Kirkham, 2020)

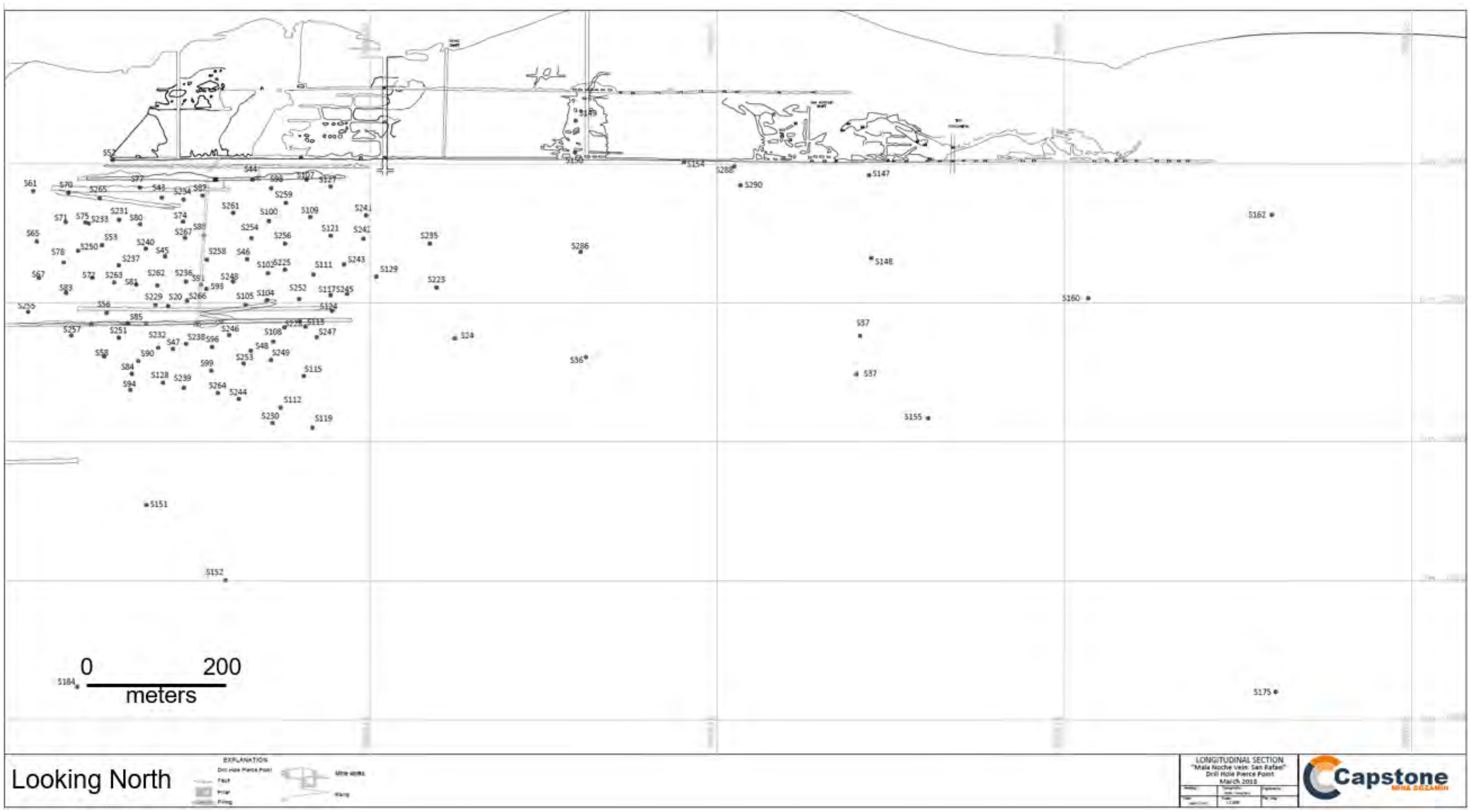

Figure 10-2: Longitudinal Section of Drilling Pierce Points in San Rafael zone of the Mala Noche Vein (Kirkham, 2020)

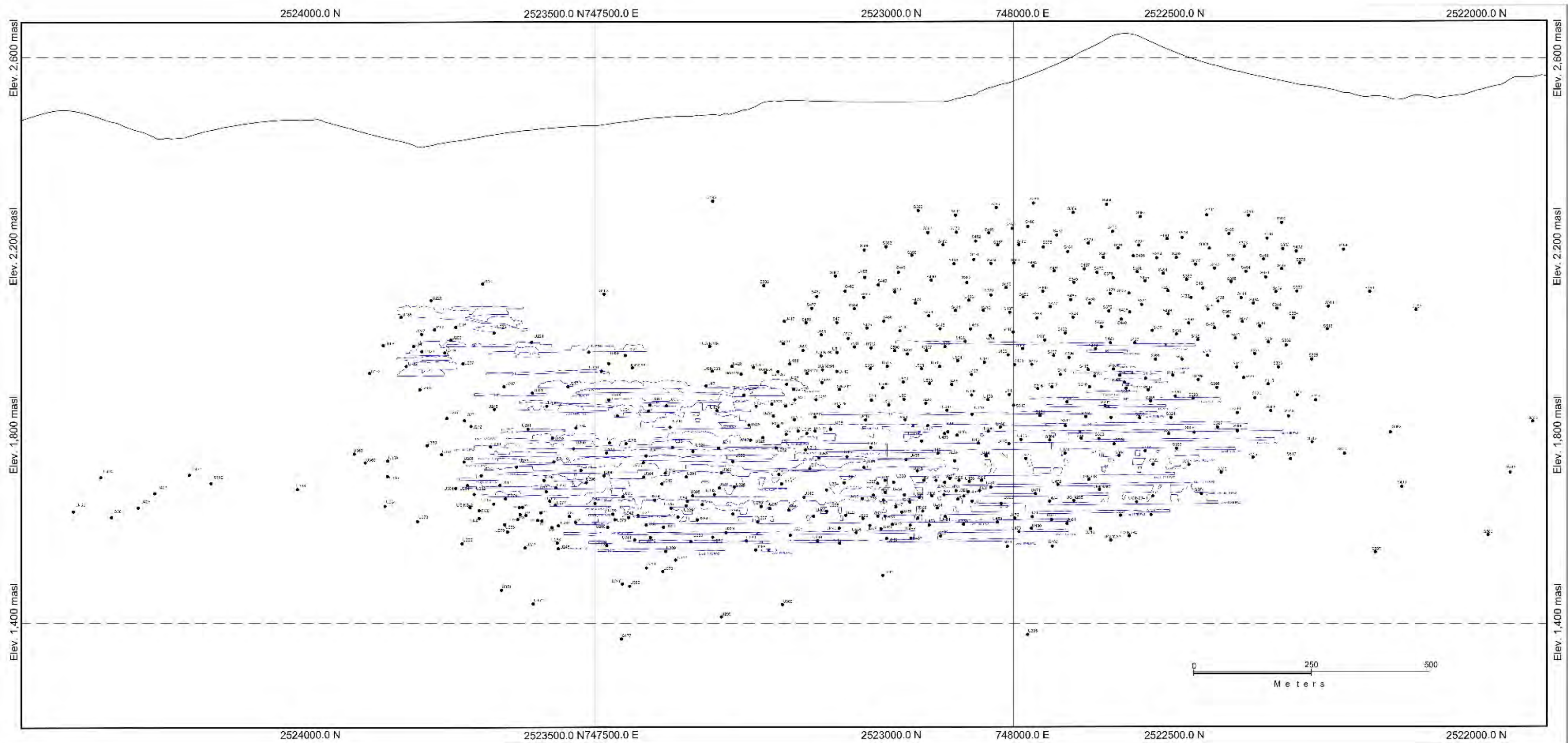

Figure 10-3: Longitudinal Section of Drilling Pierce Points in Mala Noche Footwall Zone, -59° dip looking 58° azimuth (Kirkham, 2020)

11 Sample Preparation, Analyses and Security

11.1 Drill Core Samples

11.1.1 Drill Site Control

Clean core boxes are delivered to the drill site by the drilling contractor. The driller clearly marks the drillhole number on each box. The driller then places a wood block or a plastic ticket in the core box at the end of each core interval. Intervals are marked in feet and inches which the driller converts from metres. The box is covered by the lid and secured using either rubber straps or nylon cord prior to transportation from the drill site. Either Capstone employees or the drillers transport the core from the drill site to the core shack.

11.1.2 Survey Control

In 2009, Capstone contracted PhotoSat Information Ltd. to reference INEGI control points around the Cozamin mine (UTM 13N, NAD 27) and to create other survey reference points, such as the San Roberto headframe. The locations and orientations of the drillholes are checked by a Capstone surveyor after the completion of each drillhole. The driller identifies each drillhole with a wood plug showing the drillhole number labelled with permanent black marker. Drillhole locations are surveyed using either total station TRIMBLE or LEICA instruments.

Downhole surveys are undertaken after completion of each drillhole. Survey points are taken approximately every 50 m to 75 m using a downhole survey instrument (Table 10-2). Survey readings are generally taken every 50 m to 150 m for surface holes and every 50 m to 100 m for underground holes. Survey results were corrected for magnetic declination. The magnetic mineral pyrrhotite is present in deeper levels in the mine and occasionally causes downhole survey anomalies. These are identified by the geologist during the survey measurement process and corrected by taking another survey measurement above or below the point giving the faulty reading. Dip variations in surface drillholes are not more than 21.6°, with an average value of 3.1°. The maximum downhole dip variation in the underground holes is 33.2° with an average variation of 2.8°.

11.1.3 Drill Core Logging, Photography, Sampling and Security

When the drill core arrives at the core shack, the geologist checks the order of the core. If required, the core assistant cleans the core of any contaminants. Boxes are checked for labelled start and end depths. Next, the core is placed three boxes at a time on the ground in natural light to be photographed alongside a scale bar. The core is then logged for recovery, rock quality, lithology, structure, alteration and mineralization prior to marking out sample intervals by the geologist. Cozamin has recorded geological information using an *acQuire* database data entry object since late 2014; prior to *acQuire* implementation, geological information was collected in Microsoft Excel spreadsheets.

Only Capstone employees are permitted in the core shack when unsampled core is ready to be cut. The geologist marks the saw line along the centre of the core, with each side containing roughly equivalent mineralization. After the core is cut, one half is placed in a sample bag. The sampler returns the remaining core to the box in its original orientation, which is checked by the geologist. The same side of the core is always taken for sampling.

The drillhole number and sample interval are entered into the sample book. One ticket stub is stapled in the corresponding interval in the core box by the geologist and the other two ticket stubs are placed in the sample bag by the sampler. The sample books are archived in the core shack. A minimum of 10 samples are placed in a large sack and secured by a tamper proof seal. The sample number series within the sack are marked on the outside. A transmittal form is then completed, which identifies the batch number, the serial numbers of the seals and the corresponding sample number series, and delivered to the preparation laboratory by a Cozamin representative.

Drill core containing intercepts of the MNV and MNFWZ structure is stored in a secured warehouse near the core shack and other core is stored in a second storage building and laydown on the mine property. Some pre-2014 waste hangingwall and footwall drill core is stored within the mine on Level 8. Access to the warehouse and storage building is controlled by the Cozamin Geology department.

11.1.4 Drill Core Sample Preparation and Analysis

Since 2005, Cozamin has sent DDH samples to multiple accredited laboratories for sample preparation and analysis, as well as for participation in round robin analysis of samples for use as reference material standards (Table 11-11). These laboratories include Bureau Veritas Inspectorate (“Inspectorate”, known previously as BSI Inspectorate), ALS Geochemistry (“ALS”), SGS Canada Inc. (“SGS”), Mineral Environments Laboratories Ltd (commonly known as “Assayers Canada”, which was acquired by SGS in 2010), Activation Laboratories Ltd. (“Actlabs”), and Acme Analytical Laboratories Ltd. (“Acme”, acquired by Bureau Veritas in 2012). In 2010, Cozamin sent samples from one drillhole (CG-10-S151) to Eco Tech Laboratory Ltd. (“Eco Tech”, which was acquired by ALS in 2012).

Until December 2013, Capstone analyzed field and pulp duplicate samples at a second laboratory. Capstone now analyzes the duplicate samples at the same laboratory as the original sample to better represent sampling precision, without additional inter-laboratory variability between the samples.

Table 11-1: Primary and Secondary Laboratories Used for Cozamin DDH Samples

Principal Laboratory	Secondary Laboratory	Drilling Phase	Number of Samples
Inspectorate	ALS	I	1,515
ALS	Inspectorate	II	903
SGS	ALS	III	5,854
ALS	SGS	IV and V	2,581
ALS	SGS	VI	6,774
ALS	SGS	VII	6,842
ALS / Eco Tech[1]	SGS	VIII	14,843
ALS	ALS	IX	6,100
ALS	Actlabs	X	1,301
ALS	Actlabs	XI	898
ALS	-	XII	3,462
ALS	-	XIII	2,422
Cozamin Mine Laboratory	-	XIII	1,007
ALS	-	XIV	4,403
Cozamin Mine Laboratory	-	XIV	438
ALS	-	XV	991
Cozamin Mine Laboratory	-	XVI	292
ALS	-	XVI	6,072
Cozamin Mine Laboratory	-	XVII	0
ALS	-	XVII	1,584
Cozamin Mine Laboratory	-	XVIII	762
ALS	-	XVIII	5,138
Cozamin Mine Laboratory	-	XIX	60
ALS	-	XIX	4,715

Table 11-1 Notes:

1. Eco Tech used only for drillhole GC-10-S151

ALS sample preparation facilities in Hermosillo, Mexico were used until 2009, when ALS opened a new preparation facility in Zacatecas, Mexico in time for the Phase VII drilling campaign in 2010. After preparation, all ALS samples were sent to the Vancouver, Canada laboratory for analysis. The SGS sample preparation facility is located in Durango, Mexico. Samples were then analysed in the SGS Lakefield laboratory located in Toronto, Canada. The Inspectorate facility in Durango, Mexico conducted the sample preparation before analysis at the Inspectorate laboratory in Sparks, Nevada, USA. The Actlabs sample preparation and analysis facility is located in Zacatecas, Mexico. The Eco Tech laboratory facility was located in Kamloops, Canada. Samples remained in the custody of the respective laboratories from arrival at the preparation facility through analysis. Sample preparation and analysis procedures at each of the laboratories utilized by Cozamin are detailed in Table 11-2 and Table 11-3.

Table 11-2: Sample Preparation Details at Laboratories Utilized by Cozamin

Laboratory	Accreditation	Crushing	Pulverizing
Inspectorate	ISO 9002, certificate 37925	Dried, weighed, then crushed to 75% passing 2 mm	250 g subsample split pulverized to 90% passing 75 microns
ALS	ISO 9001:2001 and ISO 17025		
SGS	ISO 9002 and ISO 17025 accredited for Specific Tests SCC No. 456.		
Actlabs	ISO 9001:2008, No. MX-11-182, No. Mx11-183	Dried, weighed, then crushed to 90% passing 2 mm	250 g subsample split pulverized to 95% passing 105 microns
Eco Tech	ISO 9001:2008 by KIWA International (TGA-ZM-13-96-00)	Dried, weighed, then crushed to 70% passing 1.8 mm	250 g subsample split pulverized to 95% passing 104 microns
Cozamin Laboratory	ISO 17025 accredited for specific tests, certificate Q-0383-064/12	Dried, weighed, then crushed to 95% passing 6.4 mm	200 g subsample split pulverized to 100% passing 75 microns

Table 11-3: Sample Digestion and Analysis at Laboratories Utilized by Cozamin

Laboratory	Cu	Zn	Pb	Ag
Inspectorate	Aqua regia digest with AAS finish. Overlimit samples follow the same procedure with the instrument calibrated for ore grades.			
ALS	Four acid digest with ICP-AES finish. Overlimit Pb samples use a four acid digestion followed by titration (CON02 method).			Four acid digest with ICP-AES finish, and fire assay (50 g charge) with a gravimetric finish.
SGS	Four acid digest with ICP-OES finish. Overlimit samples follow the same procedure but with sodium peroxide fusion.			Multi acid digest (2 g charge), with AAS finish. Overlimit samples analyzed using fire assay (50 g charge) with an AA finish.
Actlabs	Four acid digest with ICP-OES finish. Overlimit samples use an aqua regia digest with ICP-AAS finish.			Four acid digest with ICP-OES finish. Overlimit samples are analyzed using fire assay (30 g charge) with a gravimetric finish.
Eco Tech	Aqua regia digest with ICP-AES finish.Overlimit samples undergo an oxidizing digestion in 200 ml phosphoric flasks with final solution in aqua regia solution and an AA finish.			
Cozamin Laboratory	Three acid digest, with ICP-OES finish. Overlimit samples follow the same sample digestion procedure, but with an AAS finish.			

11.1.5 Drill Core Quality Assurance and Quality Control (QAQC)

11.1.5.1 Phase I and II Drilling Programs, 2004

In 2004, splits of 24 previously assayed intervals from five drillholes were sent for independent analysis at the Acme laboratory in Vancouver. The analyses from these check samples agreed well with the previously analysed results. No other QAQC samples were submitted during this drilling program.

11.1.5.2 Phase III Drilling Program, 2005

Capstone implemented a formal QAQC program for the 2005 Phase III drilling campaign. Cozamin staff obtained large samples from the dewatered underground workings and made three in-house reference material ("RM") standards (not certified) that had undergone round robin testing at SGS, ALS, Acme, Assayers Canada and Inspectorate laboratories to determine mean and performance thresholds at two and three standard deviations (Table 11-4).

Table 11-4: Cozamin Reference Materials used in the Phase II and III Drilling Campaigns, 2005-2006

RM	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (ppb)
4759	3.45 ± 0.07	2.78 ± 0.065	0.17 ± 0.01	212.46 ± 47.17	109.4 ± 8.3
4757	1.31 ± 0.03	0.86 ± 0.030	0.03 ± 0.01	60.04 ± 3.73	70.2 ± 4.6
4787	0.55 ± 0.03	0.68 ± 0.015	0.01 ± 0.007	24.42 ± 1.37	200.3 ± 5.4

Most RM values plotted within two standard deviations of the mean value. There were seven failed samples that were attributed to sample switching. Overall assay accuracy was acceptable, with no signs of bias.

Duplicate samples comprised a second split of the pulp reject being sent to the SGS laboratory for reanalysis at a rate of approximately one in every 10 samples. A total of 432 samples for copper, zinc and lead, 388 samples for gold, and 422 samples for silver were analysed over the Phase III campaign. No evidence of bias was detected for silver or lead, but there was a weak positive bias observed in copper at higher grades and a weak negative bias for zinc and gold at higher grades. The magnitudes of the biases were not considered to be significant.

Samples of cement were submitted on a regular basis within the sample stream to identify evidence of cross contamination in the laboratory. A total of 144 blanks were submitted. A few samples had anomalous values of zinc, gold, and silver. In these instances, SGS was instructed to reanalyze the samples.

ALS was used as a check laboratory for analysis of 262 pulp samples. No bias between the results of the two laboratories was observed, but significantly lower levels of precision were noted with the ALS results. This was attributed to different analytical procedures followed at the two laboratories.

11.1.5.3 Phase IV and V Drilling Programs, 2006-2007

The QAQC program initiated in 2005 for the Phase III drilling program continued through the Phase IV and V drilling programs (Table 11-5).

Table 11-5: QAQC Program Summary Phase IV and V Drilling Programs, 2006-2007

Control	No. Samples	Insertion Rate (%)	Comments
RM	103	4.0	Acceptable performance for Cu, Ag, Pb and Zn; most sample values plot within 2 standard deviations from the certified mean. Medium grade RM 4757 shows low bias.
Blank	112	4.3	Acceptable performance for Ag, Au, Cu, Pb and Zn. 4 failures for Ag, 1 failure for Cu, 1 failure Au.
Core Duplicate	106	4.1	Good correlation between original sample and core duplicate for Cu, Ag Pb and Zn. Low correlation between original sample and core duplicate for Au.
Pulp Duplicate	106	4.1	Pulp duplicates show very good correlation for Cu, Ag, Pb, Zn and Au.

11.1.5.4 Phase VI Drilling Program, 2008

QAQC continued through 2008 using the same protocols developed in 2005 for Phase III program. Commercially available certified reference materials ("CRM") and Cozamin sourced RMs were used during the program. Supplies of the Cozamin sourced material created in 2005 were depleted by the end of 2008 (Table 11-6). In 2006 and 2007, Cozamin created new RM using the remainder of the large samples collected from underground in 2005. The certification process was poorly documented and only partial details of the certification process are available. The performance summary of the Phase VI drilling program QC samples is in Table 11-6.

Table 11-6: Reference Materials used in the Phase VI Drilling Program, 2008

Control	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (ppb)	# In UG DDH	# In Surface DDH	Insertion Rate (%)
06-4787	0.68 ± 0.003	0.65 ± 0.062	0.176 ± 0.003	35.38 ± 0.310	-	4	23	0.4
4757	1.31 ± 0.03	0.86 ± 0.030	0.03 ± 0.01	60.04 ± 3.73	70.2 ± 4.6	-	30	0.4
06-4759	1.94 ± 0.003	0.74 ± 0.004	0.144 ± 0.002	115.14 ± 0.32	200.3 ± 5.4	3	9	0.2
4787-a	9.49 ± 0.13	1.05 ± 0.07	0.172 ± 0.002	427.6 ± 3.06	-	-	48	0.7
4757-a	1.18 ± 0.03	3.58 ±0.086	10.6 ±0.086	138.8 ± 3.75	-	-	34	0.5
4759-a	1.27 ±0.05	0.14 ± 0.002	0.04 ±0.006	42.95 ± 2.90	-	-	13	0.2

Control	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (ppb)	# In UG DDH	# In Surface DDH	Insertion Rate (%)
HLLC[1]	1.49 ± 0.06	3.01 ± 0.17	0.29 ± 0.03	65.1 ± 6.7	830 ± 120	5	113	1.7
HLHC[1]	5.07 ± 0.27	2.35 ± 0.11	0.17 ± 0.01	111.0 ± 8.6	1970 ± 220	18	-	0.3
FCM-2[1]	0.756 ± 0.046	1.739 ± 0.104	0.479 ± 0.038	73.9 ± 7.3	1370 ± 120	8	-	0.1
BLANK	0.01% warning limit	0.011% warning limit	0.01% warning limit	5 g/t warning limit	50 ppb warning limit	66	211	4.1

Table 11-6 Notes:
1. CRM purchased from CDN Resource Laboratories Ltd., Delta, Canada. HLLC and HLHC are High Lake volcanogenic massive sulphide deposit material. FCM is Campo Morado volcanogenic massive sulphide deposit material.

The results of the Phase VI drilling program QAQC results were summarized by Bruce Davis in a memorandum to Capstone (Davis, 2009). He concluded that copper results from certified and in-house RM standards were under proper analytical control. Results from the CRMs for silver, zinc and lead were under analytical control, but were limited in number. The in-house RMs had not been subjected to homogeneity testing through a proper round robin procedure and were deemed insufficient to serve as controls for gold or silver. In addition, comparisons to ALS results showed there could be significant differences in mean grades determined for silver, zinc and lead, and therefore may not adequately serve as controls for these elements either. Davis (2009) concluded that the in-house RMs were sufficient for laboratory control of copper grades.

Blank results suggested no contamination in the sample preparation process. No coarse reject duplicates were available to validate the sample preparation process. No pulp duplicates were available to further validate the accuracy of the assays.

From the certified standard control information, Davis (2009) concluded the copper, lead, zinc and silver assay processes were producing results that could be used for public reporting, resource estimation and grade control purposes.

11.1.5.5 Phase VII-X Drilling Programs, 2010-2013

Three new RM standards were created in 2010 using MNV material sourced during active mining operations, CGLG2010, CGMG2010 and CGHG2010. Round robin testing at SGS, ALS, Acme and Assayers Canada was used to determine performance thresholds. In 2012, a new low-grade RM, CGLG2012, was created using material from MNV. Performance thresholds were determined after round robin analysis at three laboratories (Cozamin, ALS and SGS). Typically, RM and blank samples were placed at the start and finish of the mineralized interval within a hole. Approximately two sample intervals per hole were selected to have pulp duplicates prepared and another two intervals per hole were selected for preparation of core duplicates. Additional quality control samples were inserted into the sequence as deemed necessary, for example a blank inserted in the sample sequence after a sample expected to have very high grade to monitor the quality of the sample preparation.

Analytical performance for copper was generally good (Table 11-7). Silver, zinc and lead results were more inconsistent, with periods of high failure rates. Results are summarized respectively in Table 11-8, Table 11-9 and Table 11-10. Graphical results for copper, silver, zinc and lead are shown in Figure 11-1, Figure 11-2, Figure 11-3 and Figure 11-4, respectively. Less consistent results for silver, zinc and lead suggest the RM standards were not sufficiently homogenized. Sample failures were defined as values greater than three standard deviations from the mean or two (or more) consecutive samples greater than two standard deviations from the mean. Blank performance was mixed, but failed samples were not sufficient in grade to suggest significant cross contamination within samples.

Standards covering low, medium and high-grade ranges were not consistently inserted into the sample stream. The use of LG2012 as the only RM standard between June 2012 and December 2013 did not provide accuracy control in the middle to upper grade ranges for the drillholes completed within this timeframe. Following Lions Gate Geological Consulting Inc.'s ("LGGC") recommendation to provide additional accuracy control on the 2010 to 2013 DDH data, Capstone initiated a resampling program of pulps and drillcore samples from mineralized intercepts of the San Roberto zone and the MNFWZ. These were submitted to ALS with purchased CRM standards and blank material.

Table 11-11 summarizes the DDH duplicate results for copper, silver and zinc; no bias was observed. Bias in lead values could not be determined; most values were very low grade. Values for copper exceeded the target of 80% or more of the pairs with duplicate values within 20% of the original value. Silver values were very close to the target. Zinc and lead values are below the target threshold, with 67% and 68% of the paired values within 20% of each other, respectively.

Pulp duplicate values for copper, silver and zinc did not show bias. Lead was biased high for values under 0.4% (5% to 10%) and low for values over 0.4% (5% to 17%). Values for copper met the target of 90% or more of the pairs with duplicate values within 20% of the original value. Silver, zinc and lead values are below the target threshold, with approximately 80% of the paired values within 20% of each other.

The use of a secondary laboratory to analyze the duplicate samples introduced an additional source of uncertainty due to inter-laboratory variability. This practice was changed in December 2013 and now duplicate samples are submitted to the same laboratory. Cozamin found better precision between original and duplicate samples when duplicate samples are submitted to the original laboratory.

Table 11-7: 2010-2013 DDH Reference Material Standards and Blanks Data - Copper

Laboratory	SRM	Reference Value (%)	Mean (%)	No Samples	Total Failures	Failure Rate (%)
ALS	CGHG2010	6.16	6.22	84	7	7
CML			5.92	9	1	11
Eco Tech			5.81	3	3	100
ALS	CGMG2010	2.36	2.33	304	5	2
CML			2.31	154	12	16
Eco Tech			2.20	4	4	100
ALS	CGLG2010	0.12	0.12	268	1	0
CML			-	0	-	-
Eco Tech			3	0	0	0
ALS	CGLG2012	0.079	0.077	258	1	0
CML			0.079	279	60	22
ALS	Blank	0.001	0.007	942	138	15
CML			0.012	316	129	41
Eco Tech			0.006	10	-	

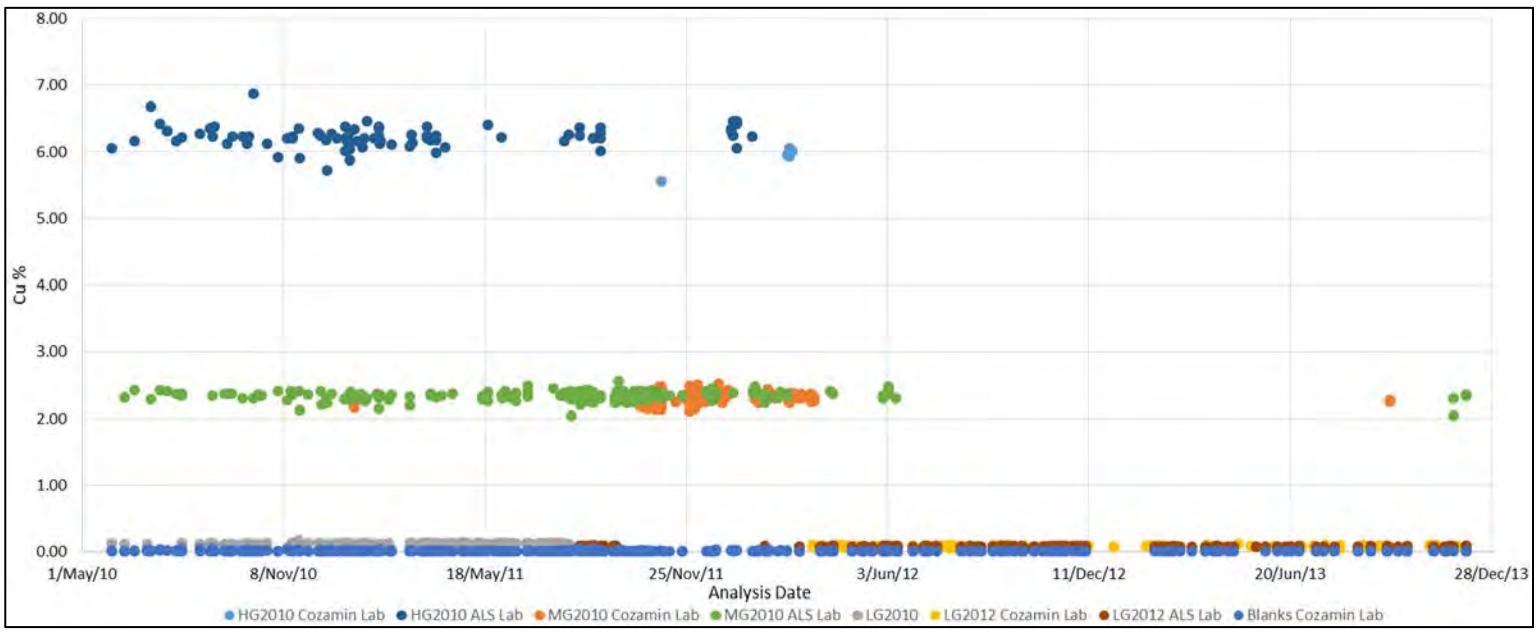

Figure 11-1: 2010-2013 DDH Reference Material Standards and Blanks Chart – Copper

Table 11-8: 2010-2013 DDH Reference Material Standards and Blanks Data – Silver

Laboratory	SRM	Reference Value (g/t)	Mean (g/t)	No Samples	Total Failures	Failure Rate (%)
ALS	CGHG2010	109	107	85	15	18
CML			108	7	0	0
Eco Tech			114	3	0	0
ALS	CGMG2010	92	88	296	78	26
CML			95	162	34	21
Eco Tech			95	4	0	0
ALS	CGLG2010	4	3	324	11	3
CML			-	-	-	-
Eco Tech			3	3	0	0
ALS	CGLG2012	2	3	201	18	9
CML			2	282	58	21
ALS	Blank	1	2	974	17	2
CML			2	320	13	4
Eco Tech			2	10	1	0

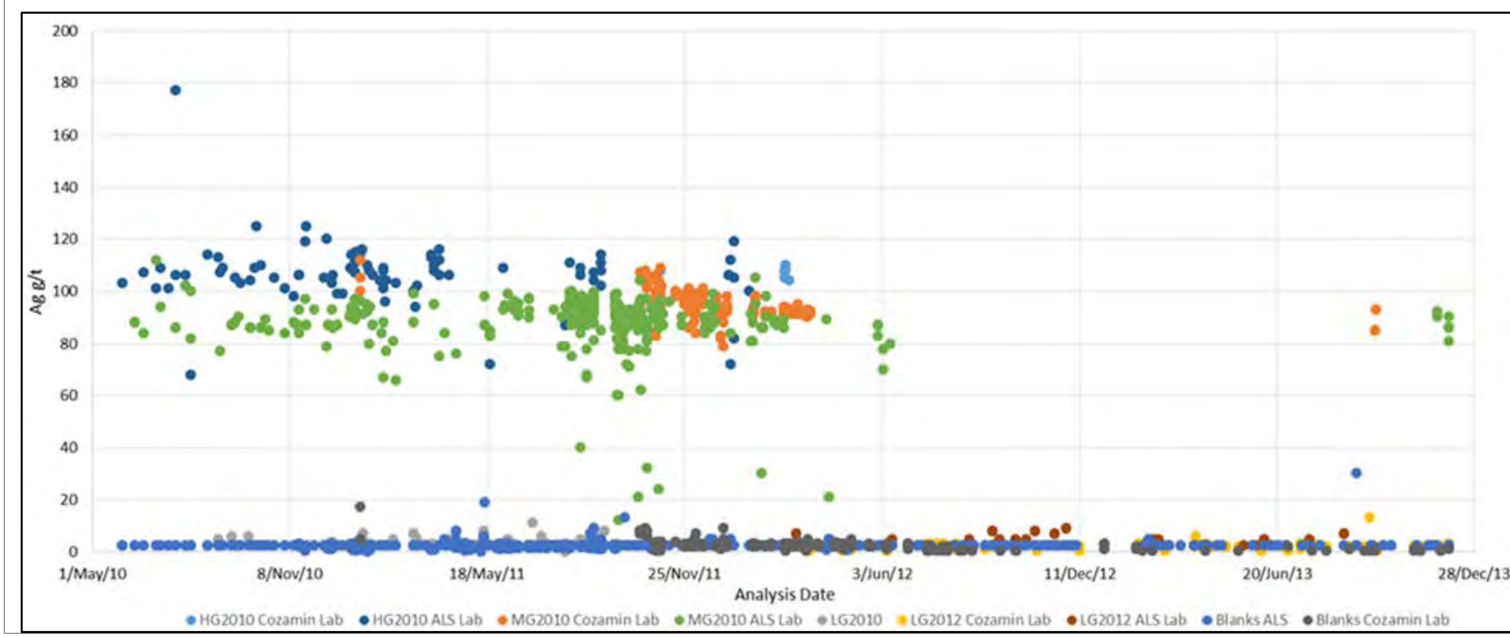

Figure 11-2: 2010 – 2013 DDH Reference Material Standards and Blanks Chart – Silver

Table 11-9: 2010–2013 DDH Reference Material Standards and Blanks Data – Zinc

Laboratory	SRM	Reference Value (%)	Mean (%)	No Samples	Total Failures	Failure Rate (%)
ALS	CGHG2010	0.17	0.17	37	9	24
CML			0.15	9	5	36
Eco Tech			0.17	3	0	0
ALS	CGMG2010	1.54	1.59	256	0	0
CML			1.55	162	0	0
Eco Tech			1.85	3	0	0
ALS	CGLG2010	0.13	0.11	258	76	29
CML			-	-	-	-
Eco Tech			0.48	3	1	33
ALS	CGLG2012	0.07	0.07	193	0	0
CML			0.07	278	0	0
ALS	Blank	0.05	0.05	976	584	60
CML			0.05	320	145	45
Eco Tech			0.04	10	2	20

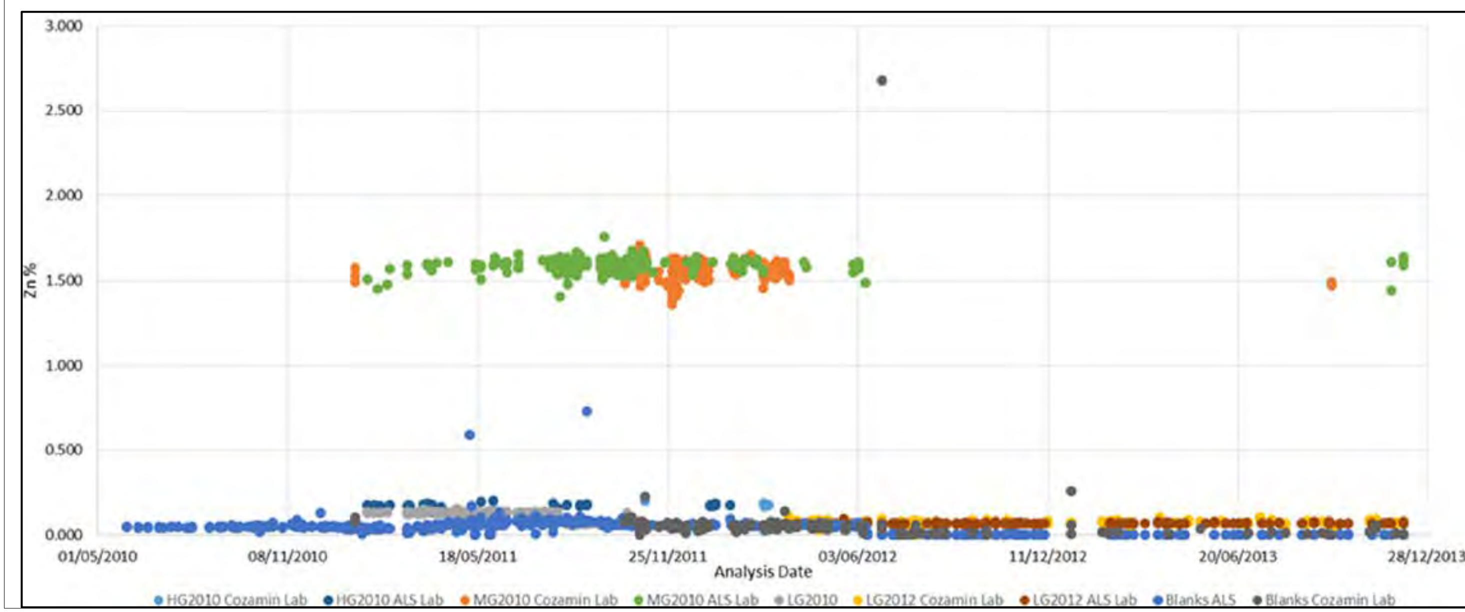

Figure 11-3: 2010–2013 DDH Reference Material Standards and Blanks Chart – Zinc

Table 11-10: 2010–2013 DDH Reference Material Standards and Blanks Data – Lead

Laboratory	SRM	Reference Value (%)	Mean (%)	No Samples	Total Failures	Failure Rate (%)
ALS	CGHG2010	0.010	0.009	83	0	0
CML			0.017	9	5	56
Eco Tech			0.008	3	0	0
ALS	CGMG2010	0.41	0.41	304	41	13
CML			0.41	162	44	27
Eco Tech			0.43	4	2	50
ALS	CGLG2010	0.002	0.011	324	80	25
CML			-	-	-	-
Eco Tech			0.003	3	0	0
ALS	CGLG2012	0.014	0.010	193	0	0
CML			0.016	280	50	18
ALS	Blank	0.050	0.006	976	26	3
CML			0.009	320	6	2
Eco Tech			0.007	10	0	0

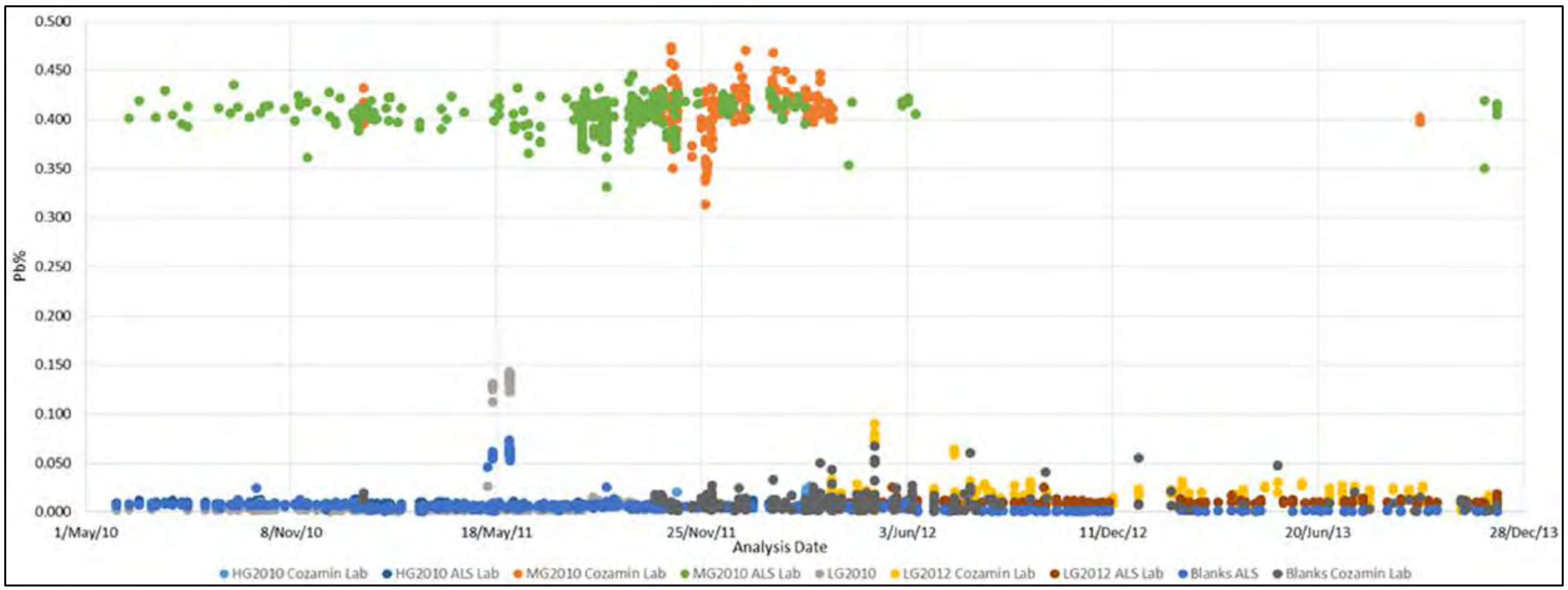

Figure 11-4: 2010–2013 DDH Reference Material Standards and Blanks Chart – Lead

Table 11-11: 2010-2013 DDH Sample Duplicate Performance

Duplicate Type (Years)	Element	Correlation Coefficient	Ranked HARD	Comments
Field (2012-2013)	Copper	0.973	87% within 20%	No bias observed.
	Silver	0.991	78% within 20%	No bias observed.
	Zinc	0.906	67% within 20%	No bias observed.
	Lead	0.922	68% within 20%	Predominately very low grade; cannot determine bias.
Pulp (2012-2013)	Copper	0.987	92% within 20%	No bias observed.
	Silver	0.974	80% within 20%	No bias observed.
	Zinc	0.981	82% within 20%	No bias observed.
	Lead	0.986	81% within 20%	Weak high bias (5-10%) under 0.4% Pb, low bias of values over 0.4% (5-17%).

Table Notes:
1. Ranked HARD = Ranked Half-Absolute Relative Difference. Target values for field duplicates are 80% or more of duplicate values within 20% of original value. Target value for pulp duplicates is 90% or more of duplicate values within 20% of original value.

11.1.5.6 Reanalysis of DDH Pulp Samples, 2010-2013

Capstone reassayed all available DDH pulp samples within the 2014 mineralization domains for MNV and MNFWZ (1,491 samples) with QAQC control samples to establish stronger controls on sample accuracy and precision. Results of the pulp reanalysis adequately corroborate the original analysis, thus original analytical values for the samples analyzed during the drilling campaigns were retained in the assay database (Capstone, 2015). Copper values reproduced well, with 90% of the samples within 5.2% of original result (Table 11-12), zinc and lead results performed well, and silver analyses showed more variability. Figure 11-5 illustrates the locations of the drillholes containing reanalyzed pulp samples.

Table 11-12: Comparison of DDH Pulp Reanalyses to Original Sample Values, 2010-2013

Element	Correlation Coefficient	Ranked HARD	Comments
Copper	0.995	96% within 10%	Not biased below 14% Cu (low bias 5-20% above 14% Cu, based on very few data points).
Silver	0.976	70% within 10%	Bias not shown.
Zinc	0.963	89% within 10%	Lower grade values below 2.75% Zn are well distributed. Low bias for values between 2.75-8% (3-7%). Overall high bias over 8% Zn, typically 4-8%.
Lead	1.00	70% within 10%	Bias not shown.

Table 11-12 Note:
1. Ranked HARD = Ranked Half-Absolute Relative Difference; target values are 90% or more of duplicate values within 10% of the original value (for pulp duplicates submitted to the same laboratory)

QAQC control samples included with the pulp reanalysis submittals included CRM, blanks and coarse and pulp rejects. All QAQC controls performed well for copper and zinc. Silver demonstrated a higher failure in two of four CRM. Silver and lead preparation duplicates were less precise than copper and zinc. All batches with CRM failures were reanalyzed.

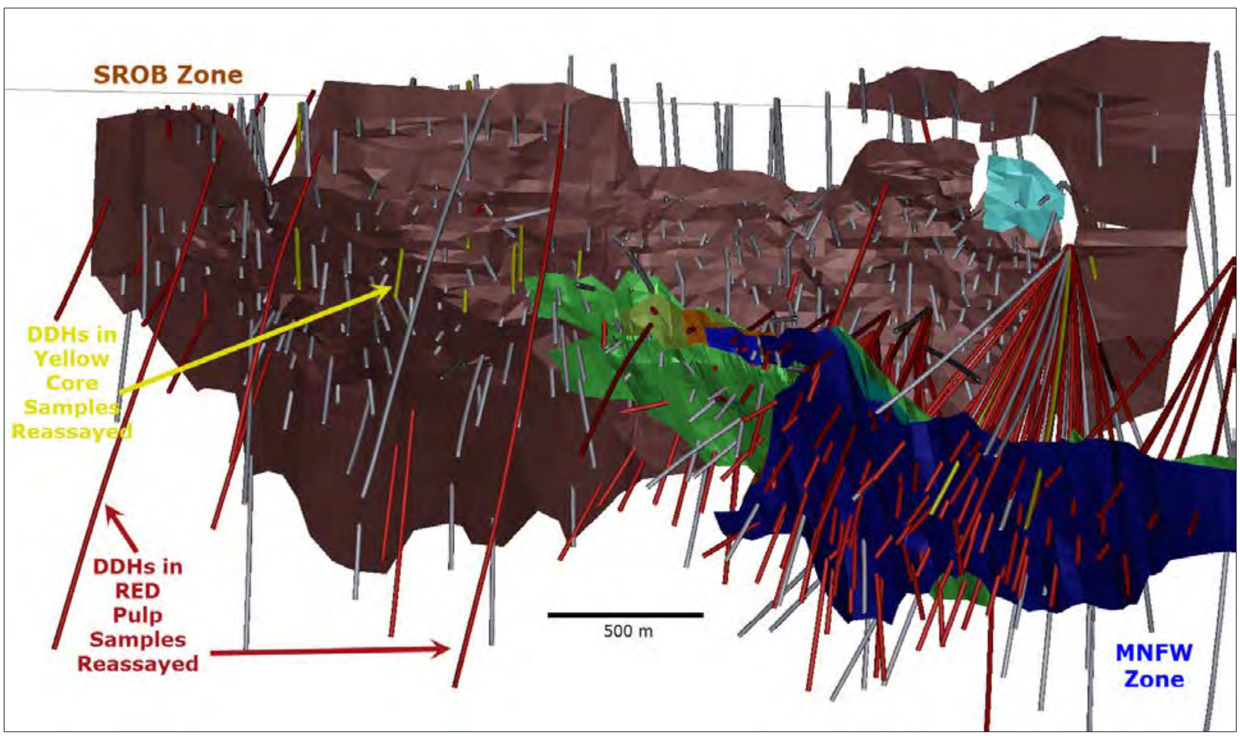

Figure 11-5: Isometric View of Drillholes Containing Reanalyzed Pulp Samples (red)

11.1.5.7 Phase XI Drilling Program, 2014

The QAQC program initiated in 2014 included CRM, blanks and duplicates (field and preparation). One of each type of control sample was included in every batch of 20 core samples; control sample performance was evaluated upon receipt of the certificate of analysis before results were accepted into the *acQuire* database. Performance of the QAQC control samples is summarized in Table 11-13, with examples of the control charts for copper in blanks (Figure 11-6) and medium-grade CRM "ME-1201" (Figure 11-7). CRM inserted included four commercially available CRM and two CRM created from ore material covered low-grade and medium-grade values. The custom CRM were certified by CDN Resources of Langley, Canada using 15 laboratories. All batches containing failed CRM were reanalyzed and the values replaced in the *acQuire* database. Blank performance demonstrated contamination typically did not occur between samples during preparation in ore grade samples. Preparation duplicates show increasing homogeneity from field duplicates (quarter core) through coarse crush duplicates and finally pulp duplicates, with strong correlation between duplicates for copper and zinc with moderate correlations for silver and lead (Capstone Gold, 2015a).

Table 11-13: 2014 DDH Certified Reference Material Standards and Blank QAQC Performance

Control	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Insertion Rate (%)	Total # Failures	Failure Rate (%)
ME-1403[1]	0.448 ± 0.045	1.34 ± 0.09	0.414 ± 0.027	53.9 ± 8.1	2.3	2	3
ME-1204[1]	0.519 ± 0.033	2.36 ± 0.18	0.443 ± 0.036	58.0 ± 9.0	1.4	-	-
CG-LG-14[2]	0.877 ± 0.057	0.451 ± 0.030	0.052 ± 0.006	27.5 ± 3.6	0.5	-	-
ME-1201[3]	1.572 ± 0.129	4.99 ± 0.435	0.465 ± 0.048	37.6 ± 5.1	0.7	2	9
CG-MG-14[2]	1.738 ± 0.099	0.492 ± 0.033	0.112 ± 0.012	53.0 ± 4.05	0.1	-	-
ME-1402[4]	2.9 ± 0.24	15.23 ± 1.005	2.48 ± 0.165	131.0 ± 10.5	0.4	-	-
BLANK	0.01% warning limit	0.01% warning limit	0.01% warning limit	10 g/t warning limit	6.5	2	1

Table 11-13 Notes:
CRM acceptable ranges are ±3 standard deviations. CRM were purchased from or certified through CDN Resource Laboratories Ltd., Langley, Canada. Blank material was quartz cobbles.
1. Mexico Campo Morado volcanogenic massive sulphide deposit material.
2. Mexico Cozamin Mine ore. "CG-Grade-14" certified using 15 laboratories.
3. Canada Slave structural province volcanogenic massive sulphide deposit material.
4. Mixed ore material with approximate whole rock composition of 36% SiO_2 and 15% Fe_2O_3.

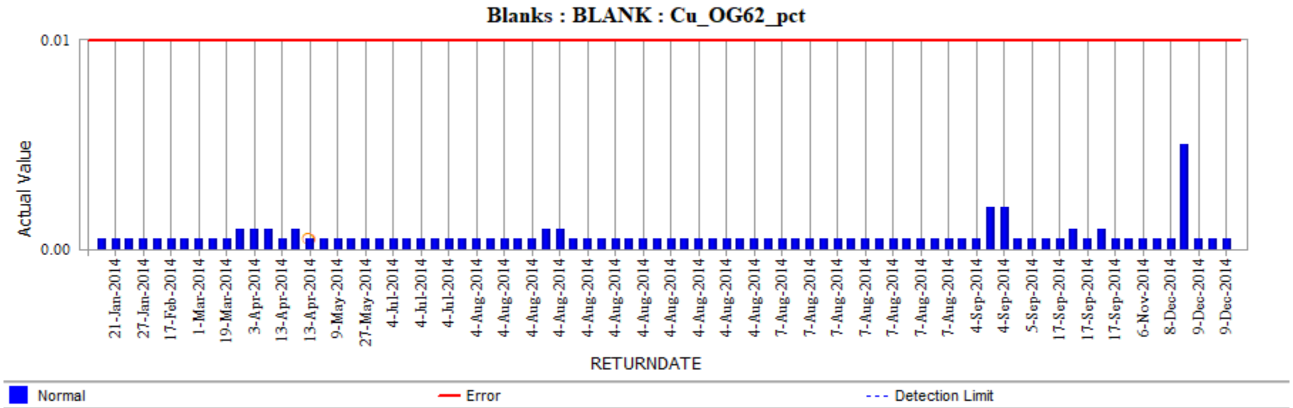

Figure 11-6: 2014 DDH Blanks performance - copper

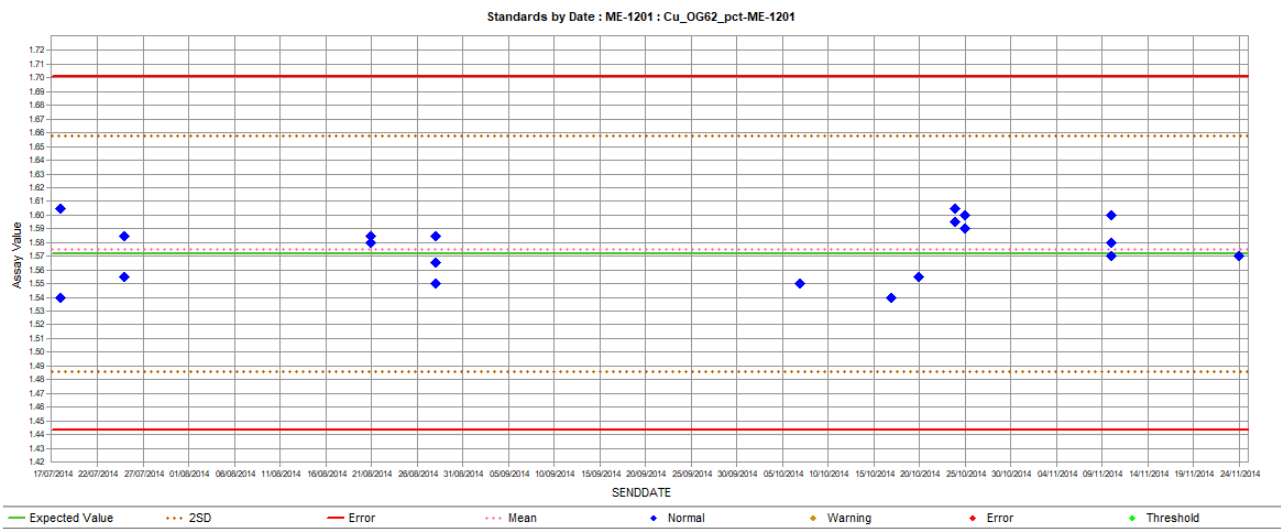

Figure 11-7: 2014 DDH CRM "CG-MG-14" performance – copper

11.1.5.8 Phase XII-XVI Drilling Programs, 2015-October 2020

The QAQC program initiated in 2014 continued to demonstrate that the assay process was in control from 2015 through October 2020. Reporting on QAQC performance includes monthly and annual reports. Blank performance demonstrated that contamination typically did not occur between samples during preparation from 2015 to November 2020 (Capstone Gold, 2015a, 2016a, 2017a, 2018a, 2019, 2020a, 2021), although increased between-sample contamination was observed in 2017, particularly for zinc. Blank performance shows that cross contamination ranging from 0.01% to 0.04% Zn occurred in 2017 and early 2018, typically at the coarse crushing stage (Capstone Gold, 2018a). The impact of these blank failures on ore-waste classification is considered low but investigation into the root cause and mitigation is part of ongoing quality control activities (Capstone Gold, 2020). CRM inserted included seven commercially available CRM and nine CRM created from ore material covering low-grade to high-grade values. The custom CRM were certified by CDN Resources of Langley, Canada using 15 laboratories for three CRM created in 2014, 10 laboratories for three CRM created in 2016 and eight laboratories for three CRM created in 2018. All batches containing failed CRM were reanalyzed and the values replaced in the *acQuire* database. Performance of the QAQC control samples is summarized in Table 11-13, with examples of the control charts for copper in blanks at ALS and CML (Figure 11-8) and medium-grade CRM “CG-MG-14” (Figure 11-9) and “CG-MG-16” (Figure 11-10). Field duplicates show high variability consistent with the vein mineralization at Cozamin, with about 70% of the duplicate value within ±20% of the original value for copper and zinc, 80% within ±20% for silver and 65% within ±20% for lead. Field duplicates from 2019 through 2020 are more variable than previous drilling campaigns for copper, with 60% of the duplicate values within ±20% of the original value for copper over 1%. Field duplicates were not taken in SROB-Zn drilling in 2017 and in drillholes from surface in 2018 to preserve material for metallurgical testing. Preparation duplicates show increasing homogeneity from field duplicates (quarter core until October 2015, the other half of core to present) through coarse crush duplicates and finally pulp duplicates. Correlation between preparation duplicates was strong for copper and zinc and moderate for silver and lead.

Table 11-14: 2015-2020 DDH Certified Reference Material Standards and Blank QAQC Performance

Control	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Insertion Rate (%)	Total # Failures	Failure Rate (%)
2015							
ME-1204[1]	0.519 ± 0.033	2.36 ± 0.18	0.443 ± 0.036	58.0 ± 9.0	0.1	-	-
CG-LG-14[2]	0.877 ± 0.057	0.451 ± 0.030	0.052 ± 0.006	27.5 ± 3.6	2.5	-	-
CG-MG-14[2]	1.738 ± 0.099	0.492 ± 0.033	0.112 ± 0.012	53.0 ± 4.05	1.8	-	-
ME-1402[3]	2.9 ± 0.24	15.23 ± 1.005	2.48 ± 0.165	131.0 ± 10.5	0.4	-	-
CG-HG-14[2]	3.553 ± 0.203	0.604 ± 0.036	0.094 ± 0.012	94.1 ± 7.1	0.1	-	-
BLANK	0.01% warning limit	0.01% warning limit	0.01% warning limit	10 g/t warning limit	5.6	14	7
2016							
ME-1306[4]	0.398 ± 0.027	3.17 ± 0.225	1.6 ± 0.105	104 ± 10.5	0.3	-	-
ME-1403[1]	0.448 ± 0.045	1.34 ± 0.09	0.414 ± 0.027	53.9 ± 8.1	0.3	-	-
CG-LG-14[2]	0.877 ± 0.057	0.451 ± 0.030	0.052 ± 0.006	27.5 ± 3.6	2.7	-	-
ME-17[5]	1.36 ± 0.15	7.34 ± 0.555	0.676 ± 0.081	38.2 ± 4.95	0.3	-	-
CG-MG-14[2]	1.738 ± 0.099	0.492 ± 0.033	0.112 ± 0.012	53.0 ± 4.05	1.3	-	-
CG-HG-14[2]	3.553 ± 0.203	0.604 ± 0.036	0.094 ± 0.012	94.1 ± 7.1	0.9	-	-

Control	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Insertion Rate (%)	Total # Failures	Failure Rate (%)
BLANK	0.01% warning limit	0.01% warning limit	0.01% warning limit	10 g/t warning limit	5.9	14	11
2017							
ME-1306[4]	0.398 ± 0.027	3.17 ± 0.225	1.6 ± 0.105	104 ± 10.5	0.9	-	-
ME-1403[1]	0.448 ± 0.045	1.34 ± 0.09	0.414 ± 0.027	53.9 ± 8.1	0.9	-	-
CG-LG-16[2]	0.751 ± 0.036	0.259 ± 0.015	0.008 ± 0.003	14.0 ± 2.55	2.3	3	4
CG-LG-14[2]	0.877 ± 0.057	0.451 ± 0.030	0.052 ± 0.006	27.5 ± 3.6	0.6	-	-
ME-17[5]	1.36 ± 0.15	7.34 ± 0.555	0.676 ± 0.081	38.2 ± 4.95	1.1	-	-
ME-1201[5]	1.572 ± 0.129	4.99 ± 0.435	0.465 ± 0.048	37.6 ± 5.1	0.4	1	7
CG-MG-14[2]	1.738 ± 0.099	0.492 ± 0.033	0.112 ± 0.012	53.0 ± 4.05	0.4	-	-
CG-HG-14[2]	3.553 ± 0.203	0.604 ± 0.036	0.094 ± 0.012	94.1 ± 7.1	0.8	-	-
BLANK	0.01% warning limit	0.01% warning limit	0.01% warning limit	10 g/t warning limit	6.9	OG62 Cu= 4 Zn= 2 ICP61 Cu= 20 Zn= 29 Pb= 10 MEMS61 Cu= 12 Zn= 70 Pb= 13	OG62 0.7% ICP61 35% MEMS61 12%
2018							
CG-HG-14[2]	3.553 ± 0.203	0.604 ± 0.036	0.094 ± 0.012	94.1 ± 7.1	0.7	7	3
CG-MG-14[2]	1.738 ± 0.099	0.492 ± 0.033	0.112 ± 0.012	53.0 ± 4.05	0.02	-	-
CG-HG-16[2]	3.19 ± 0.18	0.532± 0.048	0.028 ± 0.003	55.9 ± 3.45	0.3	2	2
CG-MG-16[2]	1.28 ± 0.063	0.608 ± 0.036	0.032 ± 0.003	30.7 ± 2.4	0.7	6	3
CG-LG-16[2]	0.751 ± 0.036	0.259 ± 0.015	0.008 ± 0.003	14.0 ± 2.55	3.0	28	3
CG-HG-18[2]	3.520 ± 0.270	1.410 ± 0.135	0.596 ± 0.045	60.9 ± 6.30	0.01	-	-
CG-LG-18[2]	0.946 ± 0.056	0.097 ± 0.011	0.032 ± 0.005	19.6 ± 2.10	0.02	-	-
ME-1201[5]	1.572 ± 0.129	4.99 ± 0.435	0.465 ± 0.048	37.6 ± 5.1	0.1	-	-

Control	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Insertion Rate (%)	Total # Failures	Failure Rate (%)
ME-1204[1]	0.519 ± 0.033	2.36 ± 0.18	0.443 ± 0.036	58.0 ± 9.0	0.2	1	2
ME-1306[4]	0.398 ± 0.027	3.17 ± 0.225	1.60 ± 0.105	104 ± 10.5	0.4	-	-
ME-1402[3]	2.90 ± 0.24	15.23 ± 1.005	2.48 ± 0.165	131.0 ± 10.5	0.1	-	-
ME-1403[1]	0.448 ± 0.045	1.34 ± 0.09	0.414 ± 0.027	53.9 ± 8.1	0.6	2	1
ME-17[5]	1.36 ± 0.15	7.34 ± 0.555	0.676 ± 0.081	38.2 ± 4.95	0.3	1	1
BLANK	0.01% warning limit	0.01% warning limit	0.01% warning limit	10 g/t warning limit	6.4	OG62 Cu= 3 MEMS61 Cu= 12 Zn=27 Pb = 7 Ag = 1 CML-ICP Zn = 3	OG62 1% MEMS61 2% CML-ICP 2%
2019							
CG-HG-16[2]	3.19 ± 0.18	0.532± 0.048	0.028 ± 0.003	55.9 ± 3.45	0.4	1	1
CG-MG-16[2]	1.28 ± 0.063	0.608 ± 0.036	0.032 ± 0.003	30.7 ± 2.4	0.4	1	2
CG-LG-16[2]	0.751 ± 0.036	0.259 ± 0.015	0.008 ± 0.003	14.0 ± 2.55	1.4	1	0
CG-HG-18[2]	3.520 ± 0.270	1.410 ± 0.135	0.596 ± 0.045	60.9 ± 6.30	0.9	-	-
CG-MG-18[2]	1.540 ± 0.135	0.165 ± 0.015	0.053 ± 0.006	28.3 ± 2.70	0.3	3	4
CG-LG-18[2]	0.946 ± 0.056	0.097 ± 0.011	0.032 ± 0.005	19.6 ± 2.10	1.3	4	1
ME-1201[5]	1.572 ± 0.129	4.99 ± 0.435	0.465 ± 0.048	37.6 ± 5.1	0.02	-	-
ME-1306[4]	0.398 ± 0.027	3.17 ± 0.225	1.6 ± 0.105	104 ± 10.5	0.3	-	-
ME-1402[3]	2.90 ± 0.24	15.23 ± 1.005	2.48 ± 0.165	131.0 ± 10.5	0.1	-	-
ME-1403[1]	0.448 ± 0.045	1.34 ± 0.09	0.414 ± 0.027	53.9 ± 8.1	0.7	1	1
ME-17[5]	1.36 ± 0.15	7.34 ± 0.555	0.676 ± 0.081	38.2 ± 4.95	0.1	-	-
BLANK	0.01% warning limit	0.01% warning limit	0.01% warning limit	10 g/t warning limit	5.5	OG62 Cu = 1 MEMS61 Cu= 10 Zn=17 Pb=1	OG62 0.4% MEMS61 2%

Control	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Insertion Rate (%)	Total # Failures	Failure Rate (%)
Jan 1 to October 31, 2020							
CG-HG-16[2]	3.19 ± 0.18	0.532 ± 0.048	0.028 ± 0.003	55.9 ± 3.45	1.2	MEMS61 Ag = 1	1
CG-MG-16[2]	1.28 ± 0.063	0.608 ± 0.036	0.032 ± 0.003	30.7 ± 2.4	1.1	OG62 Cu = 1 MEMS61 Ag = 1	2
CG-LG-16[2]	0.751 ± 0.036	0.259 ± 0.015	0.008 ± 0.003	14.0 ± 2.55	3.1	MEMS61 Cu = 1	1
CG-HG-18[2]	3.520 ± 0.270	1.410 ± 0.135	0.596 ± 0.045	60.9 ± 6.30	2.7	-	-
CG-MG-18[2]	1.540 ± 0.135	0.165 ± 0.015	0.053 ± 0.006	28.3 ± 2.70	1.1	OG62 Ag = 1 MEMS61 Ag = 2 Pb = 1	OG62 1% MEMS61 3%
CG-LG-18[2]	0.946 ± 0.056	0.097 ± 0.011	0.032 ± 0.005	19.6 ± 2.10	2.6	MEMS61 Zn = 1	MEMS61 0.6%
ME-1306[4]	0.398 ± 0.027	3.17 ± 0.225	1.6 ± 0.105	104 ± 10.5	1.2	-	-
ME-1402[3]	2.90 ± 0.24	15.23 ± 1.005	2.48 ± 0.165	131.0 ± 10.5	0.1	-	-
ME-1403[1]	0.448 ± 0.045	1.34 ± 0.09	0.414 ± 0.027	53.9 ± 8.1	1.2	-	-
ME-1801[6]	0.284 ± 0.010	7.43 ± 0.30	3.08 ± 0.10	108.0 ± 6.0	0.3	OG62 Zn = 1 Pb = 1	8
BLANK (186)	0.01% warning limit	0.01% warning limit	0.01% warning limit	10 g/t warning limit	5.1	OG62 Cu = 2 MEMS61 Cu = 7 Zn =11 Pb =2	OG62 1% MEMS61 3%

Table 11-14 Notes:

CRM Acceptable ranges are ±3 standard deviations. CRM purchased from or certified through CDN Resource Laboratories Ltd., Langley, Canada. Blank material was quartz cobbles.

1. Mexico Campo Morado volcanogenic massive sulphide deposit material.
2. Mexico Cozamin Mine ore. "CG-Grade-14" certified using 15 laboratories; "CG-Grade-16" certified using 10 laboratories; "CG-Grade-18" certified using 8 laboratories.
3. Mixed ore material with approximate whole rock composition of 36% SiO_2 and 15% Fe_2O_3.
4. Mixed ore material with approximate whole rock composition of 58% SiO_2 and 13% Fe_2O_3.
5. Canada Slave structural province volcanogenic massive sulphide deposit material.
6. Canada Caribou volcanogenic massive sulphide deposit material (New Brunswick).

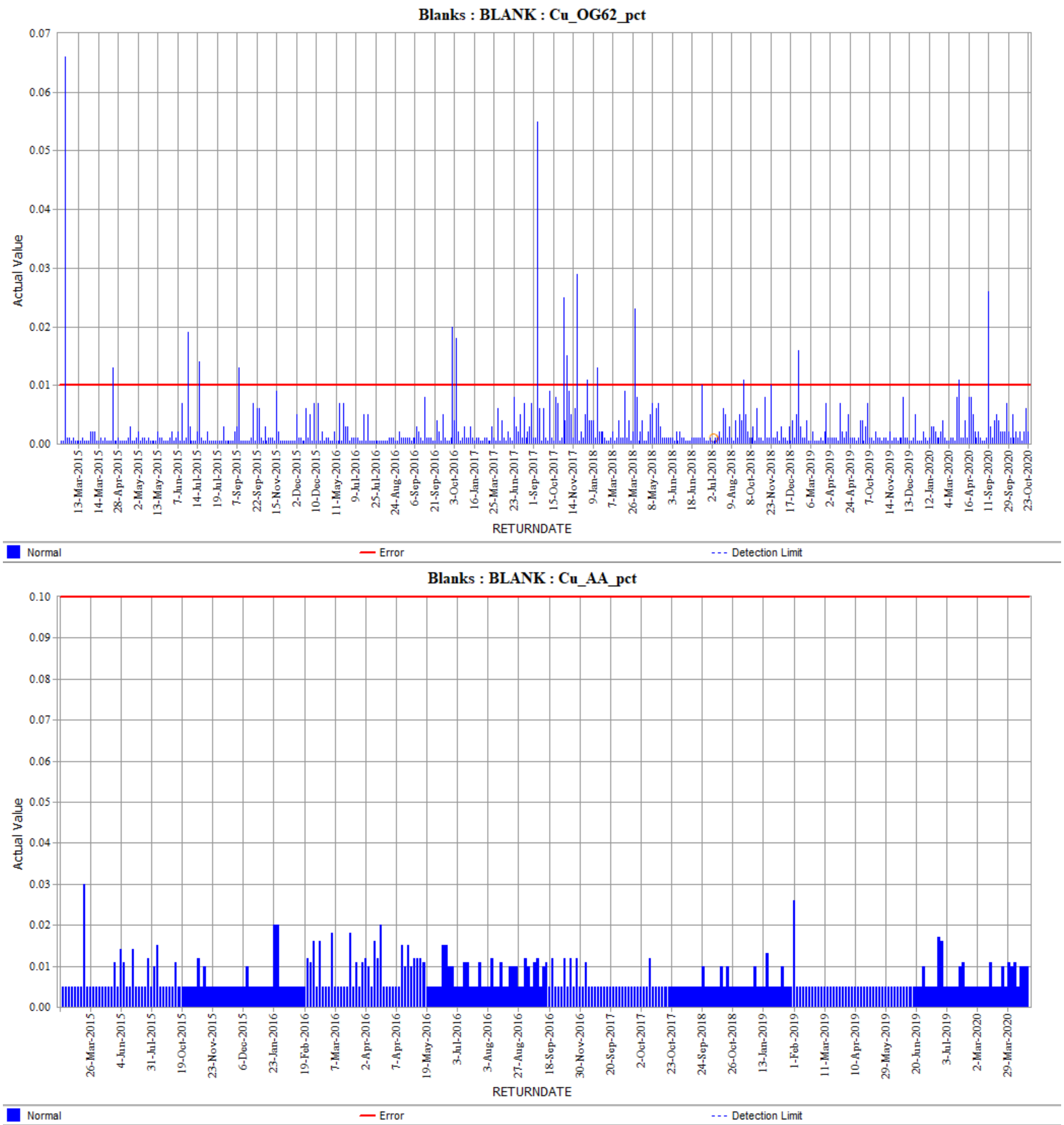

Figure 11-8: 2015 to 2020 DDH Blanks performance – copper, ALS (upper) and CML (lower)

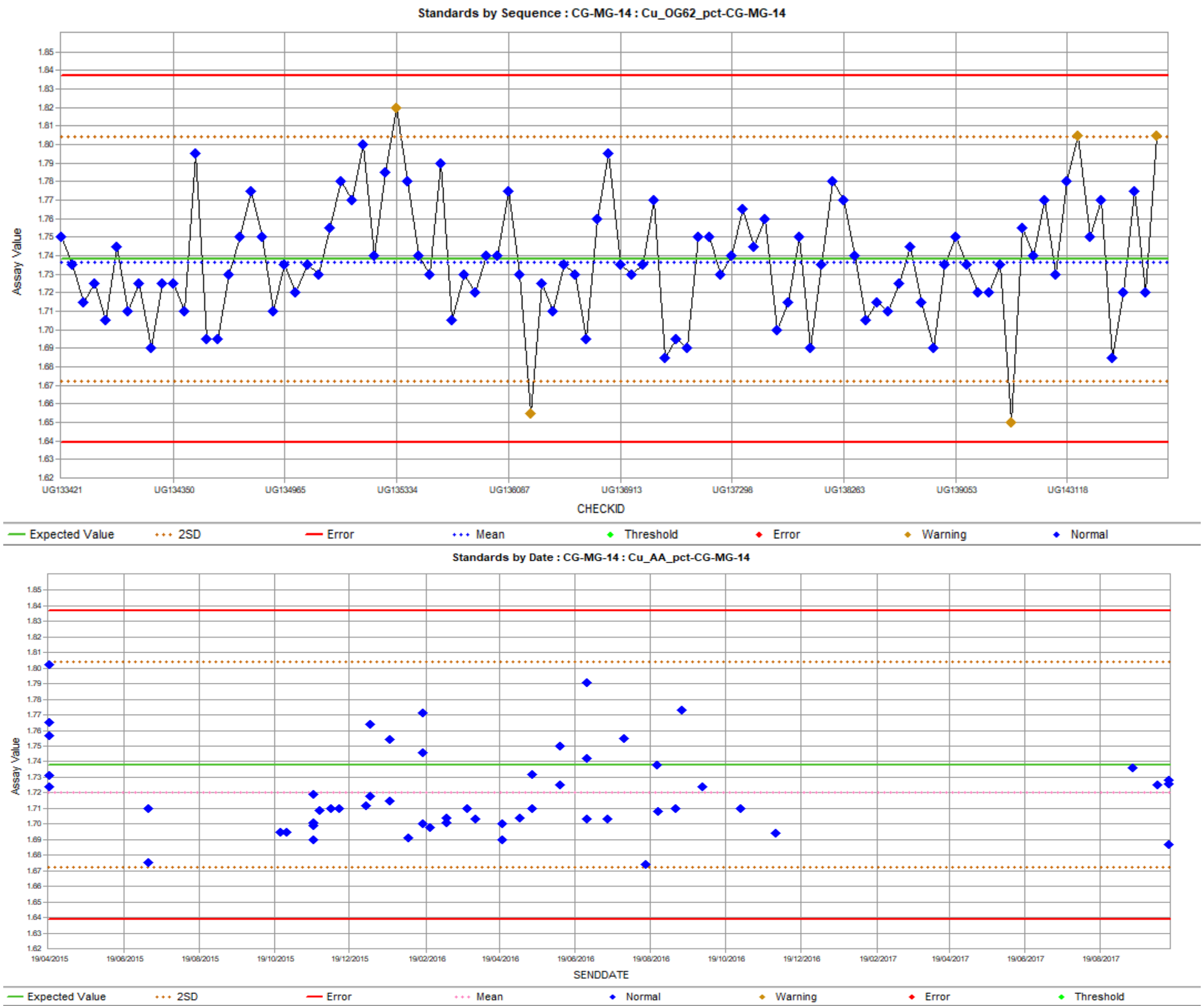

Figure 11-9: 2015 to 2017 DDH CRM "CG-MG-14" performance – copper, ALS (upper) and CML (lower)

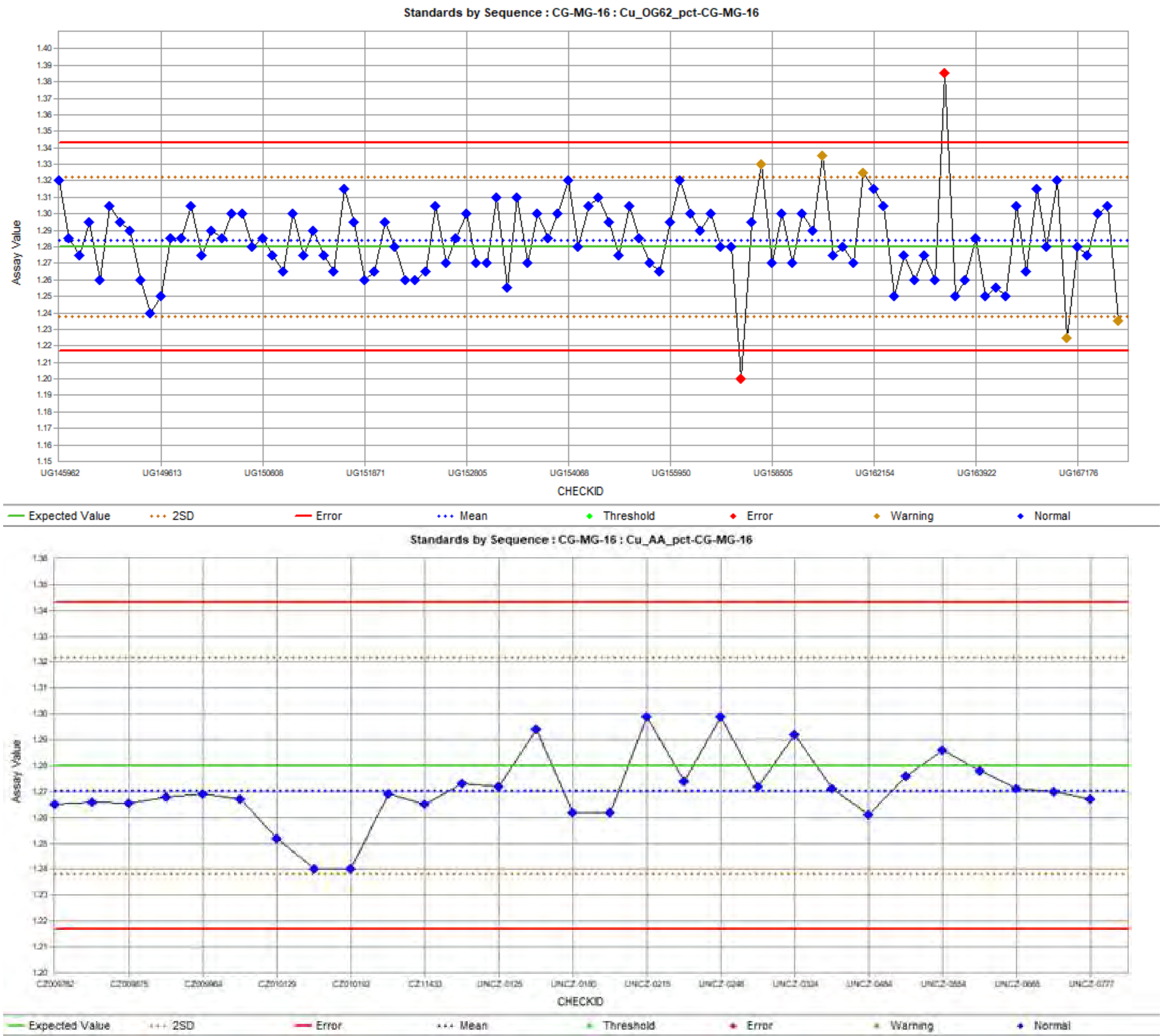

Figure 11-10: 2018 to 2020 DDH CRM "CG-MG-16" performance – copper, ALS (upper) and CML (lower)

11.2 DDH QAQC Conclusions

Cozamin's QAQC program for DDH samples effectively controlled sample accuracy, precision and contamination since its reinstatement in 2014 through October 2020. Reanalysis of available pulps from samples collected from 2010 to 2013 within resource domains, including QAQC controls, confirmed original values.

Vivienne McLennan, P.Geo., Capstone's Manager, Resource Governance, confirms that the diamond drilling samples are acceptable to support the mineral resource estimation in this Technical Report.

11.3 Bulk Density

Capstone collects bulk density measurements from each drillhole, including samples from mineralized and non-mineralized intercepts. As of October 31, 2020, a total of 47,352 bulk density measurements have been collected from most drillholes on the property.

11.3.1 Bulk Density Sampling Method and Procedure, 2009-2014

All drillcore pieces greater than 10 cm in length within an assay sample interval were selected from the core box and labelled to retain their order. Bulk density measurements were taken of consecutive assay intervals through mineralized zones. In waste zones measurements are less frequent, comprising a 2 m sample approximately every 20 m to 50 metres downhole. Core pieces were placed on a top loading balance and weighed. Capstone used the weight-in-air weight-in-water technique to determine the bulk density of the drillcore (Equation 11-1).

Equation 11-1:

$$\textit{Bulk Density} = \frac{\textit{weight in air}}{\textit{volume of water displacement}}$$

This technique uses a 2,000 mL plastic graduated cylinder that is filled with water to the 2,000 mL graduation line and weighed. The cylinder is then emptied and filled with the drillcore pieces from the sample interval. Water is poured into the cylinder containing the core to the 2,000 mL mark and then weighed. The volume of the displaced water is then divided by the weight in air to determine the bulk density (g/cm^3). Data were recorded in a *Microsoft Excel*® spreadsheet, along with the drillhole name, from and to depths, and rock type information.

In 2009, Cozamin's bulk density dataset comprised 4,045 measurements, plus an additional 857 repeat samples to assess the precision of the measurement technique. Three anomalous values were removed from the database due to suspected typographic entry errors of the sample weights. The bulk densities in the database ranged from 1.51 g/cm^3 to 6.37 g/cm^3, with a mean of 2.83 g/cm^3. Density values were measured in 135 of the 365 drillholes in the database at the time, and their spatial distribution was considered reasonably extensive throughout areas of potential economic interest.

In 2013, a total of 2,354 bulk density values were reanalyzed to correct widely varying values obtained between 2009 and 2012, ranging from 0.31 g/cm^3 to 9.02 g/cm^3, for quality control and to check extreme values. The extreme high and low values were replaced with results that fell within expected bulk density ranges database.

As of December 31, 2014, there were 18,468 bulk density measurements collected from most drillholes on the property. These bulk density values ranged from 2.05 g/cm^3 to 6.05 g/cm^3, with a mean of 2.71 g/cm^3.

11.3.2 Bulk Density QAQC 2013-2014

In November 2013, Cozamin implemented a QAQC program for its bulk density determinations. This included the use of an aluminum cylinder, approximately 20 cm in length with a known bulk density of 2.7 g/cm^3, to act as a reference standard for the measurement method. Measurements of the aluminum cylinder are taken at a rate of 1 in 25 measurements of drillcore. Values of 215 aluminum cylinder measurements ranged from 2.63 g/cm^3 to 2.74 g/cm^3, with an average of 2.69 g/cm^3. This represents an average underestimation bias of less than 0.4%.

Repeat measurements were taken to provide an understanding of the precision of the method. Capstone selected vein intercepts from drillholes in the San Roberto, MNFWZ, and San Rafael zones for reanalysis. Repeat measurements from the drillholes showed good levels of precision, with 90% of the 142 sample pairs measuring within 1% of each other (from the Ranked HARD plot). The duplicate samples did not show obvious bias.

The results of the QAQC samples indicate the 2013 to 2014 bulk density dataset is of sufficient quality for use in mineral resources and mineral reserves estimation.

11.3.3 Bulk Density Sampling Method and Procedure, 2015-2020

Since 2015, Capstone has used the weight-in-air over weight-in-water technique to determine the bulk density of the drillcore (Equation 11-2). All drillcore pieces greater than 10 cm in length within an assay sample interval are selected from the core box and labelled to retain their order. Bulk density measurements are taken from consecutive assay intervals through mineralized zones. Core pieces are placed on a top loading balance and weighed, then weighed again in a vat of water using a basket suspended from the hook on the scale.

Equation 11-2:

$$\textbf{Bulk Density} = \frac{\textbf{weight in air}}{(\textbf{weight in air} - \textbf{weight in water})}$$

Data are recorded in an *acQuire* data entry object, along with the drillhole name and from and to depths.

At the end of October 2020, Cozamin's bulk density dataset comprised 29,095 measurements collected between 2015 and 2020. Bulk densities in the database range from 1.95 g/cm^3 to 6.46 g/cm^3, with a mean of 2.73 g/cm^3.

11.3.4 Bulk Density QAQC 2015-2020

The QAQC program for bulk density determinations initiated in 2013 continued through 2020. Measurements of the aluminum cylinder reference material are taken at a rate of 1 in 20 measurements of drillcore. Values of 1,860 aluminum cylinder measurements ranged from 2.68 g/cm^3 to 2.72 g/cm^3, with an average of 2.70 g/cm^3. This average estimation matches the density of the aluminum bar reference material.

Repeat measurements are taken to provide an understanding of the precision of the method. Capstone selected vein intercepts from drillholes in the San Roberto, MNFWZ and San Rafael zones for reanalysis. Repeat measurements from the drillholes showed good levels of precision; 90% of the 1,711 sample pairs measure within 0.2% of each other (from the Ranked HARD plot). The duplicate values do not exhibit bias.

The results of the QAQC samples indicate the bulk density dataset from 2015 to 2020 is of sufficient quality for use in mineral resources and mineral reserves estimation.

12 Data Verification

12.1 Verification of Exploration, Drilling and Sampling Data for input to Mineral Resource Estimate

12.1.1 Current Drillhole Database

Cozamin implemented a "Geological Information Management System" *acQuire* database in October 2014. Error rates have remained within the typically accepted industry standard of less than 1% since that time, including the data collected between 2004 and 2014.

Table 12-1: Drillhole Database Validation - Error Rates

Time Period	Error Rate	Comments on Source of Error	Corrective Actions
November 2018 to November 2020	0.2%	1.5 % error rate on collar surveys, 1.9% error rate in downhole surveys (Capstone Gold, 2020b)	Formalized monthly 100% check on collar data, which resulted in elevation corrections ranging from 2.6m-7.5m in 9 drillhole collars (Capstone Gold, 2020c)
April to October 2018	0.8%	2.7% error rate in downhole surveys (Capstone Gold, 2018c)	Discussion regarding automated application of magnetic declination correction in database, rather than in the downhole survey tools.
July 2017 to March 2018	0.6%	downhole surveys (Capstone Gold, 2018b)	Reminded team of requirement to save all downhole survey backups.
January to July 2017	0.6%	collar surveys (Capstone Gold, 2017c)	Implemented 100% check on collar data at close of drilling campaign.
April to December 2016	0.3%	downhole survey (Capstone Gold, 2017b)	None taken.
March 2015 to March 2016	2.6%	4% error rate in downhole survey; 1 error in assay (Capstone Gold, 2016b)	Switched to downloadable Reflex tool.
Re-Built Database 2004-2014	0.3%	1.2% error rate for lithology; 1.5% error rate in downhole survey (Capstone Gold, 2015b-d)	Added lithological core logging data entry object to *acQuire*; new workflow required saving of all downhole survey backups.

As noted in Table 12-1, the error rate for the data imported into the newly built *acQuire* database was 0.3% overall, with all errors limited to downhole survey at 1.5% and a new lithology check at 1.5%. To resolve the source of these errors, use of a downloadable *Reflex* downhole survey tool and a data entry object for lithological core logging were established.

Internal verification of drillhole data imported into the *acQuire* database has been completed annually since 2015 and documented in memoranda accessible to all of Capstone's intranet users. A minimum of 10% of surveyed collar coordinates, downhole survey data and analytical values are checked against original source records. As no other source records exist, data entered directly into *acQuire*'s user interfaces, such as lithology, RQD and bulk density are not verified using this method. Functions such as pick-lists and acceptable value ranges set in the *acQuire* data entry object control error for these parameters.

All errors found were corrected immediately and the dataset used for resource estimation included the corrected values.

12.1.2 Past Drillhole Database

In 2014, audits of the former dataset collected in spreadsheets revealed an unacceptable error rate greater than the typical industry standard of less than 1%. The April 2014 internal audit demonstrated an error rate of 7.8% for assays checked against the ALS laboratory issued certificates across a random selection of 8% of the assay dataset. A further check by LGGC in May 2014 on 10% of the assays focused on drillholes within areas of Indicated and Inferred Mineral Resources (LGGC, 2014a). Collar location data, downhole survey measurements, and assay values were all checked. No errors were found during the audit of the collar data, the assay error rate was 6.4% for downhole survey data (most errors were decimal values or resulted missing source files) and 2% for assays (typically Zn and Pb switches). In June 2014, an internal audit on 92% of the drillhole database collars, downhole surveys and assays further demonstrated error rates of 2.4%, 1.4% and 3.4%, respectively. The data was considered adequate to support Indicated and Inferred classification of Mineral Resources only until further review after completion of corrective actions.

12.1.3 Site Visit and Author Verification

A site visit to Cozamin was completed by Garth Kirkham, P.Geo., on April 9 and 10, 2018. The purpose of these visits was to fulfill the requirements specified under NI 43-101 and to familiarize himself with the property. The site visit consisted of an underground tour of development headings as well as an inspection of the surface core logging, sampling and storage areas. The site visit also included an inspection of the property, offices, underground vein exposures, core storage facilities, mill and tour of areas affected by the mining operation.

The tour of the office showed a clean, well-organized, professional environment. On-site staff led the author through the chain of custody and methods used at each stage of the logging and sampling process. All methods and processes are to industry standards and reflect best practices, and no issues were identified. The core is accessible and stored in covered racks.

The author selected 10 drillholes from the database and they were laid out at the core storage area. Site staff supplied the logs and assay sheets for verification against the core and the logged intervals. The data correlated well with the physical core and no issues were identified. In addition, the author toured the complete core storage facilities, selecting and reviewing core throughout. No issues were identified.

The author is confident that the data and results are valid based on the site visit and inspection of all aspects of the project, including methods and procedures used. It is the opinion of the independent author that all work, procedures, and results have adhered to best practices and industry standards required by NI 43-101. No duplicate samples were taken during the site visit to verify assay results as Cozamin is an operating mine and ongoing QAQC is performed constantly and consistently, however there were no limitations on the author with respect to verification. In addition, there were no limitations with respect to validating the physical data or computer-based data. The author is of the opinion that the work was being performed by a well-respected, large, multi-national company that employs competent professionals that adhere to industry best practices and standards.

The data verification process did not identify any material issues with the Cozamin sample/assay data. The author is satisfied that the assay data is of suitable quality to be used as the basis for this resource estimate.

The author performed the preceding Mineral Resource estimates for the MNFW zones so no separate data verification was necessary. The MNV Mineral Resource estimate was performed by Capstone personnel which were validated by the author by creating and calculating verification models independent of those supplied. The results showed excellent agreement and are presented within this technical report without alteration or editing.

12.1.4 Summary and Opinion of QP

Garth Kirkham, P.Geo., considers the Cozamin DDH dataset appropriately validated and verified, and adequate for the mineral resource estimation in this Technical Report.

12.2 Verification of Mineral Processing and Metallurgical Testing Data

QP Chris Martin, CEng MIMMM, compared recent operations data with previous predictions to investigate if the past forecasts proved to be accurate. Results from this exercise are shown in the next section of this report. While the forecasts have, for the most part, been reasonable, a small difference was evident. Consequently, a calibration exercise was conducted by sampling the plant feed periodically for 2 days, testing the resulting feed sample in the lab and comparing the result with the mill performance over the same 2 days. The resulting calibration factor has been incorporated into the metallurgical forecast employed in this report.

The testing laboratory conducts routine QAQC exercises on its analytical laboratory using round-robin work with a large number of peer laboratories. Further, assays obtained in this study are routinely checked against expected assays from past analyses of the same samples conducted by Cozamin. To date checks have been consistently good between the two assay sources.

12.3 Verification of Inputs into Mineral Reserve Estimate

QP Tucker Jensen, P.Eng., worked on-site at Cozamin February to June 2019, and remotely until September 2020. Underground workings were routinely visited as part of the site work.

Operational information including mine plans, scheduling, performance, costs, condition of the mining fleet, dilution and ore loss was verified. The Mineral Resource models supporting the Mineral Reserves were compared to drilling, grade control sampling and an evaluation of monthly and annual reconciliations. The Mineral Resource models provided and other data was confirmed as adequate for use in Mineral Reserve estimation for this Technical Report.

12.4 Verification of Considerations for Geotechnical Factors

QP Darren Kennard, P.Eng., carried out geotechnical inspections of the Cozamin underground workings on two occasions including most recently in April 2018. Verification of Cozamin geotecnical core logging procedures was carried out in 2019 and the rock mass classification values were calculated form the data. This data was used in conjunction with core photographs and the site 3D geological model as a basis for a geotechnical domain model. Laboratory intact rock strength tests were carried out to verify Cozamin data and core logging estimates. Empirical stope and pillar stability calculations have been verified by underground inspection of the rock mass quality. Site mining and geotechnical staff describe expected performance of the stopes and pillars designed according to those presented in the Technical Report.

12.5 Verification of Factors Influencing Recovery

QP Gregg Bush, P.Eng. visited Cozamin Mine as Chief Operating Officer of Capstone periodically from 2010 through 2018, and as a consulting engineer from June 25 to 29, 2018 and from August 19 to 23, 2019. Verification of the source data for work completed by the QP in Section 17 and resulting recommendations is based on personal review of mill operating data, observation of process circuits and equipment in operation and the resulting realized concentrate sales.

12.6 Environmental, Regulatory and Social or Community Data Verification

Several verification procedures were applied to the information available for the Cozamin Mine to confirm the validity and accuracy of these data for inclusion in Chapter 20 of this Technical Report.

The QP, Jenna Hardy, P.Geo., was given full and transparent access to available data, has visited the operation for field verification inspections numerous times since 2005 in conjunction with ongoing environmental and regulatory work at Cozamin, and has reviewed in detail the site reclamation and closure plan and its costing on an annual basis since 2014. She has conducted site visits in relation to Chapter 20 reporting for previous Technical Reports for the Cozamin Mine since 2007; the date of the most recent site visit is shown in Table 2-2.

These site visits and prior technical reports spanned the original acquisition and early feasibility phases as the project was readied for renewed production and its subsequent expansions. Reviews with operations personnel (particularly the team responsible for site environmental and regulatory management) established information on past work and results, and verified the procedures used to collect, record, store and analyze historical and current environmental and regulatory data. During each site visit the environmental and social management of the mine operation was reviewed, key project areas were physically visited in the field to verify reporting of conditions, conclusions and recommendations made.

Specifically for the review of the permitting and environmental baseline work in Section 20, the QP examined representative documentation available (both physically in print copies and electronically) including baseline and feasibility studies, permits, permit applications and regulatory authorizations, reports of regulatory site visits and inspections, and annual and semi-annual reports submitted by Capstone to its regulators. The review included documents generated by Capstone, its regulators, and by its in-country and international environmental consultants. Written summaries of certain of the most recent meetings with regulators prepared by Capstone which were not otherwise recorded were also reviewed. Follow-up information was also provided directly by Cozamin operational management (both on site interviews/discussions and as follow up emails/telephone calls) to confirm the current environmental and regulatory status.

Capstone has established internal controls and procedures to manage the environmental, regulatory and social or community aspects for Cozamin mining operations and on site exploration programs which follow mining industry standard approaches, as well as Mexican environmental regulations, regulatory guidelines and best practices recommended for holders of Mexican Clean Industry Certifications. These are periodically reviewed by operational and corporate management for their effectiveness in a corporate culture which follows the principle of continuous improvement. These are considered by the QP to be supportive of the data verification process in these areas.

The QP, who relies on this work, considered the above from the perspectives of consistency and integrity of the data contained, and discussed the summary and conclusions of these documents with the site environmental and operational management teams to understand the implications of the conclusions and recommendations for follow up actions which have been, and are being, implemented. The above considerations support the written summary of information included in Section 20 of this Technical Report.

The QP is of the opinion that a reasonable level of verification has been completed and that no material issues would have been left unidentified from the programs undertaken which are not described in this report. In reaching this opinion, the QP has also relied upon the work of other consultants in the specific project areas in support of this Technical Report (listed in Section 3). Data review and verification undertaken with respect to the environmental and regulatory aspects of the Cozamin Mine operation and closure adequately support the summary, conclusions and recommendations presented in this Technical Report in these areas.

13 Mineral Processing and Metallurgical Testing

13.1 Introduction

Mr. Chris Martin, QP of Blue Coast Metallurgy Ltd. last visited and toured the mill in January 2018, and has been in contact with the mill personnel regularly since then.

In addition, Mr. Martin has been overseeing laboratory testwork on a selection of samples taken from the San Rafael and V10SE/Calicanto zones in the Cozamin resource. These lead-zinc rich zones are being included in the mine plan for later in the life of the project once the high-grade copper-rich zones have largely been mined, so testing was needed to demonstrate with reasonable confidence their processibility.

13.2 Testing of Future Pb/Zn Ores

13.2.1 Samples

Some 14 samples were shipped from Cozamin to the laboratories of Blue Coast Research Ltd in Parksville, BC, Canada for testing. These included four samples from the San Rafael deposit and ten from the V10SE/Calicanto deposit (termed “Calicanto” through this section). The source of the Calicanto samples is shown in Figure 13-1 below.

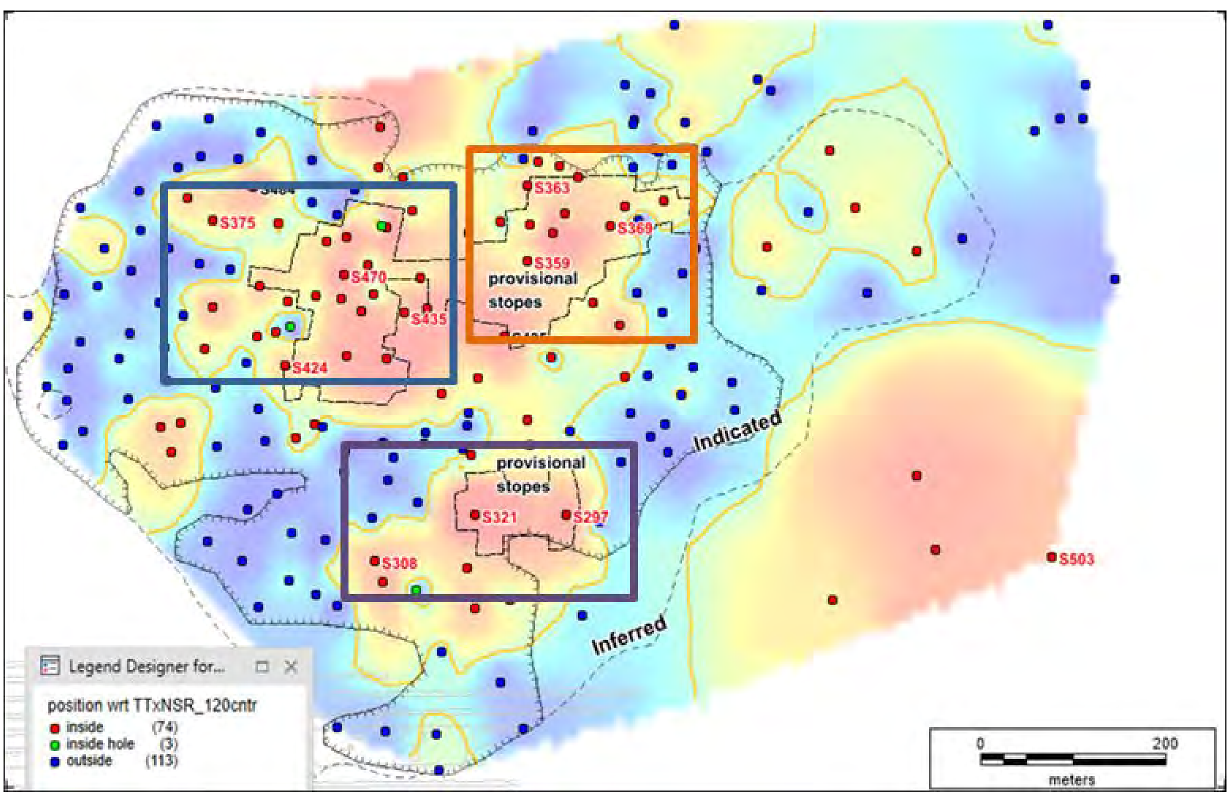

Figure 13-1: Long section of Vein 10SE/Calicanto Vein with location of samples tested (Blue Coast, 2020)

Spatially, S503 is an outlier, and was included as a representation of a recently discovered and highly prospective extension of the Calicanto zone. One master composite was created from each of the Calicanto and San Rafael samples.

13.2.2 Ore hardness

A Bond Ball Mill Work Index test was run on the Calicanto master composite. This sample, tested to a closing screen size of 212 microns, was moderately hard at 15.2 kWh/tonne – however, this is softer than recent work index numbers obtained from V10 and San Rafael samples and 20% softer than the 18.5 kWh/tonne measured on a sample of mill feed, taken when the mill processed an average of 4,053 metric tonnes per day during the two days. Accordingly, based on the composite sample tested it can be expected that mill grinding capacity will not be stretched in the processing of Calicanto material.

13.3 Mineralogy

The bulk modal mineralogy of the San Rafael and Calicanto master composites is shown below, compared with high and low grade V20 Cu ores (Table 13-1). Copper, lead and zinc are all present solely as chalcopyrite, galena and sphalerite respectively.

Table 13-1: Modal Mineralogy of Calicanto, San Rafael and V20 Composites

		Calicanto	San Rafael	V20 Hi-Cu	V20 Lo-Cu
Mineral Mass (% Sample)	Chalcopyrite	1.06	1.19	9.74	4.38
	Sphalerite	5.17	8.20	0.38	0.45
	Galena	2.80	0.70	0.02	0.10
	Pyrite	16.06	6.41	16.86	9.04
	Pyrrhotite	0.92	0.31	2.07	2.28
	As-Pyrite Cobaltite	0.43	0.35	0.07	0.13
	Total Sulphides	*26.43*	*17.14*	*29.14*	*16.38*
	Quartz	36.30	51.01	44.41	57.65
	Feldspar	19.14	7.40	8.84	9.79
	Micas	4.38	2.96	3.42	2.36
	Chlorite	7.48	13.13	5.57	7.62
	Serpentine	0.00	0.06	1.39	0.90
	Carbonates	5.02	7.10	4.85	3.68
	Fe-Oxide	0.23	0.32	1.03	0.69
	Other	1.02	0.88	1.34	0.92
	Total NSG	*73.57*	*82.86*	*70.86*	*83.62*
	Total	*100.00*	*100.00*	*100.00*	*100.00*

Calicanto contains coarse-grained sulphides, so at the plant grind chalcopyrite, galena and sphalerite liberation all favour good metallurgy. San Rafael chalcopyrite is less liberated, however, while galena and sphalerite are somewhat less well liberated. (Figure 13-2)

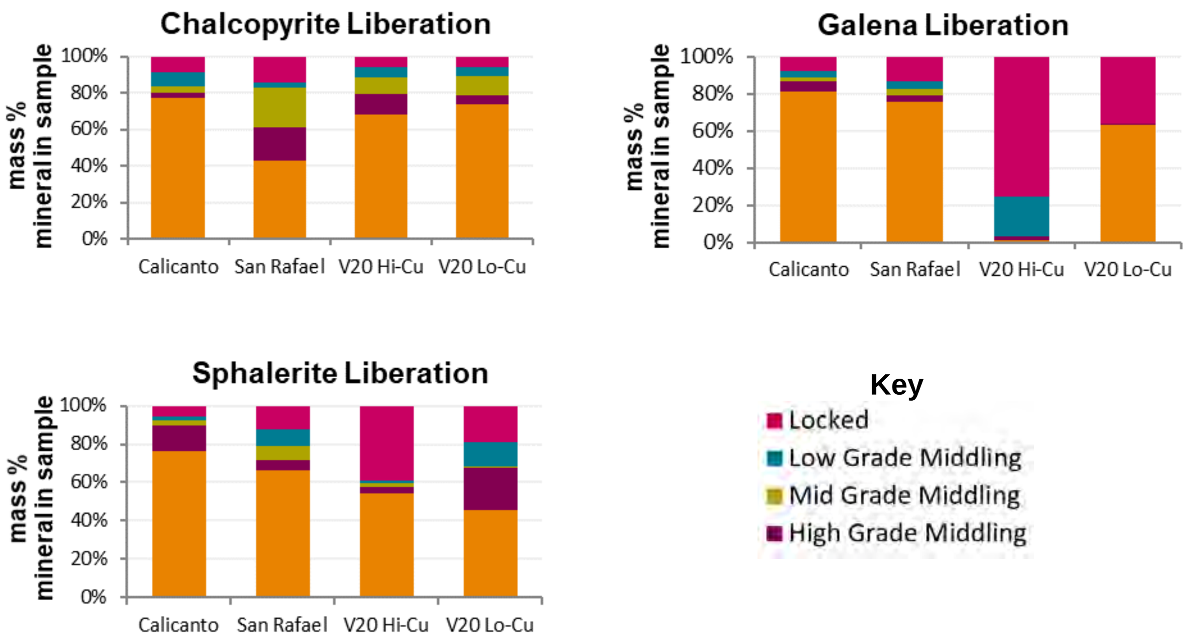

Figure 13-2: Liberation of Key Sulphides at the Plant Grind

13.4 Flotation Testing

Laboratory tests were run on both Calicanto and San Rafael master composites to establish a baseline metallurgical performance on both master composites and on the variability samples. Given the paucity of copper mineralisation in the two zones and the likelihood that they would be processed at least in part in the absence of any copper-rich mineralisation, no assumptions could be made on reagent effects based on past milling experience at Cozamin (which has always been focused on Cu-rich ores). Accordingly, a factorial-designed test program was run to establish the basic rules of processing these lead-zinc resources. Results from this work showed:

- Sequential Pb/Zn flotation could be consistently achieved (and Cu/Pb/Zn flotation when enough copper was present to allow for some flotation).
- Zinc sulphate and ammonium metabisulphite were needed to effect sequential Pb and Zn flotation. High doses of ammonium metabisulphite, relative to those typically used at Cozamin, were especially beneficial.

- In the absence of copper, the use of cyanide, even at modest doses, severely retarded flotation of all metals. Recoveries were very poor. However, as the copper content rose with the blending of V20 with the Pb/Zn ores, the need for cyanide returned.
- The current primary grind size was adequate and regrinding was not needed to create cleaner concentrates of grades similar to previous ores, at high cleaner stage recoveries.

The basic flowsheet adopted to test the variability composites included grinding to a product size of 80% passing about 230 microns in the presence of lime, 1200 g/t ammonium metabisulphite and 250 g/t zinc sulphate. Copper flotation (where appropriate) employed Solvay AERO®3894 collector and Flottec F-150 frother. Lead flotation was achieved using Solvay Aerophine® 3418A and F-150 frother. Zinc flotation, conducted at pH 8.5-9.5 (adjusted with lime), used copper sulphate as an activator and AERO® 3894 as a collector. Cyanide was not used in any tests containing just Calicanto or San Rafael materials, irrespective of copper grade. When the feed was blended with V20 feed, cyanide was used. Seven Calicanto variability samples were tested, plus two from San Rafael. The data shown in the tables below also include previous work on a mix of holes 262 and 266 in the San Rafael resource.

In addition, a 50:50 blend of San Rafael and Calicanto materials was tested to examine if the metallurgy of the blended feed amounted to the sum of the individual parts. Different proportions of copper feeds were mixed with this Calicanto/San Rafael blend for the same reason. The head grades are shown below in Table 13-2. They vary widely, copper assaying from 0.06% to 0.98%, lead from 0.30% to 7.7% and zinc from 1.29% to 10.87%. Accordingly, no single treatment scheme could apply to all the samples and typically two tests were required on each of the variability samples to achieve some degree of optimisation in each case.

Table 13-2: Head Assays of Tested Composites

Sample	Head Assays			
	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
CAL-VAR-1	30	0.71	2.49	2.35
CAL-VAR-2	57	0.98	2.81	2.92
CAL-VAR-3	35	0.12	3.74	3.43
CAL-VAR-4	60	0.05	2.28	1.29
CAL-VAR-5	166	0.06	2.42	2.33
CAL-VAR-6	21	0.06	1.29	4.63
CAL-VAR-7	56	0.32	7.72	10.87
SR-VAR-1	76	0.37	0.88	5.76
SR-VAR-2	33	0.36	0.30	2.59
SR-262/266	66	0.49	1.64	4.50
SRCC-50/50 Comp	57	0.36	1.70	3.43
V20(50)-SRCC(50)	47	0.96	0.84	1.80
V20(35)-SRCC(65)	52	0.79	1.02	2.39
V20(25)-SRCC(75)	55	0.66	1.26	2.73

Only batch flotation was employed, and little focus was applied to optimising concentrate grades. Past work reported in previous technical reports has demonstrated that the mill, equipped with extensive column cleaner flotation capacity, routinely outperforms the laboratory. Therefore, only evidence of selective upgrading typical of past testwork, was sought from the different samples to the different concentrates. Copper flotation was only employed on samples assaying over 0.3% copper in the feed. The Calicanto and San Rafael variability composites floated 55-62% of the copper to the copper concentrate. When blended together, recoveries were higher at 66-68% in repeat tests perhaps suggesting that the chosen flowsheet worked better for the blended feed than individual ores, though the difference may not be statistically significant.

Lead flotation from all but one of the Calicanto samples was highly effective with batch recoveries above 90%. Galena from San Rafael floated somewhat less well but results are typical of what has been seen before. Zinc flotation was also effective with batch recoveries in the high 80's percent in most samples. Concentrate grades were typically over 20% for copper, 30-60% for lead and usually over 40% for zinc (Table 13-3).

Table 13-3: Key Metallurgical Results from Variability and Blend Testing

Copper Flotation Sample	Test	Assays				% Distribution			
		Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag	Cu	Pb	Zn
CAL-VAR-1	F-43	270	23.8	2.3	6.6	17	62	2	5
CAL-VAR-2	F-44	353	17.0	2.2	2.5	20	57	3	3
CAL-VAR-7	F-58	420	18.9	10.0	12.1	6	50	1	1
SR-VAR-1	F-50	1504	22.1	5.3	7.3	19	57	6	1
SR-VAR-2	F-66	830	23.3	0.7	7.1	21	55	2	2
SRCC-50/50 Comp	F-29	1105	22.5	1.4	5.4	20	66	1	2
V20(50)-SRCC(50)	F-40	554	24.8	0.5	2.1	41	89	2	4
V20(35)-SRCC(65)	F-41	675	24.2	0.7	3.2	36	84	2	4
V20(25)-SRCC(75)	F-42	753	24.1	0.8	3.6	32	84	1	3
Lead Flotation Sample	**Test**	**Assays**				**% Distribution**			
		Ag (g/t)	**Cu (%)**	**Pb (%)**	**Zn (%)**	**Ag**	**Cu**	**Pb**	**Zn**
CAL-VAR-1	F-43	268	2.7	38.4	5.0	54	23	91	13
CAL-VAR-2	F-44	325	3.2	29.8	1.4	42	24	78	3
CAL-VAR-3	F-52	423	1.0	58.2	5.7	72	52	93	10
CAL-VAR-4	F-63	478	0.5	36.2	2.5	47	54	94	11
CAL-VAR-5	F-56	2094	0.6	49.2	3.4	58	48	93	7
CAL-VAR-6	F-57	305	1.2	42.5	6.3	39	52	90	4
CAL-VAR-7	F-58	358	2.1	61.1	7.0	77	79	95	8
SR-VAR-1	F-50	1691	2.7	35.0	12.6	43	14	76	4
SR-VAR-2	F-66	839	4.2	21.4	7.6	28	13	79	3
SR-262/266	F-2179	1128	1.1	58.9	7.3	41	6	87	4
SRCC-50/50 Comp	F-29	787	1.5	50.1	4.2	42	12	89	4
V20(50)-SRCC(50)	F-40	412	1.2	19.2	2.7	34	5	89	6
V20(35)-SRCC(65)	F-41	533	1.8	26.9	3.0	34	8	88	4
V20(25)-SRCC(75)	F-42	586	1.2	31.1	3.4	39	7	91	5
Zinc Flotation Sample	**Test**	**Assays**				**% Distribution**			
		Ag (g/t)	**Cu (%)**	**Pb (%)**	**Zn (%)**	**Ag**	**Cu**	**Pb**	**Zn**
CAL-VAR-1	F-43	25	0.3	0.8	46.9	3	2	1	73
CAL-VAR-2	F-44	50	0.5	4.1	44.2	5	3	8	85
CAL-VAR-3	F-52	67	0.6	1.1	37.7	15	37	2	85

CAL-VAR-4	F-63	89	0.4	1.3	41.5	4	19	1	78
CAL-VAR-5	F-56	153	0.4	0.6	41.7	5	36	1	89
CAL-VAR-6	F-57	19	0.2	0.2	42.8	9	38	2	90
CAL-VAR-7	F-58	17	0.1	0.2	33.1	8	13	1	86
SR-VAR-1	F-50	76	0.3	0.2	38.7	12	11	3	83
SR-VAR-2	F-66	45	0.3	0.2	40.6	7	4	3	77
SR-262/266	F-2179	99	1.7	0.8	43.6	12	29	4	80
SRCC-50/50 Comp	F-29	54	0.3	0.2	44.3	6	6	1	80
V20(50)-SRCC(50)	F-40	49	0.3	0.3	39.2	4	1	1	78
V20(35)-SRCC(65)	F-41	53	0.3	0.2	42.7	5	2	1	80
V20(25)-SRCC(75)	F-42	54	0.3	0.2	42.1	5	2	1	78

The recovery of silver to copper concentrates from Cu-bearing Calicanto and San Rafael samples was limited to 20%, but this rose when the feed was blended with copper-rich V20 ores. More silver was recovered to the lead concentrate, often rendering this (by value) a silver concentrate. Little silver floated to the zinc concentrates.

13.5 Metallurgical Parameters for Resource Estimations

The metallurgical forecast for V20 copper ores has been assumed unchanged from those published in the Technical Report dated July 2020. The parameters described below are for San Rafael and Calicanto when processed in isolation. Blending testwork has shown that the metallurgical responses between the three ore sources when blended are essentially the “sum of the parts”.

13.5.1 Copper flotation

No copper flotation is assumed for head grades below 0.3% copper as it is doubtful that a saleable concentrate could be produced at such low head grades.

For mill head grades above 0.3% copper, no algorithm could be established based on the data available for either Calicanto or San Rafael, so copper flotation recovery to the copper concentrate is assumed to be the average from the lab testwork (Calicanto: 63.2%; San Rafael: 59.4%). Similarly, for silver, single point recovery projections have been assumed (Calicanto: 16.2%; San Rafael: 20.1%).

The copper concentrate is expected to assay 26% copper.

13.5.2 Lead flotation

As with copper, and for both San Rafael and Calicanto, where the feed grade is less than 0.3% lead, it is doubtful that an effective lead float can be operated, so the algorithms only apply at grades above 0.3% lead. Where a lead concentrate can be made, lead and silver flotation recoveries to the lead concentrates show a connection with lead head grades (Figure 13-3). The data in Table 13-4 was used to create algorithms to predict lead and silver recoveries to the lead concentrate.

Table 13-4: Forecast Algorithms: Lead and Silver Recovery to Lead Concentrate

Lead Recovery		
Resource Area	**Range of Lead Head Grades**	**Algorithm**
V10SE/Calicanto	<0.3%	0
V10SE/Calicanto	0.3-8%	(11.2*Pb % - 0.3)/0.71) + 81.0
V10SE/Calicanto	>8%	95.6
San Rafael	<0.3%	0
San Rafael	0.3-2%	Pb % x 4.46 + 77.8
San Rafael	>2%	86.7

Silver Recovery		
Resource Area	**Range of Lead Head Grades**	**Algorithm**
V10SE/Calicanto	<0.3%	0
V10SE/Calicanto	0.3-8%	(100-AgRecCuCon%) * (22.3*LN (Pb %) +37.5)
V10SE/Calicanto	>8%	(100-AgRecCuCon%) * 83.8
San Rafael	<0.3%	0
San Rafael	0.3-2%	(100-AgRecCuCon%) * (9.0*LN (Pb %) +45.2)
San Rafael	>2%	(100-AgRecCuCon%) * 51.4

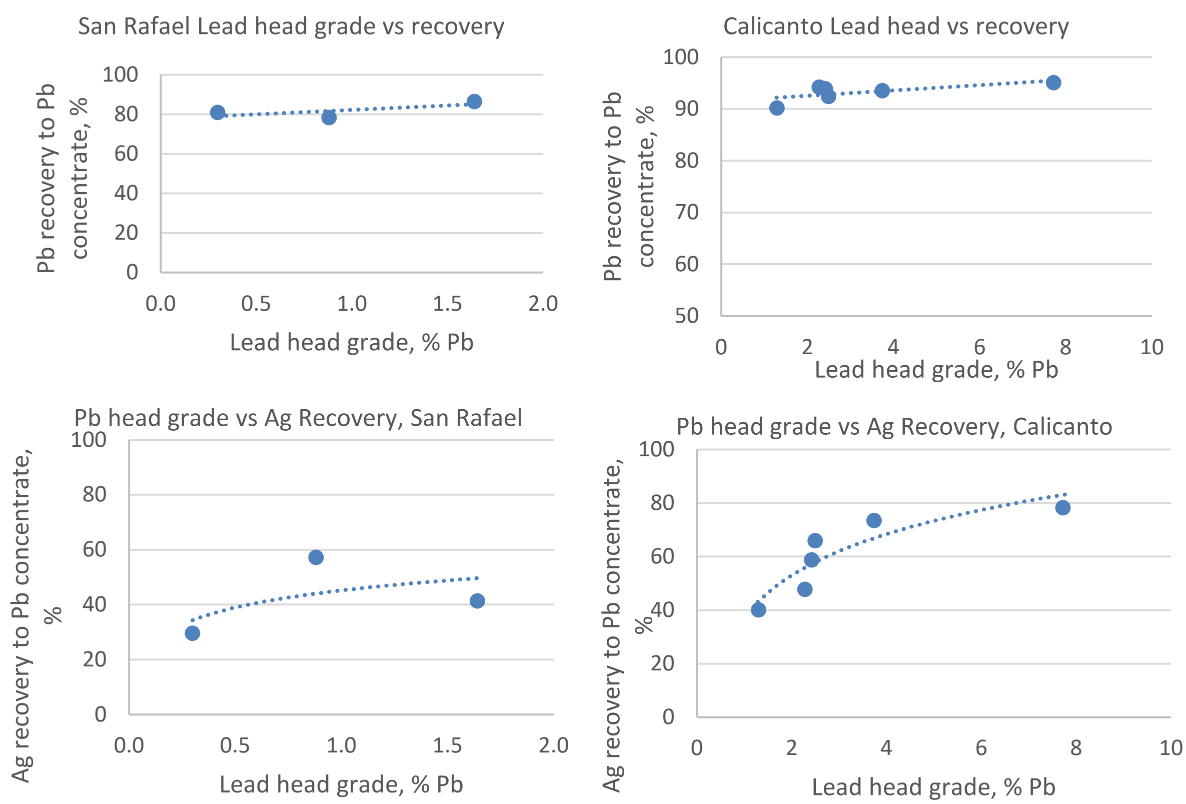

Figure 13-3: Lead and Silver Recovery to the Lead Concentrate

The lead concentrate is expected to assay 55% lead.

13.5.3 Zinc flotation

The limited data suggest zinc recovery to the zinc concentrate is linked to zinc head grade (Figure 13-4). Silver recovery (based on the zinc circuit feed) shows no clear relationship with any head grade, so is considered to be fixed for the sake of this report at 18% for Calicanto and 27% for San Rafael.

Algorithms for zinc and silver recovery to the zinc concentrate are shown in Table 5. Both the lab data and probe data on the sphalerite point to concentrate grades consistent with past performance (46% zinc).

Table 13-5: Forecast Algorithms: Lead and Silver Recovery to Lead Concentrate

Zinc Recovery		
Resource Area	**Range of Zinc Head Grades**	**Algorithm**
V10SE/Calicanto	<0.3%	0
V10SE/Calicanto	0.3-5%	(Zn % x 2.76) + 78.5
V10SE/Calicanto	>5%	92.3
San Rafael	<0.3%	0
San Rafael	0.3-2%	(Zn % x 3.59) + 64.9
San Rafael	>2%	86.4

Silver Recovery		
Resource Area	**Range of Zinc Head Grades**	**Algorithm**
V10SE/Calicanto	<0.3%	0
V10SE/Calicanto	>0.3%	(100-AgRecCuCon%- AgRecPbCon%) * 18
San Rafael	<0.3%	0
San Rafael	>0.3%	(100-AgRecCuCon%- AgRecPbCon%) * 27

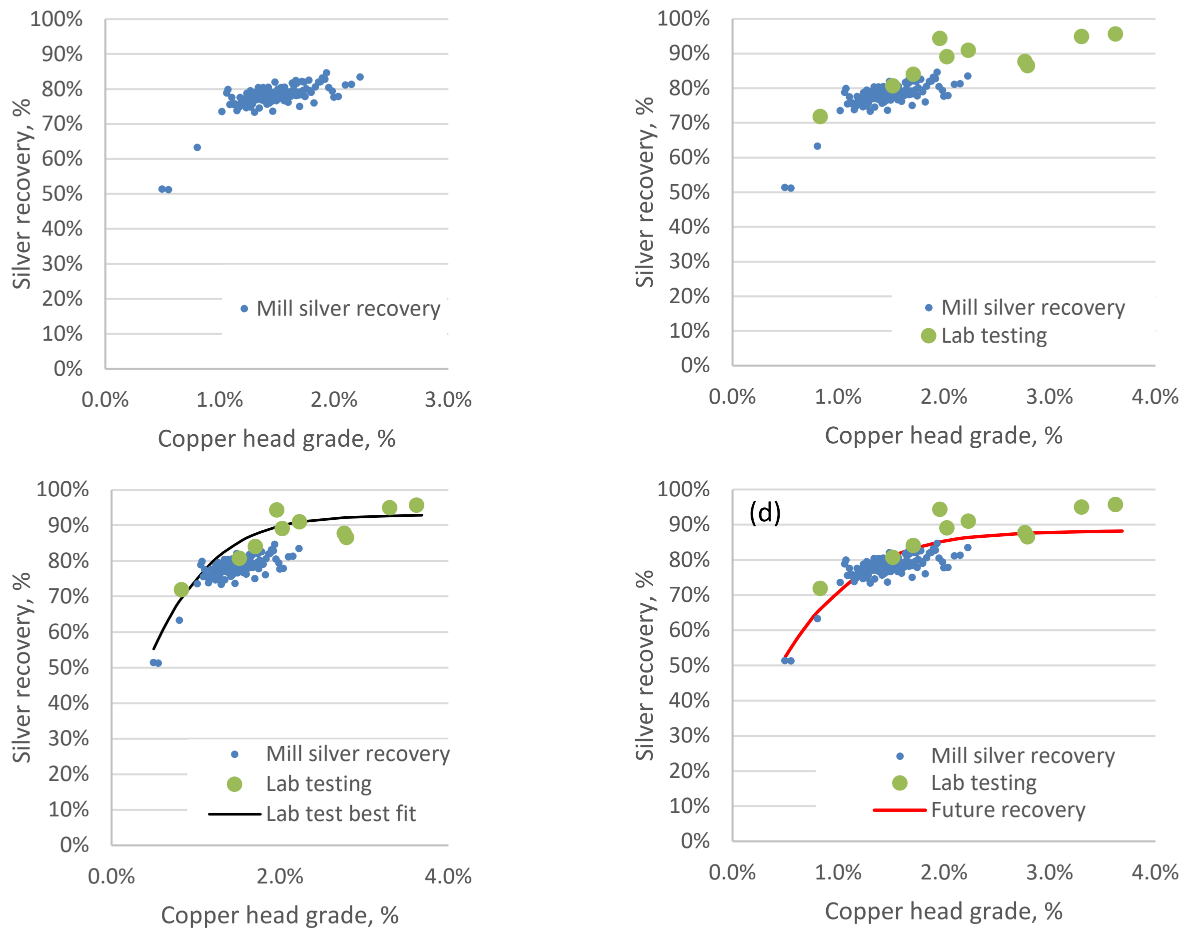

Figure 13-4: Zinc and Silver Recovery to the Zinc Concentrate

13.6 Recommendations

The QP recommends that as the time approaches to mine the Pb/Zn ores in the MNFWZ more testwork is conducted to better evaluate the effect of blending copper with Pb/Zn ores. This work could be conducted in house or in a commercial laboratory. If the latter, the cost will likely be in the order of US $80,000.

14 Mineral Resources Estimates

At the Cozamin Mine, Mineral Resources are estimated within the MNV and MNFWZ, a mineralized splay off the Mala Noche fault that contains the MNV. MNV comprises the mineralized zones San Roberto ("SROB"), San Roberto Zinc ("SROB-Zn") and San Rafael. Capstone commenced production from SROB in 2006, produced from San Rafael from 2006 to 2009 and recommenced in February 2018, commenced production from the MNFWZ in 2010 and from SROB-Zn in early 2018. Most production since 2018 takes place in MNFWZ.

In March 2009, Capstone completed a Mineral Resource estimate for the SROB and San Rafael zones under the supervision of Robert Sim, P.Geo., of Sim Geological Inc. (SGI). Findings of this Mineral Resource estimate were summarized in a NI 43-101 Technical Report (SRK, 2009). In December 2009, the San Rafael zone was again updated by SGI to reflect additional exploration and infill drilling.

SROB and MNFWZ were updated, respectively in November 2012 and February 2013, as two separate Mineral Resource models by Ali Shahkar, P.Eng., of Lions Gate Geological Consulting Inc. (Shahkar, 2013). After completion of the 2013 drilling campaign, which focused on infilling and delineation of additional resources in SROB and MNFWZ, Capstone commissioned LGGC in January 2014 to combine and update the mineral resource models of these two zones.

MNV was the subject of two further internal Mineral Resource estimate updates. The June 2016 update (Capstone, 2016) included 18 infill drillholes at San Roberto. An interim update in February 2017 targeted zinc-rich zones with eight infill holes at SROB-Zn and 14 infill drillholes at San Rafael. The San Roberto zone was separated into the SROB and SROB-Zn mineralization domains (Capstone, 2018a).

The MNV Mineral Resource estimate, comprising the SROB, SROB-Zn and San Rafael zones, was updated effective July 2017, incorporating 27 HQ infill drillholes completed between February 2017 and July 2017, and 60 underground BQ drillholes completed between March 2016 and July 2017 featuring whole core sampling. Further, 28 drillholes were omitted where the vein intercepts did not reasonably fit and there was a concern over spatial data (12), azimuths were sub-parallel to mineralization domains (4), absent logging or sampling information (5) or twinned drillholes (6); nine of the omitted drillholes were rejected in previous mineral resource estimations (Capstone, 2018a).

In 2018, Capstone commissioned Garth Kirkham, P.Geo., of Kirkham Geosystems Ltd. to incorporate new data, models and understandings into the MNFWZ resource estimates. Although interim estimates and models were performed by Capstone internally, which is to be expected considering that Cozamin is an operating mine, none of those internal, not materially different estimates were published in the public domain. In addition, Kirkham Geosystems Ltd. was tasked with updating the MNV Resources reporting to align with current pricing and updated NSR formulae. A Technical Report covering the initial 2018 Resource update was published in July 2018, with an effective date of March 31, 2018. The MNV and MNFW Mineral Resources were then updated effective October 24, 2018.

In 2020, Kirkham Geosystems Ltd. updated the MNFWZ Resource estimate with additional drilling, updated models, revised NSR calculations reflecting new concentrate contracts and metallurgical recoveries and the selection of cut-off grade to reflect current metal prices and mine operating costs to April 2020. Kirkham Geosystems Ltd. updated the MNV Resources reporting using the updated NSR formula. The Resource update was published in a Technical Report effective April 30, 2020.

In 2021, Kirkham Geosystems Ltd. again updated the MNFWZ Resource estimate with additional drilling, updated geological models, revised NSR calculations reflecting new metallurgical studies and concentrate contracts to the end of October 2020, and updated the MNV Resources reporting using the updated NSR formulae. This Resource update, effective October 31, 2020 is the subject of this Technical Report.

14.1 Modelling of MNV and MNFWZ

Mineral Resource estimates for the MNV and the Mala Noche Footwall zones, using data from surface and underground DDHs are the subject of Section 14 of this report. The Mineral Resource estimates were built using the commercially available three-dimensional block modelling software, *Leapfrog*®, *Maptek*™ Vulcan and *MineSight*®.

14.1.1 Geological Modelling

The drillhole desurveying method was set to the *balanced tangent algorithm* to be compatible with the *tangent* drillhole desurveying method used by *Maptek*™ *Vulcan* and *MineSight*®. This option is accessed in the survey table in *Leapfrog*®.

The internal validation tools provided in *Leapfrog*® were used to complete a more thorough validation of the data. No errors were identified in the collar, survey, lithology or assay tables. In the density, mineralization, structure and geotech tables, zero-length intervals (point values) and overlapping intervals were identified. Corrections were addressed as part of to the 2017 Mineral Resource estimate.

Strip logs of the drillholes were created to assist with the geological interpretation. These included geochemical, geological, mineralogical, structural and economic data. Vein/mineralization contacts were more strongly defined using the strip log interpretation.

A revised lithological model was created due to redefinition and regrouping of lithological logging codes. A simplified lithological model was generated using *Leapfrog*® software to assist with exploration targeting and to provide lithological information for mine planning purposes. Four lithological units were modeled based on DDH logs and surface mapping including shale, andesite, diorite and rhyolite (Figure 14-1). Surface mapping was tied into the sub-surface models using polylines. It should be noted that post-mineral faulting and the absence of a marker horizon complicated the creation of a robust stratigraphic model, however the models are considered adequate for the purpose created.

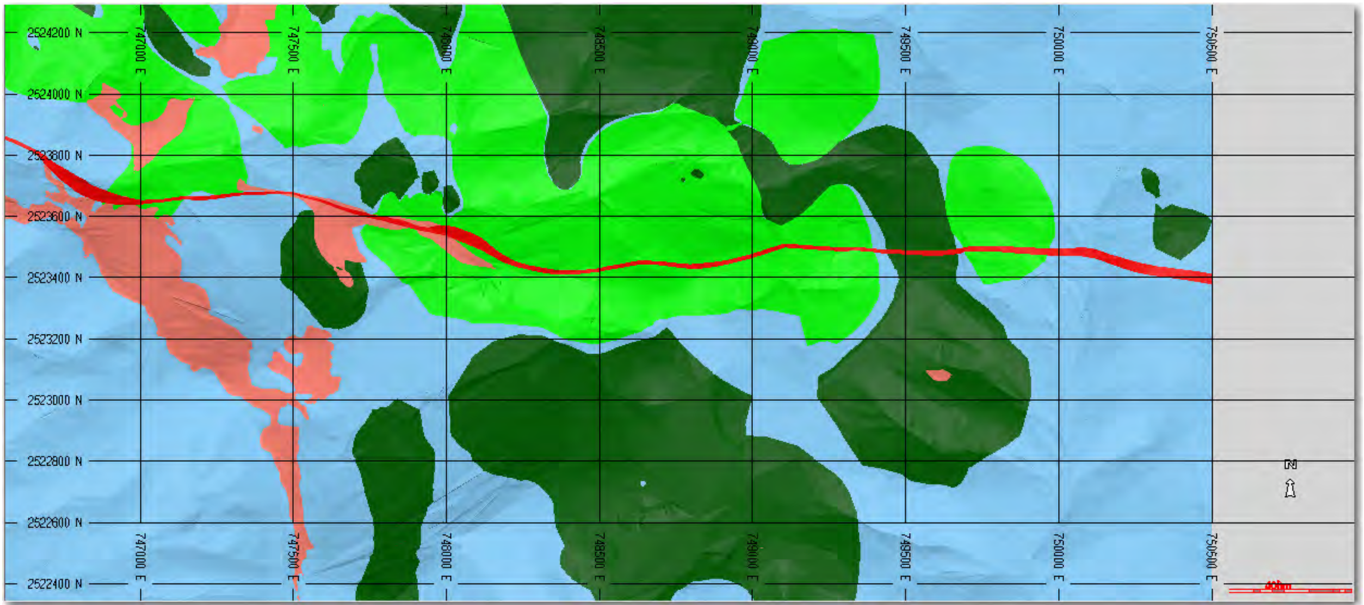

Figure 14-1: Plan view of modelled shale (grey-blue) displayed with the rhyolite (pink), andesite (light green), diorite (dark green), MNV (red) (Kirkham, 2020)

14.1.2 Mineralization Modelling

Mineralization domains for the MNV and MNFWZ were constructed using *Leapfrog*® software. The vein system function was used allowing individual veins to be identified and assigned a priority to manage the relationship of multiple intersecting veins. This was done on a section by section basis using the interval selection tool by manually selecting categorical data from either lithology, structure or vein type. Alternatively, assay data was converted into NSR value ranges to define each individual vein domain. Core photos and DDH strip logs were also used to assist in the process of defining the limits of the mineralization domains and polylines were used to help guide the location of the vein position locally. All vein boundary surfaces were manually edited to restrict their extents along strike, up dip and down dip. Finalized mineralized domains were then exported from *Leapfrog*® and imported into *Maptek*™ *Vulcan* and *MineSight*®.

14.1.2.1 Mala Noche Zone

A total of five discrete veins were modelled in the MNV: MNV_Main, MNV_HW1, MNV_HW2, MNV_HW3 and MNV_East_HW1.

Table 14-1 shows the domains and corresponding volumes for each. The MNV_Main was further subdivided into three sub-domains to spatially segregate high-grade mineralization from surrounding low-grade/unmineralized material. Also, all mineralization wireframes were trimmed against the lithological interpretation of the MNV to ensure mineralization was constrained within the MNV structure.

Table 14-1: Mineralized Domains within MNV

Domain Name	Volume (m^3)
Main	29,249,252
HW1	318,849
HW2	143,060
HW3	68,396
East_HW1	365,364
Total	**30,114,921**

The MNV is shown in Figure 14-2 and Figure 14-3.

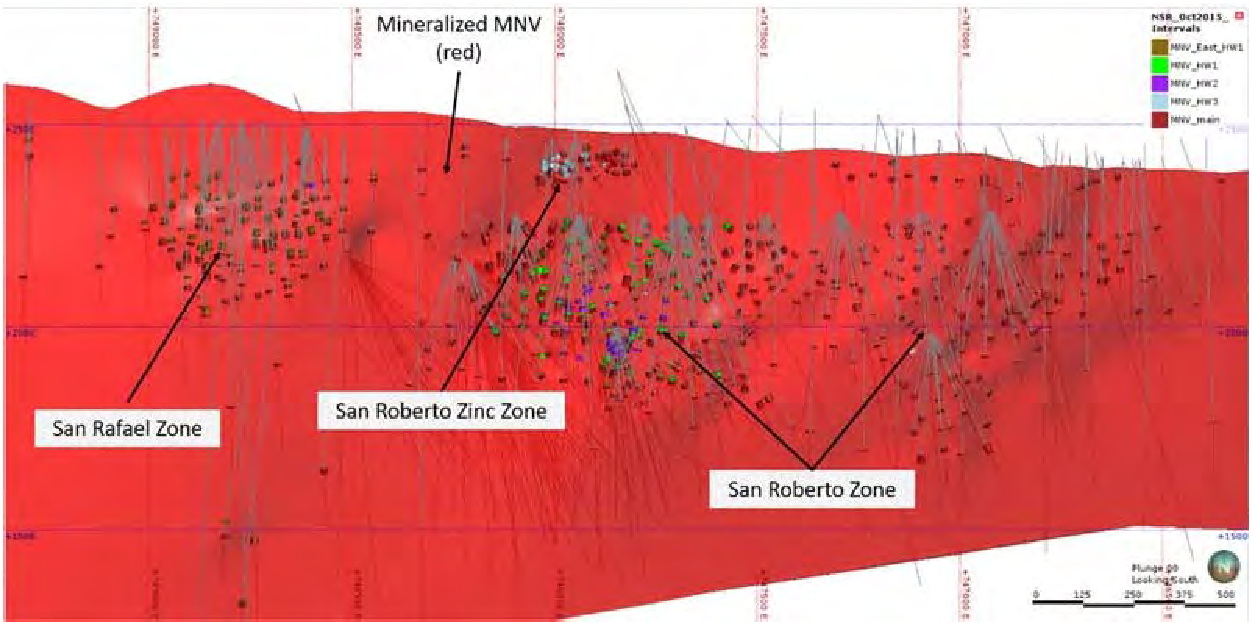

Figure 14-2: Long section, looking south, of the mineralized MNV (red) (Kirkham, 2020)

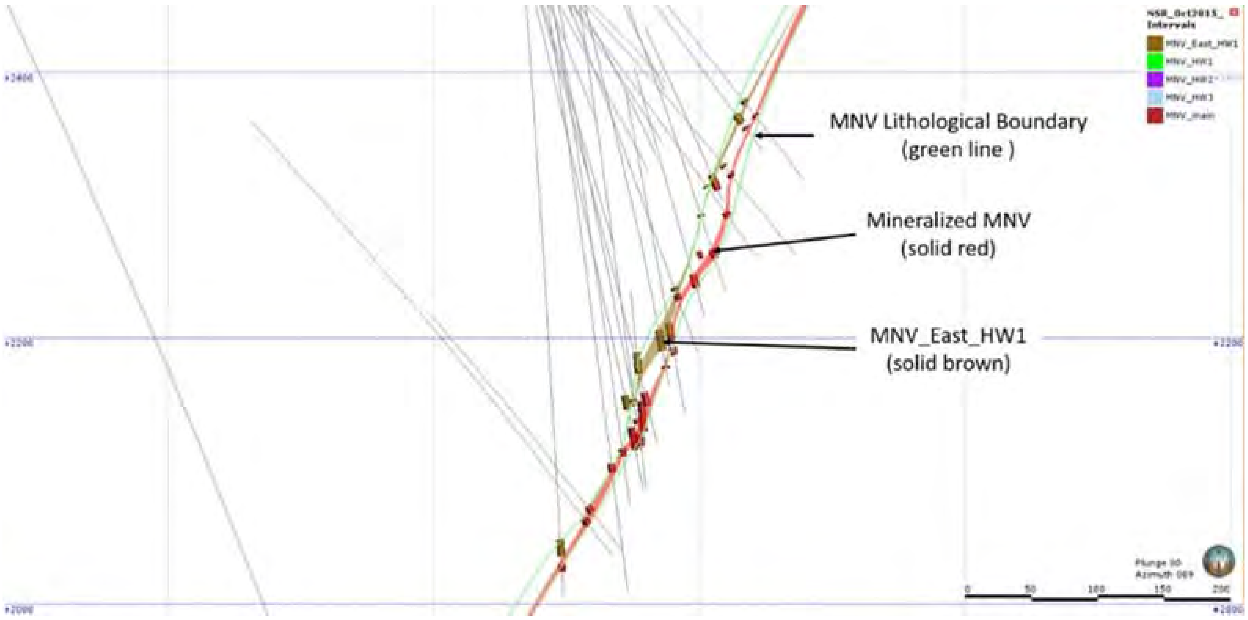

Figure 14-3: Cross section (San Rafael Zone), looking east, illustrating MNV Main (dark red intercepts and red solid vein) and MNV_East_HW1 (brown intercepts and brown solid vein) within the lithological boundary (green line) (Kirkham, 2020)

The MNV_HW1 is a hangingwall structure in the heart of SROB. It terminates against the hangingwall of MNV_Main (Figure 14-4).

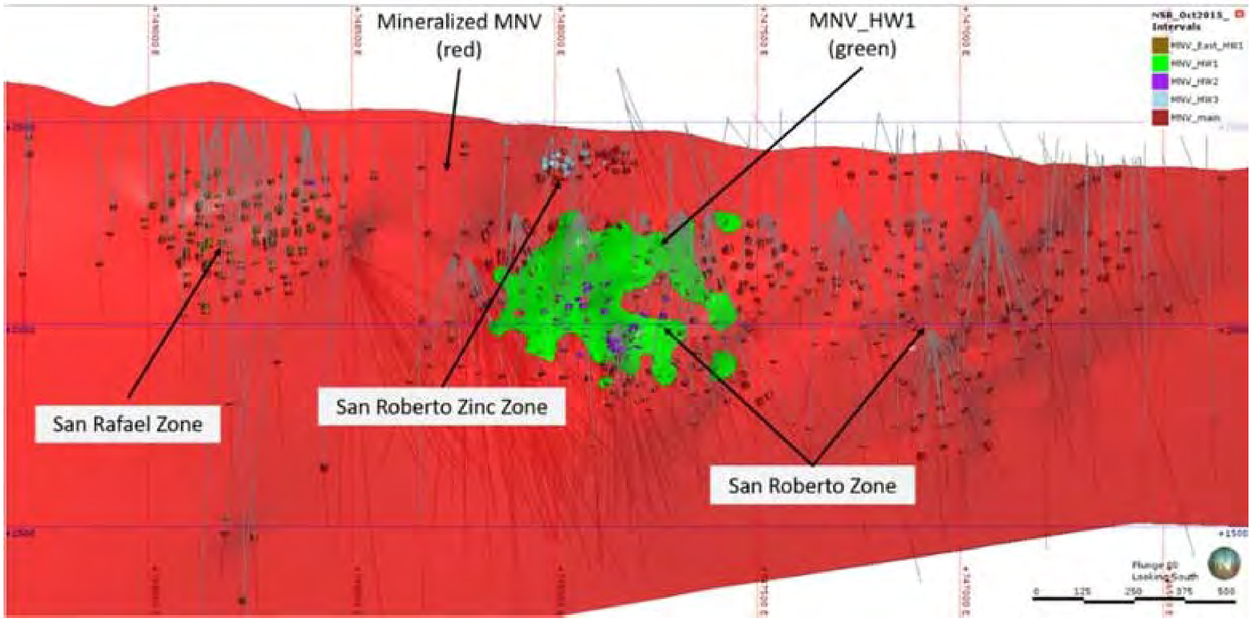

Figure 14-4: Long section, looking south, of MNV_HW1 (green) in relation to MNV (red) (Kirkham, 2020)

The MNV_HW2 is another hangingwall structure (in the hangingwall of MNV_HW1) in SROB. It terminates against the hangingwall of MNV_HW1 and MNV_Main (Figure 14 5).

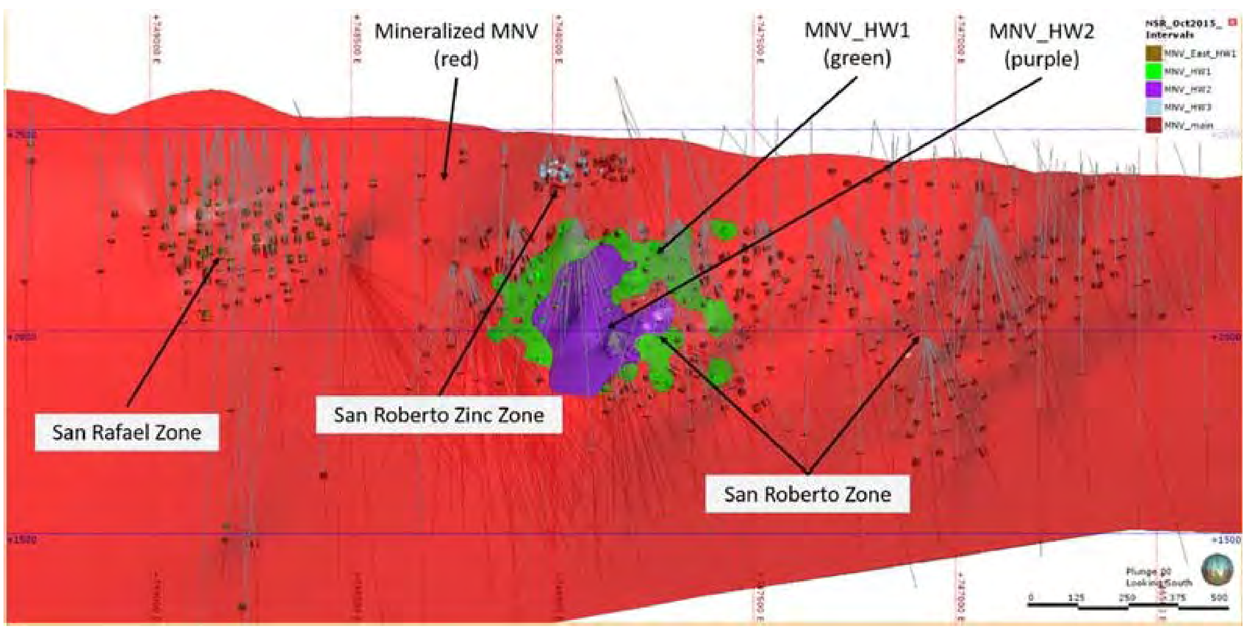

Figure 14-5: Long section, looking south, of MNV_HW2 (purple) in relation to MNV_HW1 (green) and MNV (red) (Kirkham, 2020)

The MNV_HW3 is a hangingwall structure located in SROB-Zn. It likely represents the up-dip portion of the MNV_HW1 vein, but there is insufficient drilling information to confirm this. It terminates against the hangingwall of MNV_Main (Figure 14-6).

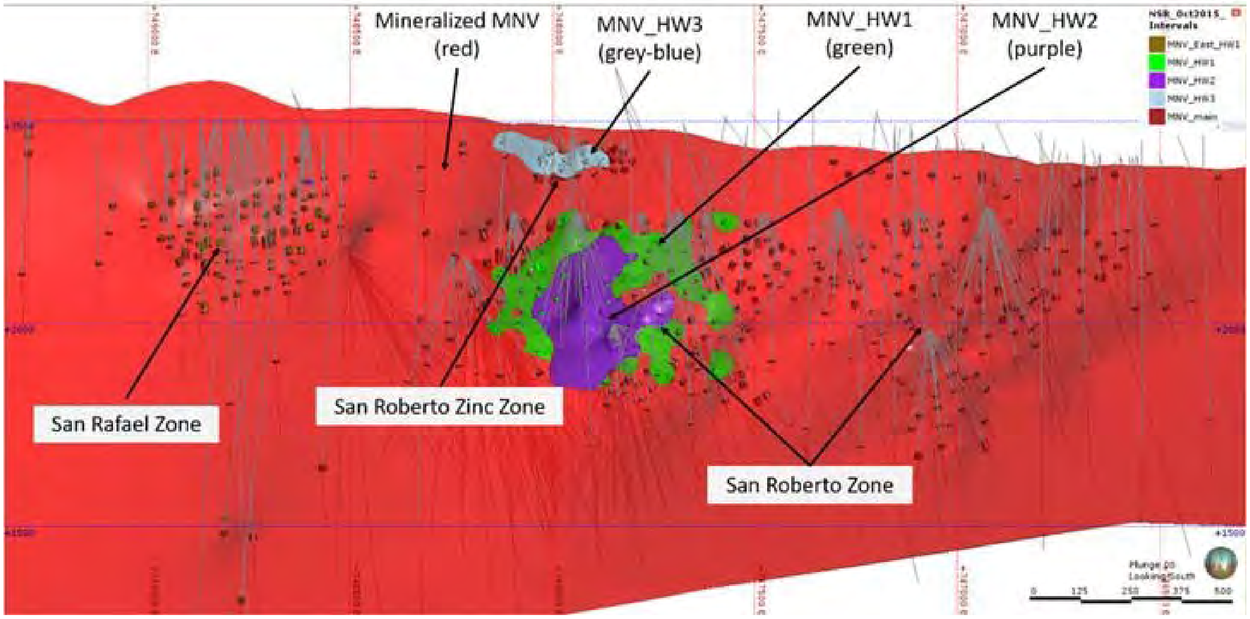

Figure 14-6: Long section, looking south, of MNV_HW3 (grey-blue) in relation to MNV_HW2 (purple), MNV_HW1 (green) and MNV (red) (Kirkham, 2020)

The MNV_East_HW1 is a hangingwall structure located in the San Rafael zone. It terminates against the hangingwall of MNV_Main (Figure 14-7).

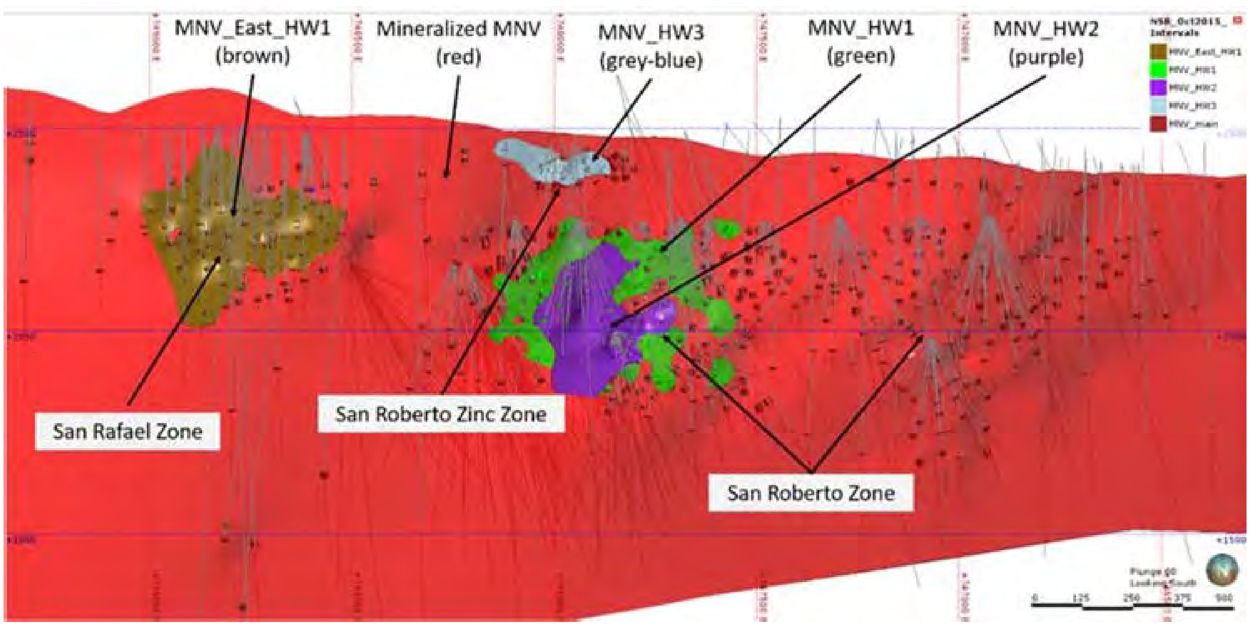

Figure 14-7: Long section, looking south, of MNV_East_HW1 (purple) in relation to MNV_HW1 (green) and MNV (red) (Kirkham, 2020)

SROB and San Rafael zones represent spatially-isolated, high-grade mineralized zones within the mineralized MNV (MNV_Main). To segregate these zones from lower-grade areas, two sub-domains were defined to isolate the high-grade copper and zinc mineralization. In the San Rafael and SROB-Zn zones, a single polygon was created to isolate the high-grade zinc (low-grade copper) mineralization. (Figure 14-8).

The remaining areas of the MNV_Main represent low-grade/unmineralized material. The sub-domains VN01 and VN02 are treated as mutually exclusive subsets comprising the entire modelled MNV_Main vein (Figure 14-8).

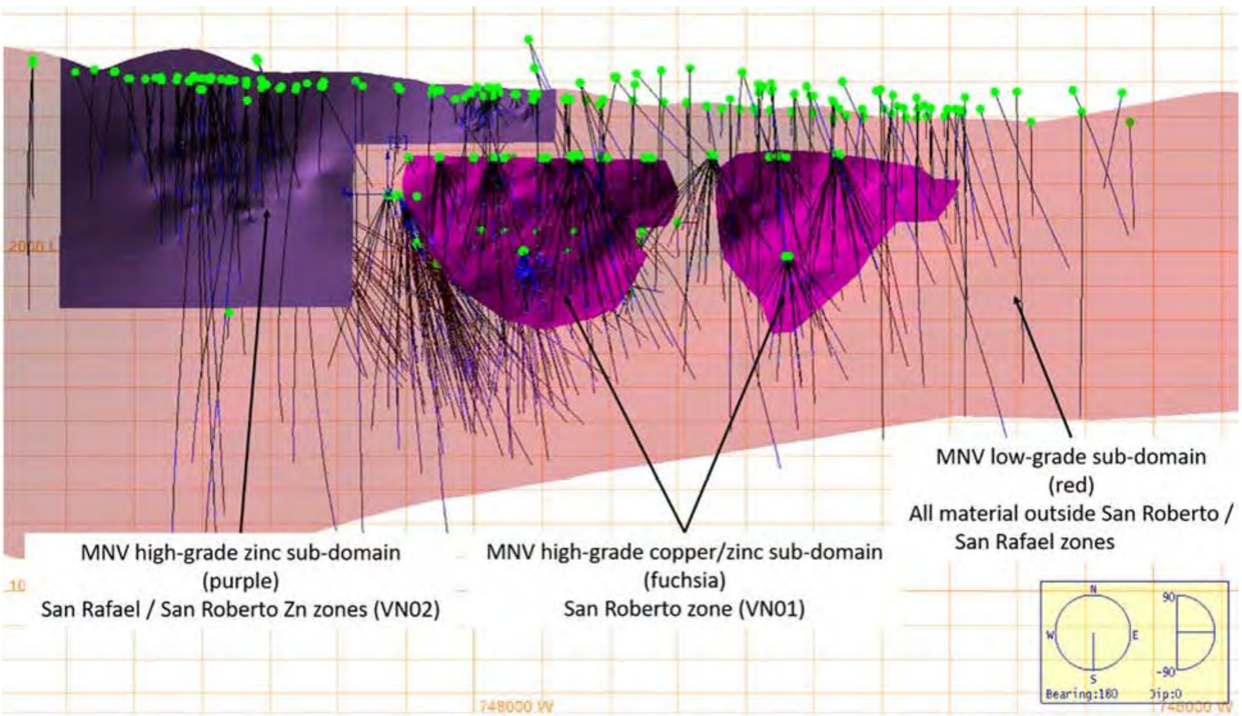

Figure 14-8: Long section, looking south, of sub-domains comprising the MNV_Main vein: San Roberto (VN01), San Rafael/San Roberto Zinc (VN02) and low-grade/unmineralized(MNV08) (Kirkham, 2020)

14.1.2.2 Mala Noche Footwall Model

Table 14-2 includes a list of the eight domains that were modelled at MNFWZ and the volumes reported for each domain solid. The total volume of all vein solids at MNFWZ is 13,401,265 m^3.

Table 14-2: Mineralized Domains within Mala Noche Footwall Zone

Domain Name	Volume (m^3)
VN08	46,464
VN09	344,869
VN10	3,906,926
VN11A	201,143
VN18	774,278
VN19	602,864
VN20	7,145,656
VN22	379,066
Total	**13,401,265**

The MNFWZ strikes approximately southeast, 145º over its length, but strikes 92º in the western section of the zone. The VN11A vein strikes at approximately 136º over the total strike length measured over 2,630 m (Figure 14-9 and Figure 14-10). The veins range in thickness from sub-metre to approximately 10 metres.

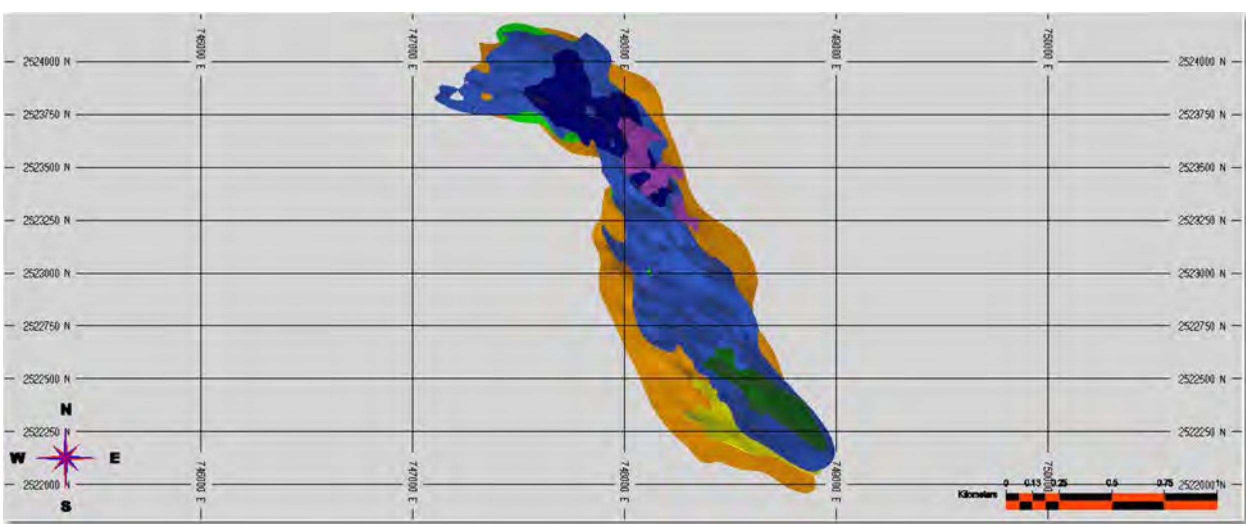

Figure 14-9: MNFWZ Structural Sub-Domains, , VN22 (red), VN20 (orange), VN19 (yellow), VN18 (light green), VN11A (dark green) VN10 (blue), VN09 (dark blue), VN08 (purple) (Kirkham, 2020)

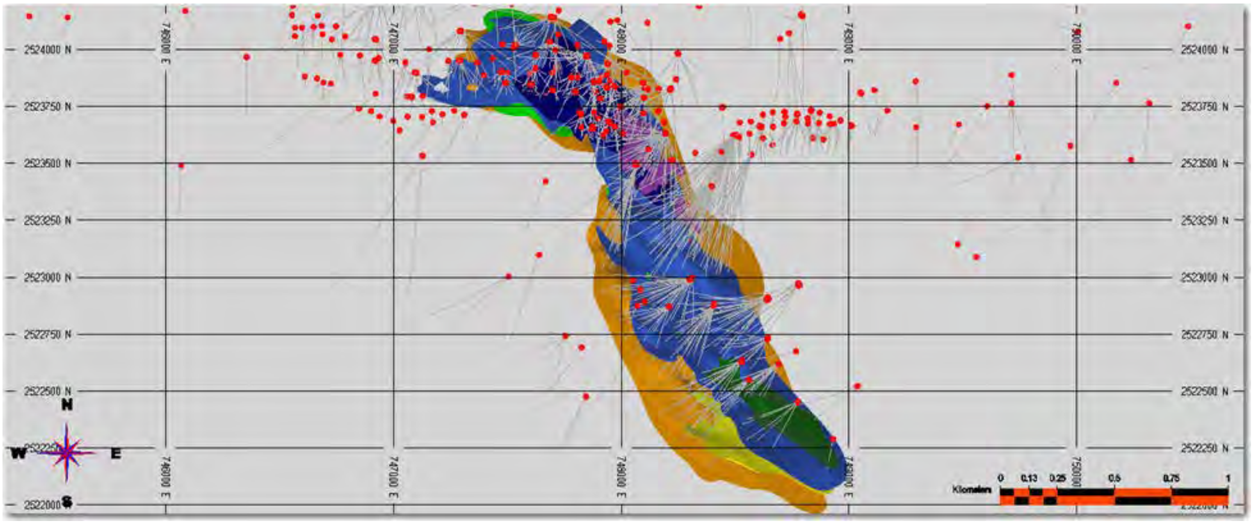

Figure 14-10: MNFWZ Structural Sub-Domains with DDH's, VN22 (red), VN20 (orange), VN19 (yellow), VN18 (light green), VN11A (dark green), VN10 (blue), VN09 (dark blue), VN08 (purple) (Kirkham, 2020)

14.2 MNV Mineral Resource Estimation

The Mala Noche resource modelling comprises the SROB along with the SROB-Zn and San Rafael zinc zones. The following section details the method and procedures employed to estimate the mineral resources within these zones and the classification of those resources.

14.2.1.1 Raw Data

The raw drillhole data were imported into *Maptek*™ *Vulcan* software version 10.1.1. This included data from the *collar.csv*, *survey.csv*, *lithology.csv*, *assay.csv*, *density.csv* and *geotech.csv* tables.

14.2.1.1.1 Geochemical Sample Analysis

The raw drillhole sample data were desurveyed and stored. The domain wireframes were used to code the drillhole data within the respective vein domains in the compositing process using the priority sequence defined during geological modelling. Missing and non-sampled data were ignored, while a value of 0.001 was assigned to data not logged. The drillhole selection file was used to exclude the drillholes identified as unsuitable for mineral resource estimation.

The database was exported and viewed within Snowden Technologies Pty Ltd *Supervisor* software version 8.7.0.7 ("Supervisor"). Univariate statistics, by vein domain, are summarized in Table 14-3 through Table 14-8 for the MNV model. The tables use abbreviated forms for statistical measures, including standard deviation ("Std. Dev.") and coefficient of variation ("CoV").

Table 14-3: Cu raw statistics of MNV

Domain	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
0	40,952	0.0001	22.00	0.16	0.89	5.61
VN01	5,818	0.0005	16.40	1.92	2.49	1.29
VN02	1,560	0.001	5.50	0.29	0.48	1.69
VN03	535	0.0005	3.48	0.24	0.43	1.78
VN05	579	0.0005	12.35	1.56	2.33	1.49
VN06	314	0.0005	12.40	1.21	1.96	1.62
VN07	87	0.0009	0.53	0.07	0.11	1.46
MNV08	1,171	0.0005	7.39	0.41	0.73	1.77
Lith10	6,327	0.0002	14.2	0.15	0.67	4.34

Table 14-4: Ag raw statistics of MNV

Domain	No. Samples	Min (g/t)	Max (g/t)	Mean (g/t)	Std. Dev. (g/t)	CoV
0	40,952	0.001	4,070	5.82	37.5	6.44
VN01	5,818	0.001	1135	67.1	87.4	1.30
VN02	1,560	0.001	650	43.6	54.6	1.25
VN03	535	0.001	1,500	41.7	82.6	1.98
VN05	579	0.001	1,520	59.1	112.6	1.90
VN06	314	0.001	610	44.8	74.8	1.67
VN07	87	0.210	62.0	15.9	14.5	0.91
MNV08	1,171	0.001	737	31.6	53.7	1.70
Lith10	6,327	0.001	3,020	9.15	47.8	5.22

Table 14-5: Zn raw statistics of MNV

Domain	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
0	40,952	0.0001	39.35	0.25	1.15	4.63
VN01	5,818	0.0005	28.30	1.43	2.62	1.84
VN02	1,560	0.0010	36.03	3.91	4.25	1.09
VN03	535	0.0010	19.95	3.67	3.42	0.93
VN05	579	0.0010	30.00	2.14	3.29	1.53
VN06	314	0.0010	11.05	1.46	2.27	1.56
VN07	87	0.1100	21.00	2.97	3.21	1.08
MNV08	1,171	0.0010	28.90	1.83	3.11	1.71
Lith10	6,327	0.0005	43.07	0.61	1.44	2.35

Table 14-6: Pb raw statistics of MNV

Domain	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
0	40,952	0.0010	28.90	0.04	0.30	7.66
VN01	5,818	0.0005	36.85	0.33	1.57	4.69
VN02	1,560	0.0009	29.45	0.60	1.76	2.94
VN03	535	0.0010	20.00	0.56	1.46	2.61
VN05	579	0.0004	32.54	0.82	2.99	3.63
VN06	314	0.0010	13.05	0.84	2.17	2.59
VN07	87	0.0022	1.60	0.22	0.34	1.53
MNV08	1,171	0.0001	20.00	0.26	1.14	4.32
Lith10	6,327	0.0001	13.65	0.11	0.60	5.70

Table 14-7: Zn oxide composited statistics of MNV

Domain	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
0	236	0.005	1.78	0.12	0.20	1.68
VN02	248	0.020	5.52	0.72	0.88	1.22
VN07	56	0.030	2.11	0.59	0.53	0.91
Lith10	165	0.005	1.74	0.22	0.24	1.09

Table 14-8: Pb oxide composited statistics of MNV

Domain	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
0	4	0.010	0.32	0.10	0.15	1.48
VN02	115	0.005	3.09	0.24	0.43	1.83
Lith10	4	0.010	0.13	0.05	0.06	1.26

14.2.1.1.2 Bulk Density Sampling

Bulk density sampling has been undertaken systematically throughout the MNV and MNFWZ veins. Since 2013 samples were taken at the same volume support as the geochemical assay data (i.e., the average bulk density value was generated over the interval length as the assay sample).

The vein domains and lithology wireframes were used to code the drillhole data in the compositing process (populating the domain and lithology fields in the database).

Univariate statistics of the raw, domain-coded bulk-density drillhole sample data within the modelled veins and lithology units are summarized in Table 14-9. A filter was placed on the data during importation into Supervisor, where values less than 1.50 g/cm3 were excluded (totaling 711). Those greater than 6 g/cm3 were included and then top cut.

Table 14-9: Bulk density raw statistics (MNV domains and all lithology units)

Vein/Litho	No. Samples	Min (g/cm³)	Max (g/cm³)	Mean (g/cm³)	Std. Dev. (g/cm³)	CoV
VN01	4,574	2.10	6.05	2.89	0.33	0.11
VN02	973	2.26	4.56	2.76	0.24	0.09
VN03	327	2.28	4.92	2.73	0.22	0.08
VN05	382	2.34	4.81	2.95	0.37	0.12
VN06	208	2.40	4.45	2.83	0.36	0.13
VN07	10	2.64	3.01	2.79	0.11	0.04
MNV08	817	2.15	3.80	2.73	0.19	0.07
Lith 10	2,838	1.60	4.95	2.67	0.22	0.08
Lith 30	4,468	1.50	4.09	2.60	0.15	0.06
Lith 50	3,844	1.75	6.91	2.72	0.16	0.06
Lith 60	2,107	1.50	4.93	2.69	0.16	0.06
Lith 80	5,868	1.50	4.03	2.67	0.14	0.05

14.2.1.1.3 Core Recovery and Rock Quality Data (RQD) Samples

Core recovery data are recorded from measurements taken by the geologist of the total core length in the box between the blocks demarking the run interval. RQD information involved summing the total length of individual pieces greater than 10 cm in length, divided by the run length. The resulting value is expressed as a percentage. Note that the core recovery and RQD data within the lithological domains should be considered as indicative and not definitive due to grouping of lithologies during the geological modelling process. Individual sub-units within a lithological domain (e.g., andesite tuff) could have significantly different values.

The vein domains and lithology wireframes were used to code the drillhole data in the compositing process (populating the domain and litho fields in the database). The domain-coded, raw statistics for the core recovery and RQD data are summarized in Table 14-10 and Table 14-11.

Table 14-10: Core recovery raw statistics (MNV domains and all lithology units)

Vein/Litho	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
VN01	351	18.03	100.0	96.88	8.20	0.08
VN02	371	0.00	100.0	95.88	12.41	0.13
VN03	115	68.40	100.0	98.71	4.19	0.04
VN05	50	31.50	100.0	93.40	14.18	0.15
VN06	66	86.56	100.0	99.09	2.53	0.03
VN07	53	62.15	100.0	96.13	8.25	0.09
MNV08	274	0.00	100.0	98.05	8.03	0.08
Lith 10	2,231	0.00	100.0	95.96	14.17	0.15
Lith 30	5,886	0.00	100.0	93.45	22.69	0.24
Lith 50	22,805	0.00	100.0	98.51	8.77	0.09

Vein/Litho	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
Lith 60	14,089	0.00	100.0	86.26	32.70	0.38
Lith 80	28,687	0.00	100.0	97.41	12.17	0.12

Table 14-11: RQD raw statistics (MNV domains and all lithology units)

Vein/Litho	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
VN01	351	1.0	100.0	62.54	26.34	0.42
VN02	371	0.0	100.0	56.22	33.54	0.60
VN03	115	0.0	100.0	61.06	33.83	0.55
VN05	50	5.0	94.0	64.58	22.72	0.35
VN06	66	25.0	87.0	59.21	16.39	0.28
VN07	53	0.0	100.0	51.92	32.38	0.62
MNV08	274	0.0	100.0	60.53	27.98	0.46
Lith 10	2,231	0.0	100.0	58.31	29.59	0.51
Lith 30	5,886	0.0	100.0	57.20	28.97	0.51
Lith 50	22,805	0.0	100.0	72.07	24.02	0.33
Lith 60	14,089	0.0	100.0	38.24	38.41	1.00
Lith 80	28,687	0.0	100.0	60.97	27.75	0.46

14.2.1.2 Compositing

The raw drillhole samples were composited within the modelled wireframes following the same prioritization rules used as previously stated. A 2.0 m composite length was chosen to match the minimum mining thickness. The run-length composite method with the merge option was used with a tolerance of “0.5”, as it yielded the most sample intervals with a 2.0 m width and a smaller sample-length variance than the other methods. Domain codes into the domain field of the database and to assign a default of zero (0) for samples in the waste domain.

The undeclustered statistics of the composited data are presented in Table 14-12 through Table 14-18.

Table 14-12: Cu composited statistics of MNV (undeclustered)

Domain	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
VN01	1,473	0.0005	10.13	1.74	1.89	1.08
VN02	536	0.0020	2.13	0.26	0.35	1.33
VN03	171	0.0010	2.32	0.22	0.34	1.51
VN05	162	0.0043	9.46	1.42	1.76	1.24
VN06	120	0.0090	6.07	1.02	1.39	1.37
VN07	59	0.0010	0.35	0.07	0.09	1.35
MNV08	398	0.0006	4.58	0.37	0.57	1.52
Lith10	2,746	0.0005	8.60	0.11	0.42	3.71

Table 14-13: Ag composited statistics of MNV (undeclustered)

Domain	No. Samples	Min (g/t)	Max (g/t)	Mean (g/t)	Std. Dev. (g/t)	CoV
VN01	1,473	0.150	634.6	60.1	63.1	1.05
VN02	536	0.611	261.8	39.4	38.7	0.98
VN03	171	2.000	359.9	35.5	40.7	1.14
VN05	162	0.500	543.2	53.5	74.8	1.40
VN06	120	1.250	391.0	37.9	52.5	1.39
VN07	59	0.260	58.7	14.8	13.4	0.90
MNV08	398	0.001	316.6	23.9	35.2	1.48
Lith10	2,746	0.059	758.3	7.3	22.9	3.14

Table 14-14: Zn composited statistics of MNV (undeclustered)

Domain	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
VN01	1,473	0.004	23.14	1.44	2.04	1.41
VN02	536	0.006	22.02	3.68	3.29	0.89
VN03	171	0.001	14.35	3.61	2.51	0.70
VN05	162	0.020	16.00	2.01	2.58	1.29
VN06	120	0.008	10.00	1.39	1.89	1.36
VN07	59	0.190	10.77	2.83	2.27	0.80
MNV08	398	0.001	22.40	1.56	2.32	1.48
Lith10	2,746	0.001	16.84	0.55	0.91	1.65

Table 14-15: Pb composited statistics of MNV (undeclustered)

Domain	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
VN01	1,473	0.001	11.30	0.30	0.78	2.96
VN02	536	0.001	17.31	0.62	1.39	2.26
VN03	171	0.001	11.37	0.61	1.19	1.96
VN05	162	0.003	17.63	0.80	2.41	3.00
VN06	120	0.003	10.00	0.65	1.55	2.39
VN07	59	0.003	1.30	0.20	0.28	1.39
MNV08	398	0.001	6.04	0.21	0.55	2.62
Lith10	2,746	0.001	8.15	0.08	0.36	4.32

Table 14-16: Zn oxide composited statistics of MNV (undeclustered)

Domain	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
VN02	123	0.022	5.33	0.58	0.74	1.27
VN07	40	0.036	1.79	0.56	0.44	0.80
Lith10	118	0.010	1.52	0.22	0.22	0.97

Table 14-17: Pb oxide composited statistics of MNV (undeclustered)

Domain	No. Samples	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
VN02	41	0.005	1.42	0.22	0.34	1.55
Lith10	2	0.020	0.02	0.02	-	-

Table 14-18: Bulk density composited statistics of (MNV domains and all lithology units)

Vein Domain	No. Samples	Min (g/cm^3)	Max (g/cm^3)	Mean (g/cm^3)	Std. Dev. (g/cm^3)	CoV
VN01	1,469	2.42	5.21	2.87	0.27	0.10
VN02	452	2.26	4.03	2.76	0.19	0.07
VN03	164	2.42	3.38	2.72	0.15	0.06
VN05	124	2.52	3.96	2.92	0.30	0.10
VN06	88	2.46	3.94	2.82	0.34	0.12
VN07	8	2.65	3.01	2.80	0.11	0.04
MNV08	334	2.41	3.45	2.71	0.14	0.05
Lith 10	1,391	1.79	4.22	2.66	0.17	0.06
Lith 30	2,656	1.54	3.95	2.59	0.13	0.05
Lith 50	3,150	1.53	6.91	2.73	0.15	0.05
Lith 60	1,673	1.50	4.93	2.70	0.15	0.06
Lith 80	4,119	1.55	3.67	2.67	0.11	0.04

Since core recovery and RQD are calculated on a “per core run” basis of 3.05 m, compositing is not necessary.

14.2.1.3 Exploratory Data Analysis (EDA)

An exploratory data analysis (“EDA”) was undertaken in Supervisor on the composited drillhole data. The objectives of this study are as follows:

- Identify spatial trends in grade data and verify domaining strategy (data orientation, data population distributions).
- Characterize geochemical associations through a regression analysis of the high-grade domains, VN02, VN03 and VN07 (Table 14-19).
- Understand sample distributions within the domains and select the appropriate grade estimation method and estimation strategy.
- Assess top-cutting and search-restriction requirements for outlier samples.

Table 14-19: Regression analysis of composited sample data in domains VN02, VN03 and VN07

Element	Ag	Cu	Zn	Pb	ZnOx	PbOx
SROB-Zn / San Rafael (VN02/03/07)						
Ag	1	**0.69**	0.33	0.36	-0.10	0.17
Cu	-	1	0.14	0.04	-0.13	0.00
Zn	-	-	1	0.31	0.32	0.20
Pb	-	-	-	1	0.03	0.60
ZnOx	-	-	-	-	-	0.26
PbOx	-	-	-	-	-	-

The following observations were made based on geochemical correlations:

- Cu and Ag are well correlated. The same estimation search parameters will be used for both elements to attempt to maintain their relationship in the block model.
- Cu is uncorrelated with Zn and Pb and their oxide species. It will be estimated independently of these elements.
- Ag is weakly correlated with Zn and Pb and uncorrelated with their oxide species. It will be estimated independently of these elements.
- Zn and Pb are weakly correlated, so they will be estimated independently. They are uncorrelated with Cu and Ag.
- Pb is moderately correlated with it's oxide species, so estimation of PbOx will use the same estimation parameters.
- Zn is weakly correlated with it's oxide species, so estimation of ZnOx is independent of Zn.

The data in the high-grade mineralization domains (VN02, VN03, VN07) were reviewed graphically and spatially and the following observations were made with respect to grade distribution and continuity:

- The boundary between the high-grade sub-domains and low-grade sub-domain (MNV08) will be treated as "soft" for grade estimation.
- The boundary between the high-grade sub domains within the modelled lithological vein structure (Lith10) will be treated as "hard" for grade estimation.
- Domains VN02 and VN03 show similar grade distributions for each element, so these will be combined and estimated together.
- Domain VN07 is lower in grade than VN02 and VN03 for each element, so it will need to be estimated separately. There are too few samples (57) to estimate using Ordinary Kriging ("OK"), so this vein domain will be estimated using inverse distance weighting.
- The modelled veins are sinuous along strike. Grade estimation will utilize a search ellipse that changes orientation to match the locally varying strike and dip of the vein to ensure the correct samples are selected (Section 6.6).
- The COV is between 0.7 and 1.6 for elements in the mineralization domains (VN02,

VN03, VN07) except lead, which is generally higher than 2. OK will be used for grade estimation, with top-cuts used to manage outlier values.

Copper:

- San Rafael contains significantly lower copper grades (~10x) than San Roberto zone, with only minor top cutting required.
- There is a central "core" area of higher-grade copper values in the central part of the San Rafael zone reaching as high as 2% Cu.

Silver:

- San Rafael is lower in grade (~30%) than the San Roberto zone, but minor top cutting will be required to control outlier grades that are dispersed throughout the zone.
- Higher-grade silver values are located in the eastern part of the San Roberto Zinc zone, with lower grades situated in the western part.

Zinc:

- San Rafael contains the highest average grade of zinc of all zones (3.7%), almost double the grade encountered in San Roberto and almost six times higher than the grade of the MNFWZ.
- The highest-grade samples are generally spatially associated with other high-grade samples, so top cutting would unfairly discount contained metal value. Instead, a search restriction will be employed to limit the influence of these samples on neighbouring blocks.

Lead:

- The lead distribution in the MNV deposit is strongly positively skewed, meaning that most of the lead metal value is contained within a few percent of the total distribution. This is supported through underground observations, where lead tends to occur in small, localized patches of higher grade material that is not continuously distributed. Due to this, OK is not the optimal estimation technique because it tends to oversmooth these types of distributions and leads to overestimation of tonnage and contained metal. A non-linear estimation technique (e.g., multiple indicator kriging, conditional simulation, etc.) would be more appropriate, but given the very small percentage of total economic value lead represents in the unmined portions of Cozamin (<5%), the additional time required to estimate using one of the suggested techniques is not justified.
- More restrictive top cutting and search restrictions will be used to mitigate over-estimation of lead using OK. The consequence will be a reduced amount of available metal in the drillhole file during estimation and lower confidence in the estimated lead grades (they will likely still be oversmoothed), but this trade-off is considered reasonable given lead's economic contribution to the total value of the ore.
- Historical mine reconciliation has shown lead to be overestimated with respect to mine production. This will be considered during validation of the grade estimation, with the aim of having grades that slightly underestimate the input sample data.

Zinc Oxide:

- All samples are located in SROB-Zn, with the highest grades reaching 5% ZnOx in the central part area. The grades decrease outward to the western and eastern limits.
- Grades in the hangingwall vein (VN07) are approximately double those in the main MNV structure (VN02), however, it is noted that the VN07 domain are only located in the

eastern edge of the zone.

- Top cuts and search restrictions will be needed to limit the influence of the high-grade samples in the VN02 domain.

Lead Oxide:

- All samples are located in SROB-Zn.
- The available data are sparse (49 in total) and will only provide a high-level indication of lead- oxide mineral concentrations. Inverse-distance weighting will be used to estimate the grades.
- The estimation parameters from lead (search orientation, sample numbers, etc.) will be borrowed to estimate lead oxide.

14.2.1.3.1 Bulk Density Data

SROB vein domains have higher average bulk density (2.82-2.91 g/cm3) than those in San Rafael (2.72-2.76 g/cm3). This implies there is a higher concentration of sulphide mineralization in the SROB and could be due to a higher amount of brecciation observed in the San Rafael mineralization.

14.2.1.3.2 Core Recovery and RQD Data

- Core recovery in the mineralization domains is greater than 95%, except for VN05, which is 93%. These are very good results and demonstrate the sample quality to be acceptable for use in mineral resource estimation.
- Lower recovery (< 90%) values do not appear to be spatially isolated or grouped, and they will not be factored into mineral resource confidence classification.
- RQD data are highly variable across the deposit. Rocks appear to have better RQD values at deeper depths (below 2,150 m).
- Rocks in VN02 (San Rafael) have a slightly lower average RQD (56%) than those in VN01 (62%). This could be due to the observed brecciated nature of the rocks in the San Rafael zone versus the San Roberto zone.

14.2.1.4 Outlier Analysis and Top Cutting

Grade distributions in each vein were assessed graphically and spatially for the presence of outlier samples, which can have a disproportionate impact during grade estimation and can lead to overestimated grades. Top-cut selection and search distance restrictions considered the locations of the outlier samples relative to other data. If high grade samples were isolated from other samples, top cuts and/or search restrictions were stricter to mitigate against grade overestimation, and conversely, they were relaxed if spatially associated with other high-grade samples. Determination of appropriate top-cut values was undertaken through identification of population breaks in histograms, and inflection points in log-probability plots and in mean-and-variance plots. The impact of the selected top cut was assessed by reviewing the change in the mean grade and CoV of the composited samples before and after the top cut (Table 14-20 through Table 14-25).

The samples from domains VN02 and VN03 were combined for grade estimation. For proper comparison to the block model estimates, the tables below present the combined domain statistics. For domain Lith10, top-cut selection for silver and copper considered the samples around the San Rafael and San Roberto Zinc zones only, and not the San Roberto zone. Estimate quality is focused in the San Rafael and San Roberto Zinc zones because the San Roberto zone is nearly mined out. It is noted that these zones have far fewer high-grade outlier values than the San Roberto zone, so the top cut is appropriate.

Table 14-20: Cu top-cut, composited statistics of MNV

Vein Domain	Mean (%)	CoV	Top Cut (%)	Top Cut Mean (%)	Top Cut CoV	No. Samples Cut	Rest. Search Threshold (%) and distance (m)
VN01	1.74	1.08	8.75	1.74	1.08	9	≥ 6.0 25×25×10
VN02/03	0.25	1.37	1.57	0.25	1.31	10	-
VN05	1.42	1.24	No TC	-	-	-	-
VN06	1.02	1.37	5.20	1.00	1.33	3	≥ 4.0 25×25×10
VN07	0.07	1.35	No TC	-	-	-	-
MNV08	0.37	1.52	1.70	0.34	1.26	14	-
Lith10	0.11	3.71	3.80	0.11	3.20	8	≥ 1.24 24×18×6

Table 14-21: Ag top-cut, composited statistics of MNV

Vein Domain	Mean (g/t)	CoV	Top Cut (g/t)	Top Cut Mean (g/t)	Top Cut CoV	No. Samples Cut	Rest. Search Threshold (%) and distance (m)
VN01	60	1.05	350	60	1.00	8	≥ 200 15×15×10
VN02/03	38	1.02	158	38	0.94	10	-
VN05	54	1.40	350	51	1.22	2	≥ 118 25×25×10
VN06	38	1.39	250	37	1.25	1	≥ 140 25×25×10
VN07	15	0.90	No TC	-	-	-	-
MNV08	24	1.48	150	24	1.17	5	-
Lith10	7	3.14	30	6	1.13	76	-

Table 14-22: Zn top-cut, composited statistics of MNV

Vein Domain	Mean (%)	CoV	Top Cut (%)	Top Cut Mean (%)	Top Cut CoV	No. Samples Cut	Rest. Search Threshold (%) and distance (m)
VN01	1.44	1.41	12.0	1.43	1.35	6	≥ 10.0; 25×25×10
VN02/03	3.67	0.85	14.0	3.60	0.79	11	≥9.0 24×18×6
VN05	2.01	1.29	10.0	1.95	1.20	2	≥ 7.8; 10×10×10
VN06	1.39	1.36	No TC	-	-	-	-
VN07	2.83	0.80	6.7	2.69	0.70	2	-
MNV08	1.56	1.48	11.0	1.52	1.36	5	-
Lith10	0.55	1.65	2.5	0.50	1.25	79	-

Table 14-23: Pb top-cut, composited statistics of MNV

Vein Domain	Mean (%)	CoV	Top Cut (%)	Top Cut Mean (%)	Top Cut CoV	No. Samples Cut	Rest. Search Threshold (%) and distance (m)
VN01	0.30	2.96	5.6	0.29	2.72	7	-
VN02/03	0.61	2.19	7.8	0.58	1.86	5	≥ 5.8; 24×18×6
VN05	0.80	3.00	9.5	0.70	2.58	2	≥ 8.0; 10×10×10
VN06	0.65	2.39	5.95	0.60	2.17	2	-
VN07	0.20	1.39	0.80	0.18	1.22	3	-
MNV08	0.21	2.62	2.4	0.19	2.26	6	-
Lith10	0.08	4.32	2.6	0.08	3.04	8	≥ 1.4 24×18×6

Table 14-24: Zn oxide top-cut, composited statistics of MNV

Vein Domain	Mean (%)	CoV	Top Cut (%)	Top Cut Mean (%)	Top Cut CoV	No. Samples Cut	Rest. Search Threshold (%) and distance (m)
VN02/ 07	0.58	1.27	No TC	-	-	-	≥ 2.5; 24×18×6
Lith10	0.22	0.97	0.85	0.22	0.87	2	-

Table 14-25: Pb oxide top-cut, composited statistics of MNV

Vein Domain	Mean (%)	CoV	Top Cut (%)	Top Cut Mean (%)	Top Cut CoV	No. Samples Cut	Rest. Search Threshold (%) and distance (m)
VN02	0.22	1.55	No TC	-	-	-	-
Lith10	0.02	-	-	-	-	-	-

The composited bulk-density data were assessed graphically and spatially for outlier values in each vein domain. In general, top cuts were not harsh and only capped a minor number of samples in the mineralization vein domains. Top cuts were harsher in the waste lithology domains in order to mitigate the impact of isolated mineralized samples outside of the vein mineralization (Table 14-26). Search restrictions for higher bulk density values were not used.

Table 14-26: Bulk density top-cut, composited statistics (MNV)

Vein Domain	Mean (g/cm^3)	CoV	Top Cut (g/cm^3)	Top Cut Mean (g/cm^3)	Top Cut CoV	No. Samples Cut
VN01	2.87	0.10	3.80	2.87	0.07	9
VN02	2.76	0.07	3.37	2.76	0.07	4
VN03	2.72	0.06	2.73	2.72	0.05	6
VN05	2.92	0.10	3.60	2.91	010	3
VN06	2.82	0.12	3.60	2.82	0.11	4
VN07	2.80	0.04	No TC	-	-	-
MNV08	2.71	0.05	3.02	2.71	0.05	11
Lith 10	2.66	0.06	3.53	2.66	0.06	10
Lith 30	2.59	0.05	3.10	2.59	0.04	18
Lith 50	2.73	0.05	3.07	2.73	0.05	8
Lith 60	2.70	0.06	3.05	2.70	0.05	17
Lith 80	2.67	0.04	3.18	2.67	0.04	8

There were no outlier values identified in the RQD data. No top cuts or bottom cuts were applied.

14.2.1.5 Variography

Spatial relationships of the top-cut, composited sample data were analyzed in Supervisor to define continuity directions of the mineralization. For copper and silver, a weak, shallow plunge to the east-southeast was modelled (-36→□285). For lead, a weak plunge was modelled steeply dipping down the vein (-65□355), while for zinc, a weak, shallow plunge was observed in an orthogonal direction to copper and silver (-31□069). This was visually confirmed by reviewing the grade distribution spatially above a variety of cut-offs. These observations “fit” geologically, as copper and silver show a strong correlation, while lead and zinc are not correlated with copper/silver or with each other.

After establishing the orientation of the continuity ellipse, experimental semi-variograms were generated in the downhole direction (to establish the nugget effect) and in each of the three axis directions of the continuity ellipse (Figure 14-11). Spherical models were used to model the directional experimental semi-variograms with variance contributions normalized to a total 1.0.

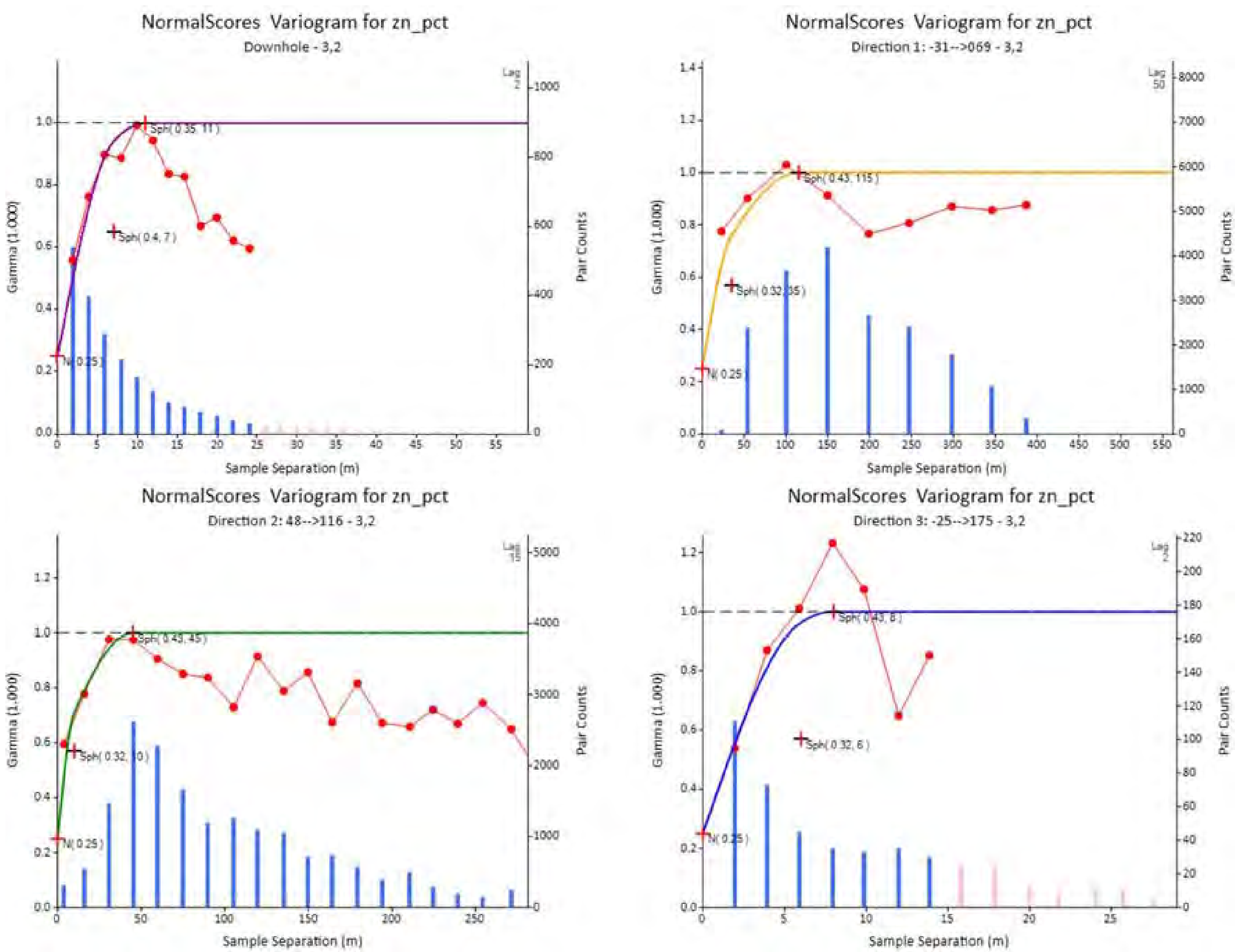

Figure 14-11: Zinc semi-variogram models (top left: downhole; top right: major axis – direction 1; bottom left: semi-major axis – direction 2; bottom right: minor axis – direction 3. (Kirkham, 2020)

After modelling, the semi-variogram models were back-transformed into regular space for use in grade estimation. Projecting the data onto a flat plane through data "unfolding" would improve the quality of the experimental semi-variogram and should be explored in the future. Tables 14-27 through 14-30 show the correlogram models for Cu, Ag, Zn and Pb, respectively.

Table 14-27: Cu back-transformed, semi-variogram parameters – Domains VN02 and VN03

Continuity Direction	Axis Direction	Variance	Range (m)		
		Nugget/Sill	R_1	R_2	R_3
HC: 00°265	D_1: 36°285	C_0: 0.05	-	-	-
AS: -65°355	D_2: -44°058	C_1: 0.54	35	35	10
DP: 36°105	D_3: -25°175	C_2: 0.41	130	130	10
Axis Rotation Angles (Vulcan ZXY): {284.525, -35.631, 121.330}					

*Note: HC = Horizontal Continuity; AS = Across Strike Continuity; DP = Dip Plane Continuity; C_0 = Nugget; C_x = Structure X

Table 14-28: Ag back-transformed, semi-variogram parameters – Domains VN02 and VN03

Continuity Direction	Axis Direction	Variance	Range (m)		
		Nugget/Sill	R_1	R_2	R_3
HC: 00°265	D_1: 36°285	C_0: 0.07	-	-	-
AS: -65°355	D_2: -44°058	C_1: 0.41	25	15	6
DP: 36°105	D_3: -25°175	C_2: 0.25	85	70	14
		C_3: 0.27	375	150	14
Axis Rotation Angles (Vulcan ZXY): {284.525, -35.631, 121.330}					

*Note: HC = Horizontal Continuity; AS = Across Strike Continuity; DP = Dip Plane Continuity; C_0 = Nugget; C_x = Structure X

Table 14-29: Zn back-transformed, semi-variogram parameters for MNV – Domains VN02 and VN03

Continuity Direction	Axis Direction	Variance	Range (m)		
		Nugget/Sill	R_1	R_2	R_3
HC: 00°265	D_1: -31°069	C_0: 0.28	-	-	-
AS: -65°355	D_2: 48°116	C_1: 0.34	35	10	6
DP: -27°071	D_3: -25°175	C_2: 0.38	115	45	8
Axis Rotation Angles (Vulcan ZXY): {68.515, -31.321, -119.651}					

*Note: HC = Horizontal Continuity; AS = Across Strike Continuity; DP = Dip Plane Continuity; C_0 = Nugget; C_x = Structure X

Table 14-30: Pb back-transformed, semi-variogram parameters for MNV – Domains VN02 and VN03

Continuity Direction	Axis Direction	Variance Nugget/Sill	Range (m)		
			R_1	R_2	R_3
HC: 00°265	D_1: -65°355	C_0: 0.32	-	-	-
AS: -65°355	D_2: 00°085	C_1: 0.50	35	20	7
DP: 65°175	D_3: -25°175	C_2: 0.18	175	100	8
Axis Rotation Angles (Vulcan ZXY): {355.000, -65.000, 180.000}					

*Note: HC = Horizontal Continuity; AS = Across Strike Continuity; DP = Dip Plane Continuity; C_0 = Nugget; C_x = Structure X

14.2.1.6 *Block Model*

The selective mining unit ("SMU"), has been revised to 12 m east × 2 m north × 10 m elevation. It was previously 4 m East × 2 m North × 5 m Elevation. The updated size matches the model parent-block size and much more closely approximates the volume of a single long-hole stope blast that represents the volume of material that must be physically selected (mined).

The dimensions of the SMU are roughly one-third to one-quarter the average drillhole spacing supporting Measured and Indicated Mineral Resources (about 40 m × 40 m).

The existing MNV block model parameters remain unchanged with respect to its origin and block sizes. It is sub-blocked and non-rotated and was updated to represent the modelled geology and vein domain wireframes generated in Leapfrog®. The model origin is defined as the lower, southwest edge of the model and the origin coordinates are in the Cozamin local mine grid (Table 14-31). A total of 45 model variables were created, comprising domain codes, grade/density/RQD fields, classification, density, estimation parameters and search angles used by the dynamic anisotropy. Waste grades and waste density values were also estimated into the block model to provide additional information regarding local dilution grades and tonnages.

As a part of the July 2017 update, new variables were added to capture the zinc oxide and lead oxide data, as well as their ratios to total zinc and total lead. These data are limited to SROB-Zn.

Table 14-31: MNV Block model origin and parameters

	X	Y	Z
Origin* (local grid)	746,400	2,523,350	1,500
Parent Block Size (m)	12.0	2.0	10.0
Sub-Block Size (m)	4.0	0.5	2.0
Extents (m)	2,604	1,050	1,120

*Note: Model origin is defined as lower, southwest edge of the model.

14.2.1.7 *Grade, Density and RQD Estimation*

Grades were estimated using OK, with inverse-distance-squared weighting ("ID2") and nearest neighbour ("NN") techniques used as checks of the OK estimate for global mean-grade unbiasedness (inverse-distance-weighting was set to the power of nine to generate the NN estimate). The OK grade estimation strategy was defined through an assessment of variogram shapes and ranges, and a review of the estimation parameters used in the previous estimates. A multi-pass search strategy was used ("SVOL").

For all domains, silver estimates used the same parameters as the copper estimates to maintain their spatial correlation. Lead and zinc were estimated independently of each other and of copper and silver.

Due to local changes in strike and dip of the veins, a search strategy employing a dynamic search ellipse was employed to match the strike and dip of the veins during estimation (dynamic anisotropy) to allow for better sample selection.

Vein limits were treated as hard boundaries. In the case of the high-grade sub-domains comprising SROB (VN01) and San Rafael (VN02), within the principal MNV structure, these limits were treated as soft boundaries to permit the correct interaction of low-grade samples from the lower-grade sub-domain comprising the rest of the structure (MNV08). The lithological unit representing the entire MNV fault/vein system (Lith10) was estimated separately from the mineralization vein domains and used hard boundaries.

Top cuts and grade restrictions were applied within the individual estimation profiles. Block discretization was set to 3 × 3 × 3 to take into account the change of support (volume increase/reduction in sample variance) moving from a point sample volume (i.e., drillhole) to the block volume.

Final estimation and search parameters for the MNV model are in Table 14-32.

Table 14-32: MNV estimation and search parameters

Element (Est. Method)	Vein Domain	SVOL	Min Samp.	Max Samp.	Max Samp./DH	Search Distance D1, D2, D3 (m)	Soft Boundary Dist. (m)
Cu (OK)	01/05/06/08	1	8	12	3	120, 60, 30	VN01/08: 50×50×25
Cu (OK)	02/03/08	1	8	16	3	90, 90, 30	VN02/08: 24×18×6
Cu (OK)	01/02/05/06/08	2	6	16	4	240, 120, 30	VN01/02/08: 50×50×25
		3	6	16	3	360, 180, 30	
Cu (ID^2)		1	6	16	4	240, 120, 30	No
Cu (NN)		1	1	1	1	240, 120, 30	No
Cu (ID^2)	07	1	8	16	3	130, 100, 15	No
Cu (ID^2)	Lith10	1	2	16	3	300, 300, 30	No
Ag (OK)	01/05/06/08	1	8	12	3	120, 60, 30	VN01/08: 20×20×25
Ag (OK)	02/03/08	1	8	16	3	90, 90, 30	VN02/08 24×18×6
Ag (OK)	01/02/05/06/08	2	6	12	4	240, 120, 30	VN01/02/08: 20×20×25
		3	6	12	3	360, 180, 30	

Element (Est. Method)	Vein Domain	SVOL	Min Samp.	Max Samp.	Max Samp./DH	Search Distance D1, D2, D3 (m)	Soft Boundary Dist. (m)
Ag (ID^2)		1	6	12	4	240, 120, 30	No
Ag (NN)		1	1	1	1	240, 120, 30	No
Cu (ID^2)	07	1	8	16	3	130, 100, 15	No
Ag (ID^2)	Lith10	1	2	16	3	300, 300, 30	No
Zn (OK)	01/05/06/08	1	8	VN01: 16 VN05: 20 VN06: 12	3	120, 60, 30	VN01/08: 40×40×25
Zn (OK)	02/03/08	1	8	16	3	60,30, 15	VN02/08: 24×18×6
ZN (OK)	01/02/05/ 06/08	2	8	VN01: 16 VN05: 20 VN06: 12	4	240, 120, 30	VN01/02/08: 40×40×25
		3	6		3		
Zn (ID^2)		1	6		4	240, 240, 30	No
Zn (NN)		1	1	1	1	240, 240, 30	No
Zn (ID^2)	07	1	12	24	3	120, 60, 15	No
Zn (ID^2)	Lith10	1	2	16	3	300, 300, 30	No
Zn (ID^2)	02/10	1	8	16	3	85, 45, 25	No
Pb (OK)	01/05/06/08	1	8	20	3	120, 60, 30	VN01/08: 50×50×30
Pb (OK)	02/03/08	1	12	20	3	50, 35, 15	VN02/08: 24×18×6
Pb (OK)	01/02/05 /06/08	2	6	20	4	240, 120, 30	VN01/02/08: 50×50×30
		3	6	20	3	240, 120, 30	No
Pb (ID^2)		1	6	20	4	240, 120, 30	No
Pb (NN)		1	6	20	4	240, 120, 30	No
Pb (ID^2)	07	1	12	24	3	175, 100, 15	No
Px (ID^2)	02	1	8	16	3	50, 35, 15	No
Bulk Density (ID^2)	01/02/03/05/ 06/07/08	2	12	24	4	330, 300, 30	No
Bulk Density (ID^2)	Lith10	2	12	24	4	300, 300, 30	No
RQD (ID^2)	01/02/03/05/ 06/07/ 08/Lith10	2	6	20	4	300, 300, 30	No

14.2.1.8 Model Validation

Block model validation after grade estimation involved the following steps:

- Visual inspection of block grades against the input drillhole data.
- Declustering of the top-cut, input drillhole data for:
    - Assessment for global unbiasedness.
    - Evaluation of block grades against declustered, top-cut, input drillhole data in swathe plots.
    - Global change of support to assess smoothing above a specified cut-off.

- Review of element correlations in the blocks compared to input drillhole correlations.

14.2.1.9 Mineral Resources Classification

Mineral Resources classification conforms to the definitions provided in the CIM Definition Standards for Mineral Resources and Reserves (CIM, 2014). Previously, nearly all material contained within the modelled veins was given a default classification of Inferred, as the extents of the vein boundaries were limited during geological modelling (except the MNV). This methodology was changed during this update to eliminate the upper reaches of the MNV where previous mining has occurred. There is no available drilling information in these areas, meaning the grades estimated in these blocks are extrapolations of the grades directly below. Given the grade variability of copper, silver, zinc and lead in the MNV, confidence in these estimates is low.

Classification of Indicated Mineral Resources in the San Rafael and SROB-Zn zones considered the following factors:

- QAQC data: There is accurate and repeatable performance of external certified reference material and duplicate samples. There is also an established bulk density QAQC data set. The QAQC data are of sufficient quality to support classification of Measured Mineral Resources.
- Drillhole spacing: The high-level drillhole spacing study completed by Davis (2014) recommended a 40 m × 40 m drillhole spacing grid to have sufficient confidence in grade continuity for Indicated Resources. This was the primary constraint used during classification, but areas with wider spacing were reviewed on a case-by-case basis. Measured Resources require a drillhole spacing of about 25 m × 25 m, or they must be located proximally to underground development.
- Confidence classification boundaries: The existing boundaries were used as a guide for classification of Indicated resources, which were then adjusted to account for new drilling.
- Underground development and mined stopes: There is a development drive into the San Rafael zone along Level 10 that extends eastward from the San Roberto zone. Blocks around this development were left as Indicated resources and not classified as Measured.

Furthermore, mineral resource statements for underground mining scenarios must satisfy the “reasonable prospects for eventual economic extraction” by demonstration of the spatial continuity of the mineralization within a potentially mineable shape. Constraining volumes were used in conjunction with the criteria, as detailed above, for the preparation of Mineral Resource estimate for the MNV.

14.2.1.10 Grade Tonnage Reporting

Mineral Resources were reported above a US$50/t NSR cut-off and consider depletion from mining until April 30, 2020.

Mineral Resources were evaluated using the NSR formula with metallurgical recoveries based on zone mineralization. Metal prices used were US$3.25/lb Cu, US$20.00/oz Ag, US$1.20/lb Zn, US$1.00/lb Pb. For copper-zinc zones, assumed metal recoveries were 92% Cu, 79% Ag, 72% Zn, and 42% Pb. For zinc zones in MNV, assumed metal recoveries were 55% Ag, 77% Zn, and 80% Pb. Confidential smelter contract terms were incorporated into the formula and royalties on ground covered by the Bacis agreement were deducted.

The SROB zone uses the copper-zinc NSR formula:

Cu-Zn NSR = (Cu%*$58.430 + Ag g/t*$0.416 + Zn%*$15.368 + Pb%*$7.837) * (1-NSRRoyalty%)

The San Rafael and SROB-Zn zone uses MNV-zinc NSR formula:

MNV-Zn NSR = (Ag g/t*$0.256 + Zn%*$16.401 + Pb%*$14.977) * (1-NSRRoyalty%)

Mineral Resources for all three zones within the MNV are summarized in Table 14-33 through Table 14-36. They are reported above a US$50/t NSR cut-off value using the copper-zinc NSR formula and MNV-zinc NSR formula and account for mining activities until October 31, 2020.

Table 14-33: MNV – SROB-Zn Mineral Resources above US$50/t NSR cut-off as at October 31, 2020

Classification	Tonnes (kt)	Cu (%)	Ag (g/t)	Zn (%)	Pb (%)	Contained			
						Cu Metal (kt)	Ag Metal (koz)	Zn Metal (kt)	Pb Metal (kt)
Zinc Zone: MNV – SROB-Zn									
Measured	-	-	-	-	-	-	-	-	-
Indicated	339	0.15	26	3.93	0.64	1	282	13	2
Total M + I	**339**	**0.15**	**26**	**3.93**	**0.64**	**1**	**282**	**13**	**2**
Inferred	719	0.09	22	3.47	0.37	1	507	25	3

Table 14-33 Notes:
1. Garth Kirkham, P.Geo., FGC, is the independent Qualified Person responsible for the disclosure of Cozamin Mineral Resources. Mineral Resources in SROB-Zn are reported at a cut-off of NSR US$50/tonne using the MNV-Zn NSR formula:
(Cu*58.430 + Ag*0.416 + Zn*15.368 + Pb*7.837)*(1-NSRRoyalty%)based on metal price assumptions (in US$) of Cu = $3.25/lb, Ag = $20.00/oz, Zn = $1.20/lb, Pb = $1.00/lb, metal recoveries of 55% Ag, 77% Zn and 80% Pb, confidential current smelter contract terms, transportation costs and royalty agreements from 1 to 3%, as applicable, are incorporated. All contained metals are reported at 100%. Totals may not sum exactly due to rounding. The NSR cut-off of US$50/tonne is based on operational mining and milling costs plus general and administrative costs. The Mineral Resources consider underground mining by long-hole stoping and mineral processing by flotation. Mineral Resource estimates do not account for mining loss and dilution. 2. The last date for drilling sample data and mining activities is October 31, 2020.
3. Mineral Resources that have not been converted to Mineral Reserves do not have demonstrated economic viability.
4. Mineral Resources are reported inclusive of the Mineral Reserves.
5. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Table 14-34: MNV – San Rafael Mineral Resources above US$50/t NSR cut-off as at October 31, 2020

Classification	Tonnes (kt)	Cu (%)	Ag (g/t)	Zn (%)	Pb (%)	Contained			
						Cu Metal (kt)	Ag Metal (koz)	Zn Metal (kt)	Pb Metal (kt)
Zinc Zone: MNV – San Rafael									
Measured	-	-	-	-	-	-	-	-	-
Indicated	1,464	0.27	44	3.61	0.52	4	2,057	53	8
Total M + I	**1,464**	**0.27**	**44**	**3.61**	**0.52**	**4**	**2,057**	**53**	**8**
Inferred	2,505	0.16	38	3.71	0.36	4	3,057	93	9

Table 14-34 Notes:

1. Garth Kirkham, P.Geo., FGC, is the independent Qualified Person responsible for the disclosure of Cozamin Mineral Resources. Mineral Resources are reported at a cut-off of NSR US$50/tonne using the MNV-Zn NSR formula: (Cu*58.430 + Ag*0.416 + Zn*15.368 + Pb*7.837)*(1-NSRRoyalty%)(Cu%*$60.535 + Ag g/t*$0.472 + Zn%*14.865 + Pb%*$9.147)*(1-Royalty%) based on metal price assumptions (in US$) of Cu = $3.25/lb, Ag = $20.00/oz, Zn = $1.20/lb, Pb = $1.00/lb, metal recoveries of 55% Ag, 77% Zn and 80% Pb, confidential current smelter contract terms, transportation costs and royalty agreements from 1 to 3%, as applicable, are incorporated. All contained metals are reported at 100%. Totals may not sum exactly due to rounding. The NSR cut-off of US$50/tonne is based on operational mining and milling costs plus general and administrative costs. The Mineral Resources consider underground mining by long-hole stoping and mineral processing by flotation. Mineral Resource estimates do not account for mining loss and dilution.
2. The last date for drilling sample data and mining activities is October 31, 2020.3. Mineral Resources that have not been converted to Mineral Reserves do not have demonstrated economic viability.
4. Mineral Resources are reported inclusive of the Mineral Reserves.
5. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Table 14-35: MNV – Total Zinc Zone mineral resources above US$50/t NSR cut-off as at October 31, 2020

Classification	Tonnes (kt)	Cu (%)	Ag (g/t)	Zn (%)	Pb (%)	Contained			
						Cu Metal (kt)	Ag Metal (koz)	Zn Metal (kt)	Pb Metal (kt)
Total Zinc Zones: MNV – SROB-Zn and San Rafael									
Measured	-	-	-	-	-	-	-	-	-
Indicated	1,803	0.25	40	3.67	0.54	4	2,339	66	10
Total M + I	**1,803**	**0.25**	**40**	**3.67**	**0.54**	**4**	**2,339**	**66**	**10**
Inferred	3,224	0.14	34	3.66	0.36	5	3,564	118	12

Table 14-35 Notes:

1. Garth Kirkham, P.Geo., FGC, is the independent Qualified Person responsible for the disclosure of Cozamin Mineral Resources. Mineral Resources are reported at a cut-off of NSR US$50/tonne using the MNV-Zn NSR formula: (Cu*58.430 + Ag*0.416 + Zn*15.368 + Pb*7.837)*(1-NSRRoyalty%)(Cu%*$60.535 + Ag g/t*$0.472 + Zn%*14.865 + Pb%*$9.147)*(1-Royalty%) based on metal price assumptions (in US$) of Cu = $3.25/lb, Ag = $20.00/oz, Zn = $1.20/lb, Pb = $1.00/lb, metal recoveries of 55% Ag, 77% Zn and 80% Pb, confidential current smelter contract terms, transportation costs and royalty agreements from 1 to 3%, as applicable, are incorporated. All contained metals are reported at 100%. Totals may not sum exactly due to rounding. The NSR cut-off of US$50/tonne is based on operational mining and milling costs plus general and administrative costs. The Mineral Resources consider underground mining by long-hole stoping and mineral processing by flotation. Mineral Resource estimates do not account for mining loss and dilution.
2. The last date for drilling sample data and mining activities is October 31, 2020.
3. Mineral Resources that have not been converted to Mineral Reserves do not have demonstrated economic viability.
4. Mineral Resources are reported inclusive of the Mineral Reserves.
5. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Table 14-36: MNV – San Roberto Copper Zone mineral resources above US$50/t NSR cut-off as at October 31, 2020

Classification	Tonnes (kt)	Cu (%)	Ag (g/t)	Zn (%)	Pb (%)	Contained			
						Cu Metal (kt)	Ag Metal (koz)	Zn Metal (kt)	Pb Metal (kt)
Copper Zone: MNV – San Roberto									
Measured	407	1.24	53	1.23	0.40	5	698	5	2
Indicated	2921	1.05	45	1.56	0.39	31	4,188	46	11
Total M + I	**3328**	**1.07**	**46**	**1.52**	**0.39**	**36**	**4,886**	**51**	**13**
Inferred	3950	0.68	37	1.58	0.15	27	4,676	62	6

Table 14-36 Notes:

1. Garth Kirkham, P.Geo., FGC, is the independent Qualified Person responsible for the disclosure of Cozamin Mineral Resources. Mineral Resources are reported at a cut-off of NSR US$50/tonne using the

Cu-Zn NSR formula:
(Cu*58.430 + Ag*0.416 + Zn*15.368 + Pb*7.837)*(1-NSRRoyalty%) based on metal price assumptions (in US$) of Cu = $3.25/lb, Ag = $20.00/oz, Zn = $1.20/lb, Pb = $1.00/lb, metal recoveries of 92% Cu, 79% Ag, 72% Zn, 42% Pb, confidential current smelter contract terms, transportation costs and royalty agreements from 1 to 3%, as applicable, are incorporated. All contained metals are reported at 100%. Totals may not sum exactly due to rounding.
The NSR cut-off of US$50/tonne is based on operational mining and milling costs plus general and administrative costs. The Mineral Resources consider underground mining by long-hole stoping and mineral processing by flotation. Mineral Resource estimates do not account for mining loss and dilution.
2. The last date for drilling sample data and mining activities is October 31, 2020.3. Mineral Resources that have not been converted to Mineral Reserves do not have demonstrated economic viability.
4. Mineral Resources are reported inclusive of the Mineral Reserves.
5. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

14.3 MNFWZ Mineral Resource Estimation

14.3.1 Raw Data

The raw drillhole data were imported into *Hexagon MineSight*® software version 15.7. This included data from the *collar.csv*, *survey.csv*, *lithology.csv*, *assay.csv*, *density.csv* and *geotech.csv* tables.

14.3.1.1 Assay Data

The raw drillhole sample data were desurveyed and stored. The domain wireframes were used to code the drillhole data within the respective vein domains in the compositing process using the priority coding defined during geological modelling.

Univariate statistics, by vein domain, are summarized in Table 14-37 through Table 14-40 for the MNFWZ model.

Table 14-37: Cu raw statistics of MNFWZ

Domain	No. Samples	Length	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	COV
VN08	48	34.2	0.002	9.34	0.468	1.367	2.9
VN09	275	221.9	0.001	12.35	1.186	1.746	1.5
VN10	1,512	1396.4	0.0005	15.85	0.865	1.743	2.0
VN11A	71	66.8	0.0024	0.694	0.074	0.130	1.8
VN18	491	412.4	0.002	14.3	1.478	2.302	1.6
VN19	120	115.7	0.0003	9.45	0.651	1.387	2.1
VN20	3,348	2912.8	0.0005	22	2.316	3.167	1.4
VN22	270	231.0	0.002	16.45	0.880	1.582	1.8
All Vein	6,135	5391.2	0.0003	22	1.693	2.719	1.6
All	76,843	82174.8	0.0001	22	0.222	1.020	4.6

Table 14-38: Ag raw statistics of MNFWZ

Domain	No. Samples	Length	Min (g/t)	Max (g/t)	Mean (g/t)	Std. Dev. (g/t)	COV
VN08	48	34.2	0.5	383	22.99	55.86	2.4
VN09	275	221.9	0.4	553	34.77	55.35	1.6
VN10	1,512	1396.4	0.2	4,070.00	39.77	124.63	3.1
VN11A	71	66.8	0.4	275	25.86	37.93	1.5
VN18	491	412.4	0.1	3,410.00	34.29	131.25	3.8
VN19	120	115.7	0.2	170	21.86	33.15	1.5
VN20	3,348	2912.8	0.1	1,500.00	50.58	85.38	1.7
VN22	270	231.0	0.1	472	20.23	36.61	1.8
All Vein	6,135	5391.2	0.1	4,070.00	43.49	98	2.3
All	76,843	82174.8	0	4,070.00	9.43	41.14	4.4

Table 14-39: Zn raw statistics of MNFWZ

Domain	No. Samples	Length	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	COV
VN08	48	34.2	0.0005	19.95	2.79	3.77	1.3
VN09	275	221.9	0.003	19.7	0.78	1.80	2.3
VN10	1,512	1396.4	0.001	30	1.64	2.89	1.8
VN11A	71	66.8	0.0134	17.65	3.03	3.62	1.2
VN18	491	412.4	0.0005	4.655	0.25	0.66	2.7
VN19	120	115.7	0.0024	24.2	1.72	3.39	2.0
VN20	3,348	2912.8	0.0005	15.15	0.34	0.90	2.6
VN22	270	231.0	0.0005	7.23	0.18	0.65	3.7
All Vein	6,135	5391.2	0.0005	30	0.76	1.93	2.5
All	76,842	82172.8	0.0001	43.07	0.39	1.36	3.5

Table 14-40: Pb raw statistics of MNFWZ

Domain	No. Samples	Length	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	COV
VN08	48	34.2	0.0005	9.11	0.48	1.45	3.0
VN09	275	221.9	0.0005	0.621	0.04	0.06	1.5
VN10	1,512	1396.4	0.0002	33.34	0.75	2.37	3.2
VN11A	71	66.8	0.0072	16.75	1.93	2.96	1.5
VN18	491	412.4	0.0004	3.68	0.02	0.12	5.0
VN19	120	115.7	0.001	8.55	0.36	0.99	2.8
VN20	3,348	2912.8	0.0003	3.62	0.03	0.15	4.7
VN22	270	231.0	0.0003	3.07	0.03	0.20	5.8
All Vein	6,135	5391.2	0.0002	33.34	0.25	1.32	5.3
All	76,843	82174.8	0	36.85	0.09	0.61	7.0

14.3.1.1.1 Bulk Density, Core Recovery and RQD Data

As previously stated, bulk density sampling has been undertaken systematically throughout the MNV and MNFWZ veins. Since 2013 samples were taken at the same volume support as the geochemical assay data (i.e., the average bulk density value was generated over the interval length as the assay sample).

The vein domains and lithology wireframes were used to code the drillhole data in the compositing process (populating the domain and litho fields in the database).

As previously stated, core recovery data are recorded from measurements of the total core length in the box between the blocks demarking the run interval. Rock Quality Data ("RQD") information involved summing the total length of individual pieces greater than 10 cm in length, divided by the run length. The resulting value is expressed as a percentage. The vein domains and lithology wireframes were used to code the drillhole data in the compositing process (populating the domain and litho fields in the database).

14.3.1.2 Compositing

The 1.0 m composite length offered a balance between supplying common support for samples and minimizing the smoothing of the grades. This was taking into consideration that the vertical block dimension was 2 metres which is the predominant direction of drilling. In addition, the 1.0 m sample length was consistent with the distribution of sample lengths within the mineralized domains as 50% of the assay lengths are less than or equal to 1.0 m and 80% of the assay lengths are less than or equal to 1.5 m as shown in Figure 14-12. It should be noted that although 1.0 m is the composite length, any residual composites of length greater than 0.5 m and less than 1.0 m remained to represent a composite whilst any composites residuals less than 0.5m were combined to the composite above.

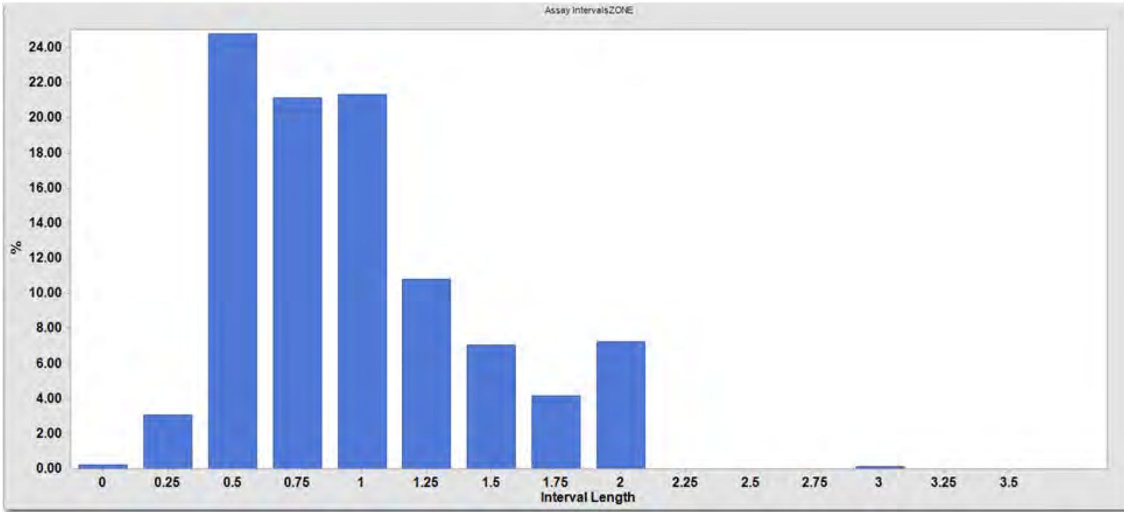

Figure 14-12: Histogram of Assay Interval Lengths within the Vein Models (Kirkham, 2020)

The statistics of the composited data are presented in Table 14-41 through Table 14-45.

Table 14-41: Cu composited statistics of MNFWZ (undeclustered)

Domain	No. Samples	Length	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
VN08	48	37.1	0.001	6.9641	0.432	1.174	2.7
VN09	242	224.5	0.01	11.8075	1.172	1.564	1.3
VN10	1,445	1405.9	0.0002	10.7649	0.859	1.559	1.8
VN11A	74	68.7	0.0022	0.6877	0.072	0.126	1.7
VN18	451	419.8	0.002	10.67	1.453	1.988	1.4
VN19	124	119.7	0.0001	9.45	0.630	1.260	2.0
VN20	2,964	2937.5	0.0003	16.192	2.298	2.755	1.2
VN22	254	234.0	0.001	10.3924	0.869	1.248	1.4
All Vein	5,602	5447.1	0.0001	16.192	1.676	2.393	1.4
All	85,372	82174.8	0.0001	16.192	0.222	0.928	4.2

Table 14-42: Ag composited statistics of MNFWZ (undeclustered)

Domain	No. Samples	Length	Min (g/t)	Max (g/t)	Mean (g/t)	Std. Dev. (g/t)	CoV
VN08	48	37.1	0.5	293.4	21.28	49.86	2.3
VN09	242	224.5	0.4	442.7	34.38	48.54	1.4
VN10	1,445	1405.9	0.2	3,468.50	39.53	113.52	2.9
VN11A	74	68.7	0.4	271.8	25.16	36.46	1.5
VN18	451	419.8	0.4	1,401.40	33.73	90.72	2.7
VN19	124	119.7	0.1	170	21.18	30.21	1.4
VN20	2,964	2937.5	0.1	1,095.60	50.22	70.15	1.4
VN22	254	234.0	0.5	279.6	19.99	30.72	1.5
All Vein	5,602	5447.1	0.1	3,468.50	43.09	82.99	1.9
All	85,372	82174.8	0	3,468.50	9.43	35.57	3.8

Table 14-43: Zn composited statistics of MNFWZ (undeclustered)

Domain	No. Samples	Length	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
VN08	48	37.1	0.0005	15.69	2.57	3.61653	1.4
VN09	242	224.5	0.003	11.05	0.77	1.51715	2.0
VN10	1,445	1405.9	0.001	30.00	1.63	2.57371	1.6
VN11A	74	68.7	0.0134	17.65	2.95	3.38039	1.1
VN18	451	419.8	0.0005	4.53	0.24	0.60907	2.5
VN19	124	119.7	0.0014	23.20	1.67	2.99762	1.8
VN20	2,964	2937.5	0.0005	13.00	0.34	0.76702	2.2
VN22	254	234.0	0.001	5.51	0.18	0.56546	3.2
All Vein	5,602	5447.1	0.0005	30.00	0.75	1.73829	2.3
All	85,370	82173.3	0.0001	33.15	0.39	1.20406	3.1

Table 14-44: Pb composited statistics of MNFWZ (undeclustered)

Domain	No. Samples	Length	Min (%)	Max (%)	Mean (%)	Std. Dev. (%)	CoV
VN08	48	37.1	0.0005	5.93	0.44	1.20595	2.7
VN09	242	224.5	0.0005	0.62	0.04	0.0512	1.3
VN10	1,445	1405.9	0.0004	23.65	0.74	2.10037	2.8
VN11A	74	68.7	0.0057	13.50	1.88	2.63728	1.4
VN18	451	419.8	0.0004	3.68	0.02	0.11722	4.9
VN19	124	119.7	0.0004	4.70	0.34	0.80485	2.3
VN20	2,964	2937.5	0.0005	2.85	0.03	0.12763	3.9
VN22	254	234.0	0.0005	2.15	0.03	0.16375	4.9
All Vein	5,602	5447.1	0.0004	23.65	0.25	1.17962	4.7
All	85,372	82174.8	0	23.65	0.09	0.5188	5.9

Table 14-45: Bulk density composited statistics (MNFWZ domains and all lithology units)

Domain	No. Samples	Length	Min (g/cm^3)	Max (g/cm^3)	Mean (g/cm^3)	Std. Dev. (g/cm^3)	CoV
VN08	22	15.2	2.49	3.34	2.757	0.19	0.069
VN09	220	175.9	2.52	3.23	2.711	0.116	0.043
VN10	986	706.2	2.38	4.94	2.838	0.329	0.116
VN11A	45	23.6	2.42	4.09	3.025	0.28	0.092
VN18	333	237.9	2.31	3.53	2.68	0.193	0.072
VN19	84	50.6	2.49	3.29	2.857	0.214	0.075
VN20	2,543	2017.6	2.13	4.11	2.855	0.244	0.085
VN22	176	126.6	2.31	3.2	2.648	0.125	0.047
All Vein	4,409	3353.4	2.13	4.94	2.824	0.261	0.092
All	22	15.2	2.49	3.34	2.757	0.19	0.069

Since core recovery and RQD are calculated on a "*per core run*" basis of 3.05 m, compositing is not necessary.

14.3.2 Exploratory Data Analysis

An exploratory data analysis ("EDA") was undertaken on the composited drillhole data. The objectives are of this study are as follows:

- Identify spatial trends in grade data and verify domaining strategy (data orientation, data population distributions).
- Understand sample distributions within the domains and select the appropriate grade estimation method and estimation strategy.
- Assess top-cutting and search-restriction requirements for outlier samples.

- Histograms, probability plots, contact plots were used for exploratory data analysis ("EDA") on the composited drillhole data. Histograms showed all veins and metals demonstrated log-normal distributions which is to be expected. Contact plots illustrated that there a sharp contact at the boundary of the veins which supports the use of hard boundaries between vein and waste.

Box plots by individual vein for copper, silver, zinc and lead are shown in Figures 14-13 through 14-16, respectively.

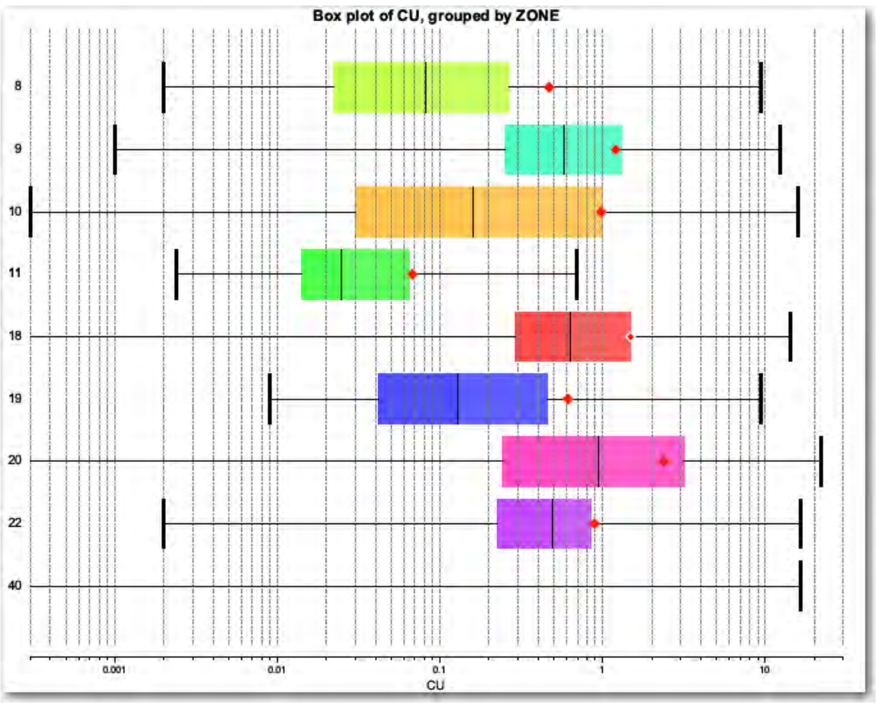

Figure 14-13: Cu Composite Box Plot (Kirkham, 2020)

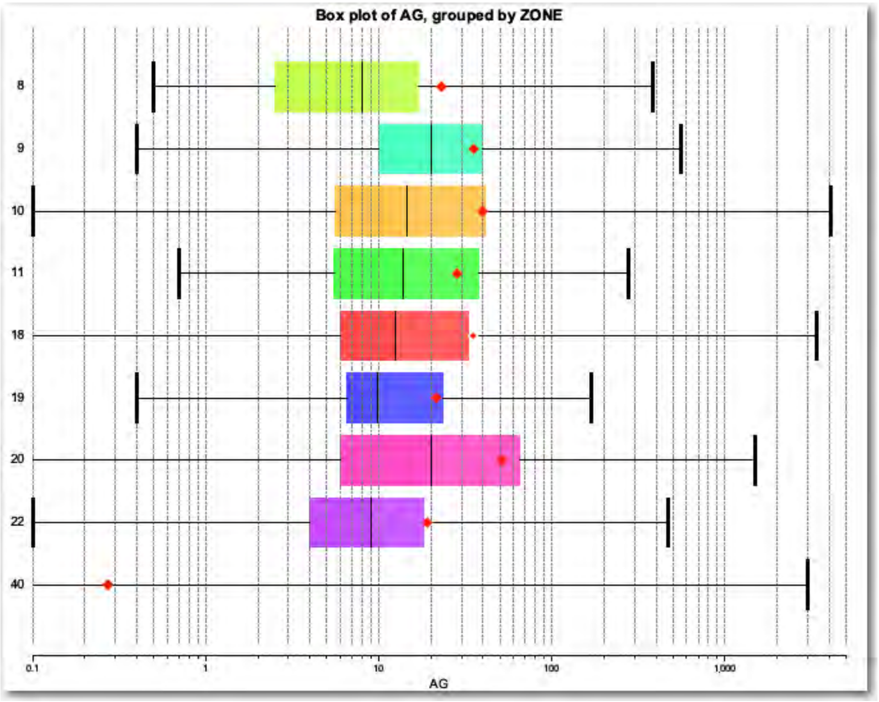

Figure 14-14: Ag Composite Box Plot (Kirkham, 2020)

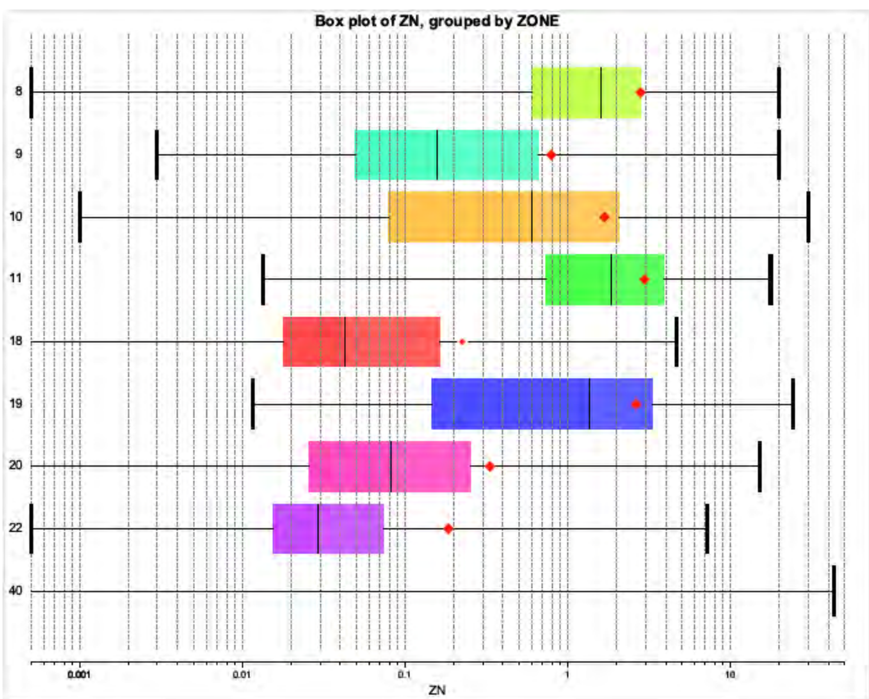

Figure 14-15: Zn Composite Box Plot (Kirkham, 2020)

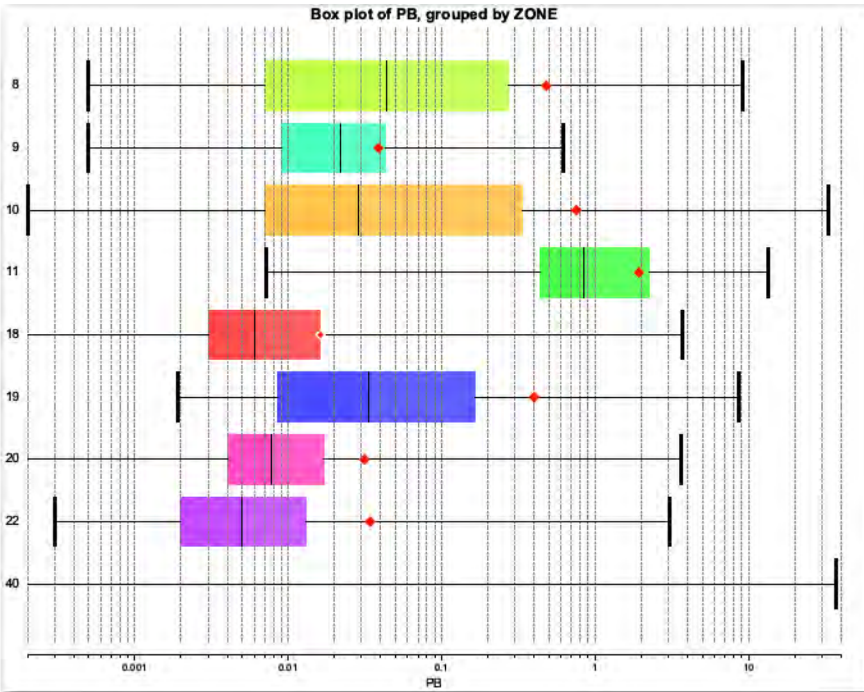

Figure 14-16: Pb Composite Box Plot (Kirkham, 2020)

The data in the vein domains were reviewed and the following observations were made with respect to grade distribution and continuity:

- The boundary between the vein domains will be treated as "hard" for grade estimation.
- Veins 09, 10, 18 and 20 show similar grade distributions for each element as do 08, 11A and 19.
- Domain Vein 08, 11A and 19 illustrate elevated zinc grades in comparison to the other veins. Domain 11A is the only vein domain with elevated lead grades.
- Domain 22 shows overall lower grades for all metals compared to all other veins.
- The coefficient of variation ("CoV") is between 1.2-1.8 for copper within the 09, 10, 18 and 20 veins whilst moderately higher at 2.0 - 2.7 in the lesser copper veins 08 and 19.
- Silver CoV's for vein 08, 10, and 18 are moderately high.
- Zinc CoV's for vein 09, 18, 20 and 22 are also moderately high.
- Lead CoV's for vein 08, 10 and 19 are moderate while vein 18, 20 and 22 are relatively high at > 4. CoV's that are generally high and indicate variability. This is flagged for review during outlier analysis.
- In general, the veins will be estimated using the same variogram models however hard boundaries will be applied so that mixing of vein populations will not be permitted.

14.3.2.1 Outlier Analysis

Grade distributions in each vein were assessed graphically and spatially for the presence of outlier samples, which can have a disproportionate impact during grade estimation and can lead to overestimated grades. Determination of appropriate top-cut values was undertaken through identification of population breaks in histograms and inflection points in log-probability plots. The impact of the selected top cut was assessed by reviewing the change in the mean grade and CoV of the composited samples before and after the top cut (Table 14-46 through Table 14-49). After application of cutting the CoV for copper and silver are fairly consistently around 1.5 which illustrates that the outliers are being sufficiently treated. The CoV's for zinc and more specifically lead are higher however and the application of cutting did not have any real effect on reducing the CoV. The mean grades are low so the issue lies in the fact that there is variability in the zinc and lead data but this is not due to outliers.

Table 14-46: Cu top-cut, composited statistics of MNFWZ

Domain	Mean (%)	CoV	Top Cut (%)	Top Cut Mean (%)	Top Cut CoV
VN08	0.432	2.7	0.7	0.194	1.3
VN09	1.172	1.3	5	1.088	1.1
VN10	0.859	1.8	8	0.854	1.8
VN11A	0.072	1.7	0.688	0.073	1.7
VN18	1.453	1.4	9.5	1.449	1.4
VN19	0.630	2.0	9.45	0.630	2.0
VN20	2.298	1.2	13	2.292	1.2
VN22	0.869	1.4	5	0.813	1.1
All Vein	1.676	1.4	-	1.664	1.4
All	0.222	4.2	-	0.242	4.0

Table 14-47: Ag top-cut, composited statistics of MNFWZ

Domain	Mean (g/t)	CoV	Top Cut (g/t)	Top Cut Mean (g/t)	Top Cut CoV
VN08	21.28	2.3	293.4	21.28	2.3
VN09	34.38	1.4	442.7	34.38	1.4
VN10	39.53	2.9	800	37.59	1.9
VN11A	25.16	1.5	271.8	25.16	1.4
VN18	33.73	2.7	800	31.57	1.9
VN19	21.18	1.4	170	21.18	1.4
VN20	50.22	1.4	800	50.12	1.4
VN22	19.99	1.5	279.6	19.99	1.5
All Vein	43.09	1.9	-	42.36	1.6
All	9.43	3.8	-	9.88	3.3

Table 14-48: Zn top-cut, composited statistics of MNFWZ

Domain	Mean (%)	CoV	Top Cut (%)	Top Cut Mean (%)	Top Cut CoV
VN08	2.57	1.4	15.694	2.57	1.4
VN09	0.77	2.0	11.048	0.77	2.0
VN10	1.63	1.6	25	1.62	1.5
VN11A	2.95	1.1	17.65	2.95	1.1
VN18	0.24	2.5	4.53	0.24	2.5
VN19	1.67	1.8	23.197	1.67	1.8
VN20	0.34	2.2	13	0.34	2.2
VN22	0.18	3.2	5.51	0.18	3.2
All Vein	0.75	2.3	-	0.75	2.3
All	0.39	3.1	-	0.41	3.0

Table 14-49: Pb top-cut, composited statistics of MNFWZ

Domain	Mean (%)	CoV	Top Cut (%)	Top Cut Mean (%)	Top Cut CoV
VN08	0.44	2.7	15.694	0.44	2.7
VN09	0.04	1.3	11.048	0.04	1.3
VN10	0.74	2.8	25	0.68	2.4
VN11A	1.88	1.4	17.65	1.81	1.3
VN18	0.02	4.9	4.53	0.02	4.9
VN19	0.34	2.3	23.197	0.34	2.3
VN20	0.03	3.9	13	0.03	3.9
VN22	0.03	4.9	5.51	0.03	4.9
All Vein	0.25	4.7	-	0.23	4.2
All	0.09	5.9	-	0.09	5.2

14.3.2.2 Variography

Spatial relationships of the top-cut, composited sample data were analyzed to define continuity directions of the mineralization. Experimental variograms and variogram models in the form of correlograms were generated for Cu, Ag, Zn and Pb grades. The individual zones did not have sufficient data to generate meaningful variogram results however when combined, which is valid in the opinion of the Author, the results are meaningful and there is justification for utilizing ordinary kriging for the estimation process. The definition of the nugget effect for each of the metals was taken from the downhole variograms. The correlogram models for each of copper, silver, zinc and lead are shown in Figures 14-17 through Figure 14-20, respectively.

Cozamin FW Veins Cu Correlograms

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.300
C1 ==> 0.459
C2 ==> 0.241

First Structure -- Spherical

LH Rotation about the Z axis ==> 12
RH Rotation about the X' axis ==> -54
LH Rotation about the Y' axis ==> -25

Range along the Z' axis	==> 3.3	Azimuth ==> 42	Dip ==> 32
Range along the Y' axis	==> 19.4	Azimuth ==> 12	Dip ==> -54
Range along the X' axis	==> 11.3	Azimuth ==> 122	Dip ==> -14

Second Structure -- Spherical

LH Rotation about the Z axis ==> -8
RH Rotation about the X' axis ==> -57
LH Rotation about the Y' axis ==> 33

Range along the Z axis	==> 72.4	Azimuth ==> 314	Dip ==> 27
Range along the X' axis	==> 18.9	Azimuth ==> 53	Dip ==> 18
Range along the Y' axis	==> 182.3	Azimuth ==> 352	Dip ==> -57

Modeling Criteria

Minimum number pairs req'd ==> 75
Sample variogram points weighted by # pairs

Figure 14-17: Cu Correlogram model parameters – MNFWZ (Kirkham, 2020)

Cozamin FW Veins Ag Correlograms

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.350
C1 ==> 0.571
C2 ==> 0.079

First Structure -- Spherical

LH Rotation about the Z axis ==> -58
RH Rotation about the X' axis ==> 1
LH Rotation about the Y' axis ==> -10

Range along the Z' axis	==> 8.9	Azimuth ==> 36	Dip ==> 80
Range along the Y' axis	==> 12.2	Azimuth ==> 302	Dip ==> 1
Range along the X' axis	==> 2.9	Azimuth ==> 32	Dip ==> -10

Second Structure -- Spherical

LH Rotation about the Z axis ==> -51
RH Rotation about the X' axis ==> 3
LH Rotation about the Y' axis ==> 33

Range along the Z axis	==> 635.2	Azimuth ==> 215	Dip ==> 57
Range along the X' axis	==> 37.7	Azimuth ==> 41	Dip ==> 33
Range along the Y' axis	==> 250.3	Azimuth ==> 309	Dip ==> 3

Modeling Criteria

Minimum number pairs req'd ==> 75
Sample variogram points weighted by # pairs

Figure 14-18: Ag Correlogram model parameters – MNFWZ (Kirkham, 2020)

Cozamin FW Veins Zn Correlograms

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.350
C1 ==> 0.561
C2 ==> 0.089

First Structure -- Spherical

LH Rotation about the Z axis ==> 7
RH Rotation about the X' axis ==> -104
LH Rotation about the Y' axis ==> -9
Range along the Z' axis ==> 2.9 Azimuth ==> 17 Dip ==> -14
Range along the Y' axis ==> 20.3 Azimuth ==> 187 Dip ==> -76
Range along the X' axis ==> 6.6 Azimuth ==> 106 Dip ==> 2

Second Structure -- Spherical

LH Rotation about the Z axis ==> -34
RH Rotation about the X' axis ==> 34
LH Rotation about the Y' axis ==> 23
Range along the Z axis ==> 432.4 Azimuth ==> 184 Dip ==> 50
Range along the X' axis ==> 38.1 Azimuth ==> 70 Dip ==> 19
Range along the Y' axis ==> 141.4 Azimuth ==> 326 Dip ==> 34

Modeling Criteria

Minimum number pairs req'd ==> 75
Sample variogram points weighted by # pairs

Figure 14-19: Zn Correlogram model parameters – MNFWZ (Kirkham, 2020)

Cozamin FW Veins Pb Correlograms

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.050
C1 ==> 0.594
C2 ==> 0.356

First Structure -- Spherical

LH Rotation about the Z axis ==> 71
RH Rotation about the X' axis ==> -88
LH Rotation about the Y' axis ==> 116
Range along the Z' axis ==> 2.1 Azimuth ==> 315 Dip ==> -1
Range along the Y' axis ==> 39.9 Azimuth ==> 71 Dip ==> -88
Range along the X' axis ==> 16.4 Azimuth ==> 45 Dip ==> 2

Second Structure -- Spherical

LH Rotation about the Z axis ==> -43
RH Rotation about the X' axis ==> 2
LH Rotation about the Y' axis ==> -6
Range along the Z axis ==> 27.7 Azimuth ==> 63 Dip ==> 84
Range along the X' axis ==> 19.6 Azimuth ==> 47 Dip ==> -6
Range along the Y' axis ==> 526.5 Azimuth ==> 317 Dip ==> 2

Modeling Criteria

Minimum number pairs req'd ==> 75
Sample variogram points weighted by # pairs

Figure 14-20: Pb Correlogram model parameters – MNFWZ (Kirkham, 2020)

14.3.2.3 Block Model

The selective mining unit ("SMU"), has been revised to 12 m East × 2 m North × 10 m Elevation. The dimensions of the SMU are roughly one-third to one-quarter the average drillhole spacing supporting Measured and Indicated mineral resources (about 40 m × 40 m).

The MNFWZ block model is sub-blocked and rotated to the southeast at 145° and was updated to represent the modelled geology and vein domain wireframes generated in Leapfrog®. The model origin is defined as the lower, southwest edge of the model and the origin coordinates are in the Cozamin local mine grid (Table 14-50). A total of 36 model variables were created, comprising domain codes, grade/density/RQD fields, classification, density, estimation parameters, and search angles used by the dynamic anisotropy. Waste grades and waste density values were also estimated into the block model to provide additional information regarding local dilution grades and tonnages.

Table 14-50: MNFWZ Block model origin and parameters

	X	Y	Z
Origin* (local grid)	746,884.125	2,523,943.25	1,200
Parent Block Size (m)	12.0	2.0	10.0
Sub-Block Size (m)	4.0	0.5	2.0
Extents (m)	2,964	1,050	1,420

*Table 14-50 Note: Model origin is defined as lower, southwest edge of the model.

14.3.2.4 Grade, Density and RQD Estimation

The estimation plan includes the following items:

- Mineralized zone code of modelled mineralization in each block;
- Estimated bulk specific gravity based on an inverse distance squared method;
- Estimated block Cu, Ag, Zn and Pb grades by ordinary kriging, using a one estimation pass.

The search ellipsoids were omni directional as oriented which will effectively use 100 metres search distance along strike and down dip for each of the veins. However, the search will only be limited to the width of the vein or perpendicular to strike as the search strategy is using hard boundaries. In all cases, a minimum of two composites is used and a maximum of 16. In addition, a maximum of five composites are permitted per drillhole.

Grades were estimated using Ordinary Kriging, with inverse-distance-squared weighting ("ID2") and nearest neighbour ("NN") techniques used as checks of the OK estimate for global mean-grade. The OK grade estimation strategy was defined through an assessment of variogram shapes and ranges, and a review of the estimation parameters used in the previous estimates. A multi-pass search strategy was used.

For all domains, silver estimates used the same parameters as the copper estimates to maintain their spatial correlation. Lead and zinc were estimated independently of each other and of copper and silver.

Vein limits were treated as hard boundaries.

Top cuts were applied within the individual estimation profiles. Block discretization was set to 4 × 4 × 2 to take into account the change of support (volume increase/reduction in sample variance) moving from a point sample volume (i.e., drillhole) to the block volume.

14.3.2.5 Model Validation

Block model validation after grade estimation involved the following steps:

- Visual inspection of block grades against the input drillhole data.
- Histogram and Grade-Tonnage curve evaluation.
- Declustering of the top-cut, input drillhole data for:
    - Assessment for global unbiasedness.
    - Evaluation of block grades estimates (Ordinary kriged vs. inverse distance vs. nearest neighbor) against the declustered, top-cut, input drillhole data in swathe plots.
    - Global change of support to assess smoothing above a specified cut-off.

14.3.2.6 Mineral Resource Classification

Mineral Resources classification conforms to the definitions provided in the CIM Definition Standards for Mineral Resources and Reserves (CIM, 2014). Classification of mineral resources in the Mala Noche Footwall zone considered the following factors:

- QAQC data: There is accurate and repeatable performance of external certified reference material and duplicate samples. There is also an established bulk density QAQC data set. The QAQC data are of sufficient quality to support classification of Measured mineral resources.
- Drillhole spacing: The high-level drillhole spacing study completed by Davis (2018) recommended a 50 m × 50 m drillhole spacing grid to have sufficient confidence in grade continuity for Indicated resources. This was the primary constraint used during classification, but areas with wider spacing were reviewed on a case-by-case basis. Measured resources require a drillhole spacing of about 25 m × 25 m, or they must be located proximally to underground development.
- Confidence classification boundaries digitized taking into account number of composites informed, distance to nearest composite, average distance of composites used, number of drillholes informed and relative error.
- Underground development and mined stopes.

Furthermore, mineral resource statements for underground mining scenarios must satisfy the “reasonable prospects for eventual economic extraction” by demonstration of the spatial continuity of the mineralization within a potentially mineable shape. Constraining volumes were used in conjunction with the criteria, as detailed above, for the preparation of Mineral Resource estimate for the Mala Noche Footwall zone.

14.3.2.7 Grade Tonnage Reporting

Mineral Resources were reported above a US$50/t NSR cut-off and consider depletion from mining until October 31, 2020.

Mineral Resources at MNFW were evaluated using three NSR formula with coefficients based metallurgical recovery of mineralization in different zones. Metal prices used were US$3.25/lb Cu, US$20.00/oz Ag, US$1.20/lb Zn, US$1.00/lb Pb. Assumed metal recoveries in copper-zinc zones across Cozamin were 92% Cu, 79% Ag, 72% Zn, and 42% Pb. The assumed metallurgical recoveries at MNFW copper-silver zones were 96% Cu and 85% Ag. MNFW zinc-silver zones use assumed metallurgical recoveries of 60% Ag, 86% Zn, and 92% Pb. Confidential smelter contract terms were incorporated into the formula and royalties on ground covered by Bacis and EDR agreements were deducted. The coefficients in the resulting NSR formulae are shown in Table 14-51.

Table 14-51: MNFWZ NSR Formula Resource Coefficients

Resource Coefficients	Cu	Ag	Zn	Pb
Copper-Silver dominant zones (VN20, VN18, VN22)	$60.779	$0.485	$0.000	$0.000
Copper-Zinc zones (VN09, VN10-NW, VN19)	$58.430	$0.416	$15.368	$7.837
MNFWZ Zinc-Silver dominant zones (VN08, VN10-SE, VN11)	$0.000	$0.304	$18.323	$17.339

Vein 20, MNFWZ’s largest domain, Vein 18 and Vein 22 use the copper-silver NSR formula:

Cu-Ag NSR = (Cu%*$60.779 + Ag g/t*$0.485) * (1-NSRRoyalty%)

MNFWZ domains Vein 9, Vein 10 NW and Vein 19 use the copper-zinc NSR formula:

Cu-Zn NSR = (Cu%*$58.430 + Ag g/t*$0.416 + Zn%*$15.368 + Pb%*$7.837) * (1-NSRRoyalty%)

MNFWZ domain Vein 10 SE uses the MNFWZ zinc-silver NSR formula:

MNFWZ-Zn NSR = (Ag g/t*$0.304 + Zn%*$18.323 + Pb%*$17.339) * (1-NSRRoyalty%)

The Mineral Resources are not particularly sensitive to the selection of cut-off grade. Table 14-51 shows global quantities and grade in the MNFWZ at different NSR cut-offs. The reader is cautioned that these values should not be misconstrued as a Mineral Reserve. The reported quantities and grades are only presented to show the sensitivity of the resource model to the selection of cut-off.

Table 14-52: MNFWZ mineral resources at various NSR cut-offs as at October 31, 2020

NSR COG	Tonnes (kt)	NSR (US$)	Cu (%)	Ag (g/t)	Zn (%)	Pb (%)	Contained			
							Cu (kt)	Ag (koz)	Zn (kt)	Pb (kt)
Indicated										
70	20,167	146.50	1.92	48	0.78	0.27	387	31,280	157	55
60	22,472	138.15	1.78	46	0.82	0.29	401	32,990	185	65
50	**24,541**	**131.14**	**1.68**	**43**	**0.86**	**0.30**	**411**	**34,273**	**210**	**72**
40	26,331	125.29	1.59	42	0.89	0.30	418	35,162	234	78
Inferred										
70	4,752	111.94	0.77	50	2.00	1.50	37	7,568	95	71
60	5,480	105.62	0.72	46	2.00	1.41	39	8,097	110	77
50	**6,695**	**96.26**	**0.64**	**42**	**1.93**	**1.28**	**43**	**9,143**	**129**	**86**
40	7,829	89.00	0.58	39	1.90	1.17	46	9,938	149	92

Table 14-52 Notes:
1. Garth Kirkham, P.Geo., FGC, is the independent Qualified Person responsible for the disclosure of Cozamin Mineral Resources. Mineral Resources are reported at a cut-off of NSR US$50/tonne using three formulae for NSR based on mineralization. Copper-silver dominant zones use the NSR formula: (Cu*60.779 + Ag*0.485)*(1-NSRRoyalty%). Copper-zinc zones use the NSR formula: (Cu*58.430 + Ag*0.416 + Zn*15.368 + Pb*7.837)*(1-NSRRoyalty%). MNFWZ zinc-silver dominant zones use the NSR formula: (Ag*0.304 + Zn*18.323 + Pb*17.339)*(1-NSRRoyalty%). Metal price assumptions (in US$) used to calculate the NSR are: Cu = $3.25/lb, Ag = $20.00/oz, Zn = $1.20/lb and Pb = $1.00/lb. Recoveries used in the NSR formulae are based on mineralization. Copper-silver dominant zones use the following recoveries: 96% Cu and 85% Ag. Copper-zinc zones use the following recoveries: 92% Cu, 79% Ag, 72% Zn and 42% Pb. MNFWZ zinc-silver dominant zones use the following recoveries: 60% Ag, 86% Zn and 92% Pb. The NSR formulae include confidential current smelter contract terms, transportation costs and royalty agreements from 1 to 3%, as applicable, are incorporated. All contained metals are reported at 100%. Totals may not sum exactly due to rounding. The NSR cut-off of US$50/tonne is based on operational mining and milling costs plus general and administrative costs. The Mineral Resources consider underground mining by long-hole stoping and mineral processing by flotation. Mineral Resource estimates do not account for mining loss and dilution.
2. The last date for drilling sample data and mining activities is October 31, 2020.
3. Mineral Resources that have not been converted to Mineral Reserves do not have demonstrated economic viability.
4. Mineral Resources are reported inclusive of the Mineral Reserves.
5. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

CIM Definition Standards for Mineral Resources and Mineral Reserves (2014) defines a mineral resource as:

"…a concentration or occurrence of solid material of economic interest in or on the earth's crust

in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

The "reasonable prospects for eventual economic extraction" requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade taking into account the likely extraction scenarios and process metal recoveries. It is the opinion of the Qualified Person that the Mala Noche Footwall zone, as classified, has a reasonable expectation of economic extraction.

Table 14-52 presents the mineral resource statement for the Mala Noche Footwall Zone at a US$50/t NSR cut-off.

Table 14-53: MNFWZ mineral resources above US$50/t NSR cut-off as at October 31, 2020

Classification	Tonnes (kt)	Cu (%)	Ag (g/t)	Zn (%)	Pb (%)	Cu Metal (kt)	Ag Metal (koz)	Zn Metal (kt)	Pb Metal (kt)
Copper-Silver Zone: MNFWZ VN20									
Measured	-	-	-	-	-	-	-	-	-
Indicated	13,411	2.30	52	0.33	0.03	308	22,507	44	4
Total M + I	**13,411**	**2.30**	**52**	**0.33**	**0.03**	**308**	**22,507**	**44**	**4**
Inferred	1,373	1.38	50	0.46	0.04	19	2,207	6	1
Other MNFWZ Copper-Silver Zones (VN18, VN22)									
Measured	-	-	-	-	-	-	-	-	-
Indicated	2,498	1.34	30	0.27	0.04	33	2,386	7	1
Total M + I	**2,498**	**1.34**	**30**	**0.27**	**0.04**	**33**	**2,386**	**7**	**1**
Inferred	271	1.49	46	0.59	0.13	4	404	2	0
Total MNFWZ Copper-Silver Zones (VN20, VN18, VN22)									
Measured	-	-	-	-	-	-	-	-	-
Indicated	15,908	2.15	49	0.32	0.03	342	24,894	50	5
Total M + I	**15,908**	**2.15**	**49**	**0.32**	**0.03**	**342**	**24,894**	**50**	**5**
Inferred	1,643	1.40	49	0.48	0.06	23	2,611	8	1
MNFWZ Copper- Zinc Zones (VN10-NW, VN09, VN19)									
Measured	-	-	-	-	-	-	-	-	-
Indicated	4,412	1.44	31	0.88	0.10	64	4,429	39	4
Total M + I	**4,412**	**1.44**	**31**	**0.88**	**0.10**	**64**	**4,429**	**39**	**4**
Inferred	1,724	0.77	38	1.56	0.42	13	2,087	27	7
MNFWZ Zinc-Lead-Silver Zones (VN08, VN10-SE, VN11A)									

Measured	-	-	-	-	-	-	-	-	-
Indicated	4,220	0.14	36	2.87	1.49	6	4,950	121	63
Total M + I	**4,220**	**0.14**	**36**	**2.87**	**1.49**	**6**	**4,950**	**121**	**63**
Inferred	3,329	0.21	42	2.83	2.32	7	4,445	94	77
MNFWZ All Zones (Copper-Silver + Copper-Zinc + Zinc-Lead-Silver)									
Measured	-	-	-	-	-	-	-	-	-
Indicated	24,541	1.68	43	0.86	0.30	411	34,273	210	72
Total M + I	**24,541**	**1.68**	**43**	**0.86**	**0.30**	**411**	**34,273**	**210**	**72**
Inferred	6,695	0.64	42	1.93	1.28	43	9,143	129	86

Table 14-53 Notes:

1. Garth Kirkham, P.Geo., FGC, is the independent Qualified Person responsible for the disclosure of Cozamin Mineral Resources. Mineral Resources are reported at a cut-off of NSR US$50/tonne using three formulae for NSR based on mineralization. Copper-silver dominant zones use the NSR formula: (Cu*60.779 + Ag*0.485)*(1-NSRRoyalty%). Copper-zinc zones use the NSR formula: (Cu*58.430 + Ag*0.416 + Zn*15.368 + Pb*7.837)*(1-NSRRoyalty%). MNFWZ zinc-silver dominant zones use the NSR formula: (Ag*0.304 + Zn*18.323 + Pb*17.339)*(1-NSRRoyalty%). Metal price assumptions (in US$) used to calculate the NSR are: Cu = $3.25/lb, Ag = $20.00/oz, Zn = $1.20/lb and Pb = $1.00/lb. Recoveries used in the NSR formulae are based on mineralization. Copper-silver dominant zones use the following recoveries: 96% Cu and 85% Ag. Copper-zinc zones use the following recoveries: 92% Cu, 79% Ag, 72% Zn and 42% Pb. MNFWZ zinc-silver dominant zones use the following recoveries: 60% Ag, 86% Zn and 92% Pb. The NSR formulae include confidential current smelter contract terms, transportation costs and royalty agreements from 1 to 3%, as applicable, are incorporated. All contained metals are reported at 100%. Totals may not sum exactly due to rounding. The NSR cut-off of US$50/tonne is based on operational mining and milling costs plus general and administrative costs. The Mineral Resources consider underground mining by long-hole stoping and mineral processing by flotation. Mineral Resource estimates do not account for mining loss and dilution.
2. The last date for drilling sample data is and mining activities is October 31, 2020. 3. Mineral Resources that have not been converted to Mineral Reserves do not have demonstrated economic viability.
4. Mineral Resources are reported inclusive of the Mineral Reserves.
5. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

14.3.2.8 Comparison between April 30, 2020 and October 31, 2020 Resource Estimates

A comparison of the April 30,2020 Resource Estimate (Kirkham, 2020) and the October 31, 2020 Mineral Resource shows an increase of the Indicated Resource and decrease of the Inferred Resource. In addition, the changes are exclusively within the MNFWZ and are due to resource expansion exploration and infill drilling programs. The differences within the MNV are minor as no further drilling on the MNV structures occurred, along with little depletion since 2018. These minor differences in the MNV are due to the update in the NSR calculation.

Mineral Resources at MNFWZ and MNV presented in this Technical Report were evaluated using four NSR formula based on mineralization and updated metallurgical recoveries whereas a single formula called NSR20RES was applied to all zones in the previous April 30, 2020 estimate.

The current four NSR formulae cover copper-silver zones, copper-zinc zones, MNFWZ zinc-silver zones and MNV zinc-silver zones. Copper-silver dominant zones use the NSR formula: (Cu*60.779 + Ag*0.485)*(1-NSRRoyalty%). Copper-zinc zones use the NSR formula: (Cu*58.430 + Ag*0.416 + Zn*15.368 + Pb*7.837)*(1-NSRRoyalty%). MNFWZ zinc-silver dominant zones use the NSR formula: (Ag*0.304 + Zn*18.323 + Pb*17.339)*(1-NSRRoyalty%). MNV zinc-silver dominant zones use the NSR formula: (Ag*0.256 + Zn*16.401 + Pb*14.977)*(1-NSRRoyalty%). Metal price assumptions (in US$) used to calculate the NSR for all deposits are: Cu = $3.25/lb, Ag = $20.00/oz, Zn = $1.20/lb and Pb = $1.00/lb, unchanged since the previous estimate. Recoveries used in the four NSR formulae are based on mineralization. Copper-silver dominant zones use the following recoveries: 96% Cu and 85% Ag. Copper-zinc zones use the following recoveries: 92% Cu, 79% Ag, 72% Zn and 42% Pb. MNFWZ zinc-silver dominant zones use the following recoveries: 60% Ag, 86% Zn and 92% Pb. MNV zinc-silver dominant zones use the following recoveries: 55% Ag, 77% Zn and 80% Pb.

For the previous April 30, 2020 Mineral Resource at MNFWZ and MNV, the NSR20RES was applied to all zones. NSR20RES formula metal prices used were the same at US$3.25/lb Cu, US$20.00/oz Ag, US$1.20/lb Zn, US$1.00/lb Pb, and confidential smelter contract terms were incorporated into the formula and royalties on ground covered by Bacis and EDR agreements were deducted. Assumed metal recoveries were 95% Cu, 82% Ag, 70% Zn, and 48%Pb for all zones. The NSR20RES formula was as follows:

NSR20RES = (Cu%*$60.535 + Ag g/t*$0.424 + Zn%*$14.865 + Pb%*$9.147) * (1-Royalty%)

After depleting the Mineral Resource for 6 months of mining activities until October 31, 2020, the differences of note are an increase in the M + I tonnes of 8% whilst the grades experienced modest changes of -3%, -1%, and -3% for copper, silver and zinc, respectively, with no change to lead. The combined differential in metal content illustrates increases of 5%, 6%, 4% and 9% for copper, silver, zinc and lead, respectively. The change in tonnes and grade for the Measured class is negligible, occurring only in MNV. The Inferred class also shows a decrease in tonnes of -16% whilst the copper grade decreased significantly by -16%, silver grade increased markedly by 8%, zinc grade remained similar with a decrease of -1% and lead increased significantly by 22%. The reason for the change in Inferred resource is partly due to conversion of much of the higher-grade copper-silver and copper-zinc zones from the Inferred Resource in the April 30, 2020 estimate to Indicated via infill drilling, as well as the expansion of infill drilling into primarily zinc-silver zones with similar zinc grades, slightly higher silver grades, much higher lead grades and little copper. Table 14-54 presents the comparison between the October 31, 2020 and April 30, 2020 Mineral Resource estimates for the MNV and MNFWZ at a US$50/t NSR cut-off.

Table 14-54: Comparison of MNV and MNFWZ Mineral Resources above US$50/t NSR cut-off as at October 31, 2020 and as at April 30, 2020

Classification	Tonnes (kt)	Cu (%)	Ag (g/t)	Zn (%)	Pb (%)	Contained			
						Cu Metal (kt)	Ag Metal (koz)	Zn Metal (kt)	Pb Metal (kt)
October 31, 2020 MNV and MNFWZ Mineral Resources									
Measured	407	1.24	53	1.23	0.40	5	698	5	2
Indicated	29,265	1.53	43	1.10	0.32	446	40,799	322	94
Total M + I	29,672	**1.52**	**44**	**1.10**	**0.32**	**451**	**41,497**	**327**	**95**
Inferred	13,869	0.54	39	2.23	0.74	75	17,383	309	103
April 30, 2020 MNV and MNFWZ Mineral Resources									
Measured	409	1.23	53	1.23	0.40	5	699	5	2
Indicated	27,050	1.57	44	1.14	0.31	425	38,509	309	85
Total M + I	**27,459**	**1.57**	**44**	**1.14**	**0.32**	**430**	**39,209**	**314**	**87**
Inferred	16,558	0.64	36	2.26	0.61	106	18,983	375	101
Difference									
%Difference M + I	8%	-3%	-1%	-3%	0%	5%	6%	4%	9%
%Difference Inferred	-16%	-16%	8%	-1%	22%	-30%	-8%	-18%	2%

Table 14-54 Notes:

1. Garth Kirkham, P.Geo., FGC, is the independent Qualified Person responsible for the disclosure of Cozamin Mineral Resources.
2. Mineral Resources that have not been converted to Mineral Reserves do not have demonstrated economic viability.
3. Mineral Resources are reported inclusive of the Mineral Reserves.
4. 2018 Mineral Resources are described in full in Capstone's Technical Report on the Cozamin Mine, Zacatecas, Mexico, January 24, 2019.

14.4 Risk factors that may affect the Mineral Resource Estimate

The QP notes certain risk factors could materially impact the Mineral Resource estimate, such as:

- Changes in continuity of grade and in interpretation of mineralized zones after further exploration and mining
- Uncertainty of assumptions underlying the consideration of reasonable prospects of economic extraction, such as commodity price, exchange rate, geotechnical and hydrogeological aspects, operating and capital costs, metal recoveries, concentrate grade and smelting/refining terms
- Significant changes to land tenure or the permitting requirements.

There are no environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors other than as discussed in this Report that are expected to affect the Mineral Resource estimates.

15 Mineral Reserves Estimates

Tucker Jensen, P.Eng., Superintendent Mine Operations at Capstone Mining Corp., is the Qualified Person for the Cozamin Mineral Reserve Estimate. The estimate is based on the mineral resource block models developed by Jeremy Vincent, P.Geo., formerly of Capstone Mining Corp for the San Roberto/San Rafael zone and by Garth Kirkham, P.Geo., FGC, Kirkham Geosystems Ltd., for the Mala Noche Footwall Zone.

The Cozamin Mineral Reserve estimate effective as of October 31, 2020 is listed in Table 15-1. The Mineral Reserves are estimated based on a long-hole open-stoping using either waste rock backfill or paste backfill. Tabulations are from the interrogations of development and stope triangulations generated in *Maptek Stope Optimizer* software ("MSO") and refined with development designs in *Deswik* mining software. These triangulations were applied to both Mineral Resource block models listed above after the models had been depleted of past mining production and areas of geotechnical sterilization. Also factored for in the Mineral Reserve estimate are mining losses and dilution.

Capstone considers that the classification and reporting of the Mineral Reserves is in accordance with CIM Estimation of Mineral Resources and Mineral Reserves Best Practices Guidelines (CIM, 2019). Capstone is not aware of any other mining, metallurgical, infrastructure, permitting, or other relevant factors not covered in this NI 43-101 Technical Report that could materially affect the Mineral Reserve estimate.

Table 15-1: Cozamin Mineral Reserves Estimate at October 31, 2020

Category	Tonnage (kt)	Cu (%)	Ag (g/t)	Zn (%)	Pb (%)	Cu Metal (kt)	Ag Metal (Troy koz)	Zn Metal (kt)	Pb Metal (kt)
Proven	0	0	0	0	0	0	0	0	0
Probable	14,127	1.77	44	0.54	0.21	250	20,179	77	29
Proven + Probable	**14,127**	**1.77**	**44**	**0.54**	**0.21**	**250**	**20,179**	**77**	**29**

Table 15-1 Notes:

1. Tucker Jensen, P.Eng., Superintendent Mine Operations at Capstone Mining Corp., is the Qualified Person for this Cozamin Mineral Reserve estimate. Disclosure of the Cozamin Mine Mineral Reserve with an effective date of October 31, 2020 was completed using fully diluted mineable stope shapes generated by the Maptek Vulcan Mine Stope Optimizer software and estimated using the 2020 MNFWZ resource block model created by Garth Kirkham, P.Geo., FGC and the 2017 MNV resource block model created by J. Vincent, P.Geo., formerly of Capstone Mining Corp.
2. Mineral Reserves are reported at or above a US$48.04/t net smelter return ("NSR") cut-off in conventionally backfilled zones for 2020-2022, a US$51.12/t NSR cut-off in conventionally backfilled zones for 2023+, a US$56.51/t NSR cut-off in paste backfilled zones of Vein 10, and a US$56.12/t NSR cut-off in paste-backfilled zones of Vein 20 using three NSR formulae based on zone mineralization.
3. Copper-silver dominant zones use the NSR formula: (Cu*50.476 + Ag*0.406)*(1-NSRRoyalty%). MNFWZ zinc-silver zones use the NSR formula: (Ag*0.259 + Zn*15.081 + Pb*15.418)*(1-NSRRoyalty%). MNV zinc-silver dominant zones use the NSR formula: (Ag*0.203 + Zn*13.163 + Pb*13.233)*(1-NSRRoyalty%). Metal price assumptions (in US$) of Cu = $2.75/lb, Ag = $17.00/oz, Pb = $0.90/lb, Zn = $1.00/lb and metal recoveries of 96% Cu, 84% Ag, 0% Pb

and 0% Zn in copper-silver dominant zones, 0% Cu, 60% Ag, 92% Pb and 86% Zn in MNFWZ zinc-silver dominant zones, and 0% Cu, 53% Ag, 79% Pb and 75% Zn in MNV zinc-silver dominant zones. Mineral reserve calculations consider mining by long-hole stoping and mineral processing by flotation. Tonnage and grade estimates include dilution and mining losses and do not include unmined pillars. The NSR royalty rate applied varies between 1% and 3% depending on the mining concession, and royalties are treated as costs in Mineral Reserve estimation. An exchange rate of MX$20 per US$1 is assumed. All metals are reported as contained. Figures may not sum exactly due to rounding.

15.1 NSR Formula

The primary metal concentrate produced at Cozamin is copper concentrate, but significant amounts of zinc and lead concentrates are also produced. All three concentrate products contain marketable silver. Due to the polymetallic nature of the mine, a formula is generated for each ore type that considers all sold concentrate products, which is used to estimate the revenue generated by the mining, processing, and marketing of a block of ore. This formula, called the Net Smelter Return (NSR), is an estimate of the net revenue received from the sale of the concentrates generated by processing a ton of ore, calculated by subtracting any applicable payability, treatment charges, refining charges, and any other marketing or selling costs from the value of the contained metal in concentrate. The formula considers the metal price assumptions, the metallurgical recovery relationships, and the smelter (or trader) terms and costs in the estimate of the net revenue.

The NSR formulae reflect the following changes since the Mineral Reserve estimate effective April 30, 2020 (Capstone, 2020):

- Updated recoveries based upon new metallurgical test work in the Calicanto Zinc zone in MNFWZ (aka Vein 10 SE)
- Updated recoveries based upon new metallurgical test work in the San Rafael Zinc zone in MNV.
- Assumed smelter treatment charge for copper concentrate was increased from $68/t to $71/t

15.1.1 Metal Price and FX Assumptions

Metal price and foreign exchange rate assumptions used in the Mineral Reserve estimate were determined using best practice techniques suggested in the 2020 CIM Guidance on Commodity Pricing (CIM, 2020). Analysis of long-term historical pricing, analyst and peer consensus pricing, and specialist consultant reports were used to forecast long term metal price and foreign exchange assumptions in the context of the expected life of the Cozamin Mine.

15.1.2 Metallurgical Recovery Assumptions

The expected metallurgical recovery performance as detailed in Section 13 was used to estimate the recoveries of a representative tonne of ore from the copper-dominant, zinc-dominant, and copper-zinc zones.

15.1.3 2020 Mineral Resource NSR Formulae

The metal recoveries and prices used in the October 2020 Mineral Resource NSR formulae calculations are summarized in Table 15-2. USDMXN exchange rate was assumed to be 20.

Table 15-2: Metal Recoveries and Selling Prices Used in the October 31, 2020 Mineral Resource NSR Calculations

Metal & Price	Recovery Cu-dominant	Recovery Calicanto Zinc	Recovery San Rafael Zinc	Recovery Copper-Zinc
Copper @ $3.25/lb	96.10%	0.00%	0.00%	92.39%
Silver @ $20.00/oz	85.48%	60.29%	55.02%	79.15%
Zinc @ $1.20/lb	0.00%	86.38%	77.32%	72.45%
Lead @ $1.00/lb	0.00%	92.47%	79.88%	41.80%

Table 15-3 lists the final NSR formulae (”NSR21RES”) used for the October 31, 2020 Mineral Resource estimate. Note that no value was ascribed to zinc or lead for the copper-dominant ores, and no value was ascribed to copper for the Zinc-dominant ores.

Table 15-3: Final October 31, 2020 Mineral Resource NSR Formulae

Ore Type	NSR Formula (“NSR21RES”)
Copper-dominant	(Cu% * $60.779 + Ag g/t * $0.485) * (1-Royalty%)
Calicanto Zinc (MNFWZ V10 SE)	(Ag g/t * $0.304 + Zn% * $18.323 + Pb% * $17.339) * (1-Royalty%)
San Rafael Zinc (in MNV)	(Ag g/t * $0.256 + Zn% * $16.401 + Pb% * $14.977) * (1-Royalty%)
Copper-Zinc	(Cu% * $58.430 + Ag g/t * $0.416 + Zn% * $15.368 + Pb% * $7.837) * (1-Royalty%)

15.1.4 2020 Mineral Reserve NSR Formulae

The metal recoveries and prices used in the October 2020 Mineral Reserve NSR formulae calculations are summarized in Table 15-4. USDMXN exchange rate was assumed to be 20.

Table 15-4: Metal Recoveries and Selling Prices Used in the October 31, 2020 Mineral Reserve NSR Calculations

Metal & Price	Recovery Cu-dominant	Recovery Calicanto Zinc	Recovery San Rafael Zinc
Copper @ $2.75/lb	95.92%	0.00%	0.00%
Silver @ $17.00/oz	84.48%	59.80%	53.08%
Zinc @ $1.00/lb	0.00%	85.99%	75.06%
Lead @ $0.90/lb	0.00%	92.44%	79.34%

Table note: Copper-dominant zones are comprised of San Roberto Cu zone in the MNV, and V09, V10NW, V18, V20, and V22 of the MNFWZ

Table 15-5 lists the final NSR formulae (”NSR21RSV”) used for the October 31, 2020 Mineral Reserve estimate. Note that no value was ascribed to zinc or lead for the Copper-dominant ores, and no value was ascribed to copper for the Zinc-dominant ores. Copper-zinc ores formed an immaterial portion of the Reserves and so were not assigned a unique NSR formula.

Table 15-5: Final October 31, 2020 Mineral Reserve NSR Formulae

Ore Type	NSR Formula ("NSR21RSV")
Copper-dominant	(Cu% * $50.476 + Ag g/t * $0.406) * (1-Royalty%)
Calicanto Zinc (MNFWZ V10 SE)	(Ag g/t * $0.259 + Zn% * $15.081 + Pb% * $15.418) * (1-Royalty%)
San Rafael Zinc (in MNV)	(Ag g/t * $0.203 + Zn% * $13.163 + Pb% * $13.233) * (1-Royalty%)

15.2 Cut-off Strategy and Mineral Reserve Cut-off Value

An NSR cut-off value is used at Cozamin to differentiate between ore and waste before other modifying factors are applied. The long-hole open stoping mining method at Cozamin will result in sterilized material if that material is not mined in sequence with the active level and panel, so the mine has been designed to provide access flexibility, allowing mine planners to prioritize high grade stoping areas without including a substantial amount of lower grade ore that would reduce net present value by delaying cashflows. Accordingly, the simple break-even cut-off (BECO) strategy was used as a first test for economic viability in the Mineral Reserve estimation. This cut-off value is the minimum net revenue generated from the sale of the concentrate contained within the mined solid that produces a profit after accounting for all applicable costs.

The applicable costs include all mining, milling, and general and administrative ("G&A") operating costs and a sustaining capital costs related to periodic refurbishment or replacement of mine equipment (including light-fleets), mill equipment, or major site infrastructure. Capital costs related to expansion, exploration, or production/cost improvements are not considered costs in support of the current mineral reserve and have been omitted. Additionally, capital costs related to mine development to access the current reserve have also been omitted since the magnitude of these costs can vary greatly due to geometry and physical location of the mining shapes. These costs are evaluated separately, as a second economic test beyond the NSR cut-off.

As Cozamin is an operating mine with stable operating history and cost control, actual operating costs were used to forecast future unit costs. Figure 15-1 shows the total OPEX costs (mine + mill + G&A) over each month since January 2018. A strong correlation between the total operating cost and monthly mill throughput is visible and supports the cut-off strategy.

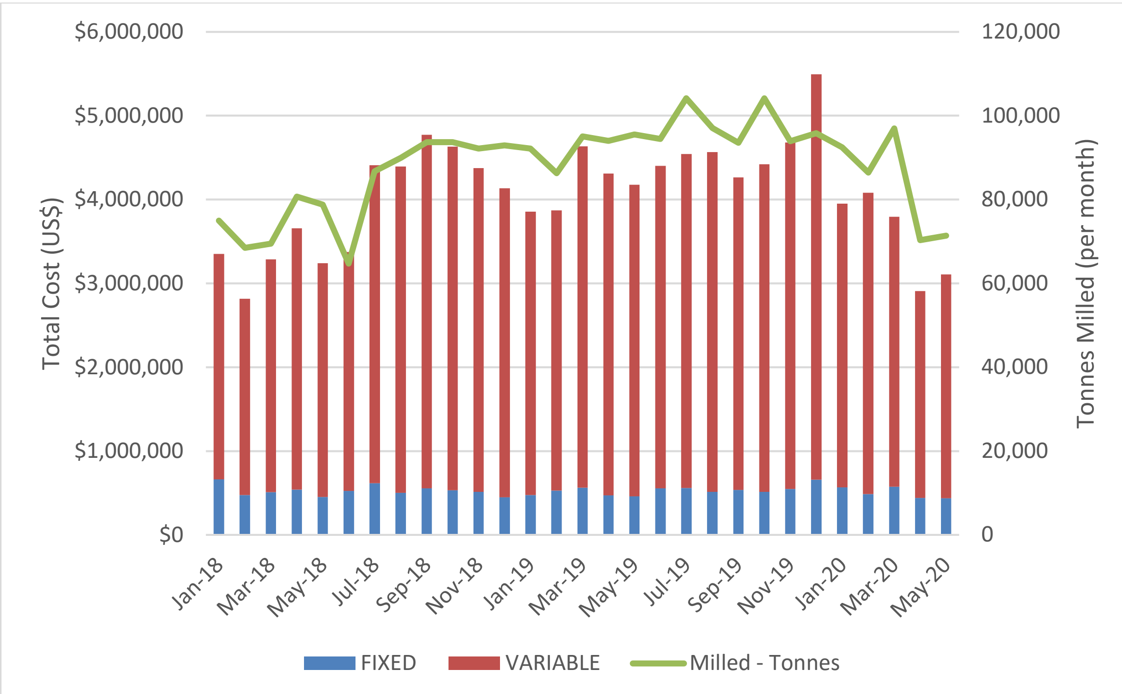

Figure 15-1: Actual Total Fixed and Variable OPEX Costs (US$) and Milled Tonnes

Figure 15-2 shows actual unit costs per tonne milled over the same period, adjusted by swings in the USDMXN foreign exchange rate showing stable cost control with a median value of $47.78/tonne milled. Table 15-6 presents the average operating costs over the same 29-month period.

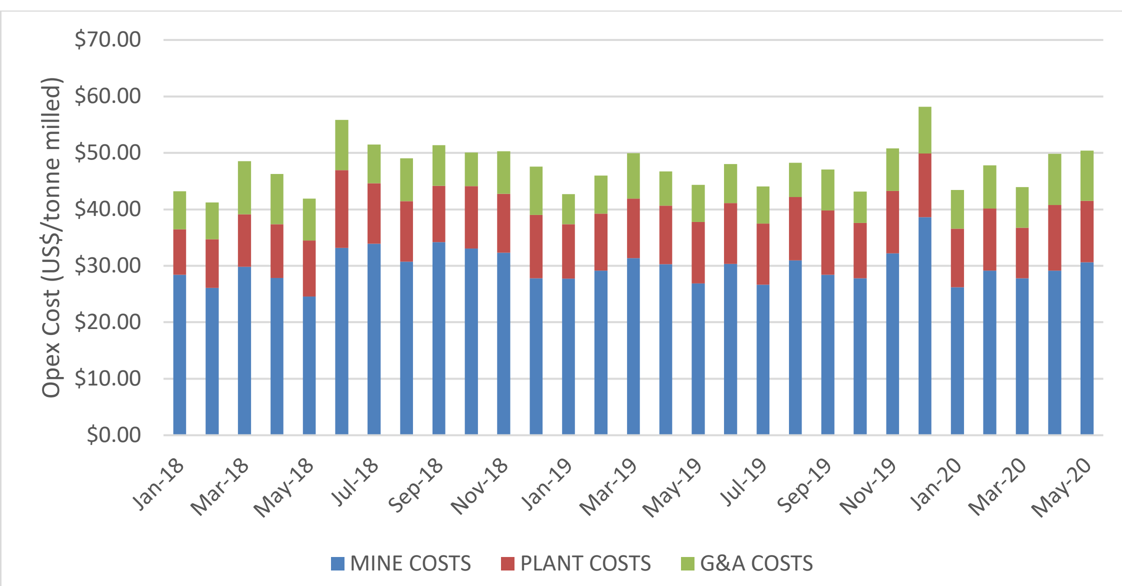

Figure 15-2: Actual FX-adjusted unit OPEX costs (US$/tonne milled)

Table 15-6: OPEX Summary January 2018 to May 2020

Cost Center	Period Average Unit Cost (US$/tonne milled)
	Cozamin Mine
Mining	$29.84
Processing (Milling)	$10.48
General and Administration	$7.31
Total Unit Cost (Avg)	$47.63
Total Unit Cost (Median)	**$47.78**

Note: Figures may not sum due to rounding

Total sustaining CAPEX and sustaining CAPEX unit costs for 2018 and 2019 are shown in Table 15-7.

Table 15-7: Sustaining CAPEX 2018 to 2019

Year	Total Sustaining CAPEX Cost	Sustaining CAPEX Unit Cost
	(US$)	(US$/tonne milled)
2018	$4,642,000	$4.71
2019	$4,987,000	$4.35
Average	$4,815,000	**$4.52**

Note: Figures may not sum due to rounding

For the previous Mineral Reserve estimate effective April 30, 2020, Reserves were reported above a NSR cut-off value of $52.29/t, representing the sum of the median unit OPEX cost and the average unit sustaining CAPEX listed in Tables 15-6 and 15-7. For the current estimate effective October 31, 2020, different NSR cut-offs were assigned to different mining methods, listed in Table 15-8.

Table 15-8: Mineral Reserve NSR Reporting Cut-off Values (US$/tonne)

Method	NSR cut-off
	(US$/tonne milled)
Conventional mining pre-filtration (2021-2022)	$48.04
Conventional mining with tailings filtration (2023+)	$51.12
Paste-fill mining in Vein 10 (2023+, with tailings filtration)	$56.51
Paste-fill mining in Vein 20 (2023+, with tailings filtration)	$56.12

Mining volumes prior to 2023 will continue to be mined using conventional backfill, assumed NSR cut-off was lowered to $48.04/t for October 31, 2020 Reserve reporting for 2021 and 2022 mining. This decreased NSR cut-off reflects mining a greater proportion of lower-cost bulk LHOS ore and a smaller proportion of development drift ore when compared to 2018-2020. This is due to several factors including: greater orebody widths of the 2020 Resource additions; adjusted operating practice to reduce the amount of ‘slashes’ that increase drift width; and increased development costs incurred during 2018-2020 to grow developed mineral inventories to levels that can sustain the production increase expected in December 2020 when the one-way haulage loop was completed

NSR cut-off from January 2023 onward reflects the anticipated commissioning of the tailings filtration and paste plant. For mining after 2022 where conventional backfill is planned, NSR cut-off is set at $51.12 to include the cost of filtering tailings. For mining planned for paste backfill in Vein 10, combined filtration costs and paste delivery costs will bring the NSR cut-off to $56.51/t. For paste backfill in Vein 20, NSR cut-off is slightly lower at US$56.12/t to reflect reduced cost of barricade construction due to superior geotechnical conditions and resulting longer stopes. All filtration and paste costs are based upon operating cost estimates by Paterson & Cooke (2020).

These cut-offs represent the *minimum* net revenue generated per tonne from a mining shape to be considered as part of the reserve, however all mining areas are further interrogated to ensure that the residual net revenue above the NSR cut-off value is sufficient to cover capital mine development costs related to access, ventilation, dewatering, and miscellaneous mine services.

15.3 Mining Methods

The mining methods used in this Mineral Reserve estimate are detailed in Section 16. The Cozamin Mine is entirely mined using underground mining methods. Longitudinal Long-hole Open Stoping (LHOS) is the primary bulk mining method, supported by horizontal drifting to develop the access for stoping. AVOCA mining is used in some portions of Vein 20 that exhibit shallower vein dip. Historically, Cut-and-Fill mining methods have been employed at Cozamin but are not used in this Mineral Reserve estimate. As further exploration and infill-drilling continues, and empirical understanding of the physical characteristics of the orebody develops, continued revision of mining methods to optimize safety and economics is necessary.

The OPEX costs presented in Section 15.2 are based entirely on the LHOS method and are representative of the mining method used in the Mineral Reserve estimate. As noted in Section 15-2, the percentage of total ore tonnes extracted in a given period sourced from lower-cost bulk LHOS methods will increase over time (as shown in Figure 15-3: Ore Source by Mining Method, % of Total Tonnes), lowering overall OPEX unit costs.

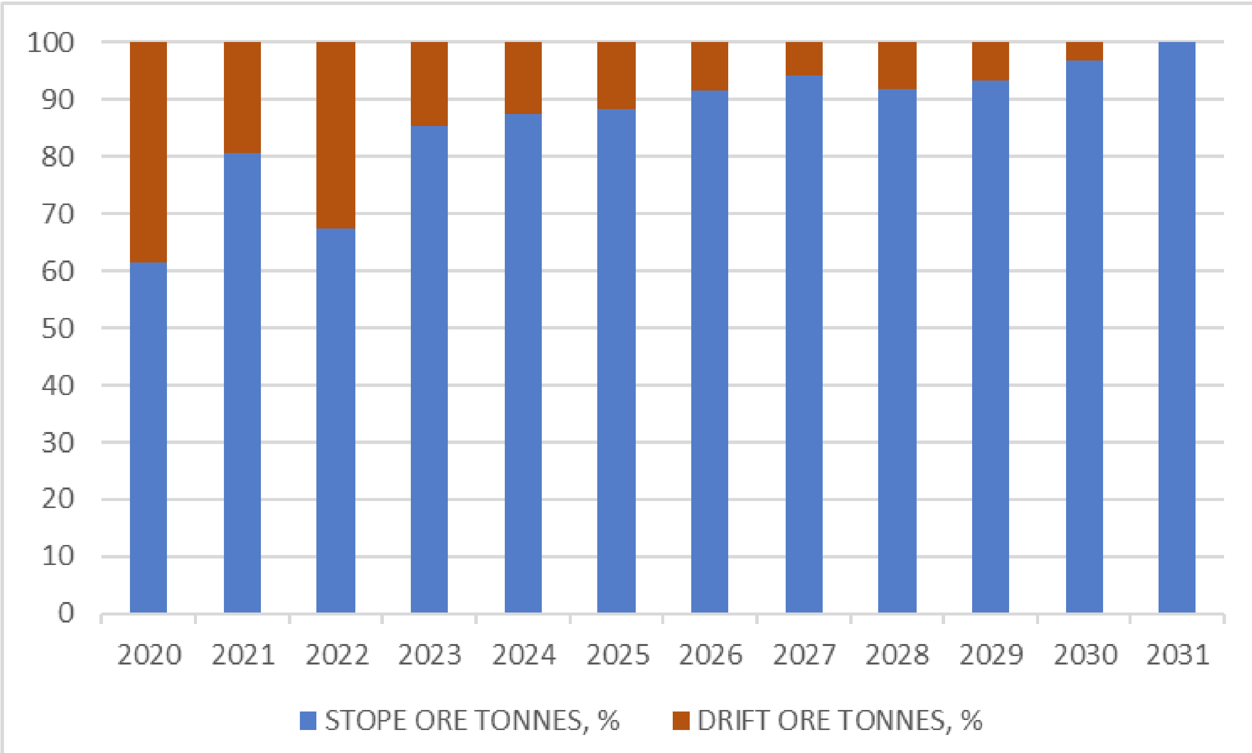

Figure 15-3: Ore Source by Mining Method, % of Total Tonnes

LHOS is an appropriate method for the Cozamin Mine given the geometry of the vein domains and the desired extraction rate. In recent years, stopes were backfilled with waste rock ("gob"), and geotechnical stability was maintained with rib and sill pillars. This Technical Report incorporates the planned use of paste backfill to improve stability and allow extraction of the great majority of in-situ ore. Figure 15-4 shows the planned backfill methods for Vein 20 stopes. In paste fill zones, mining proceeds upward (overhand mining) with each subsequent level mining on top of paste backfill. In select areas, high strength paste fill is placed to allow safe mining underneath these zones, increasing the flexibility of the mining sequence.

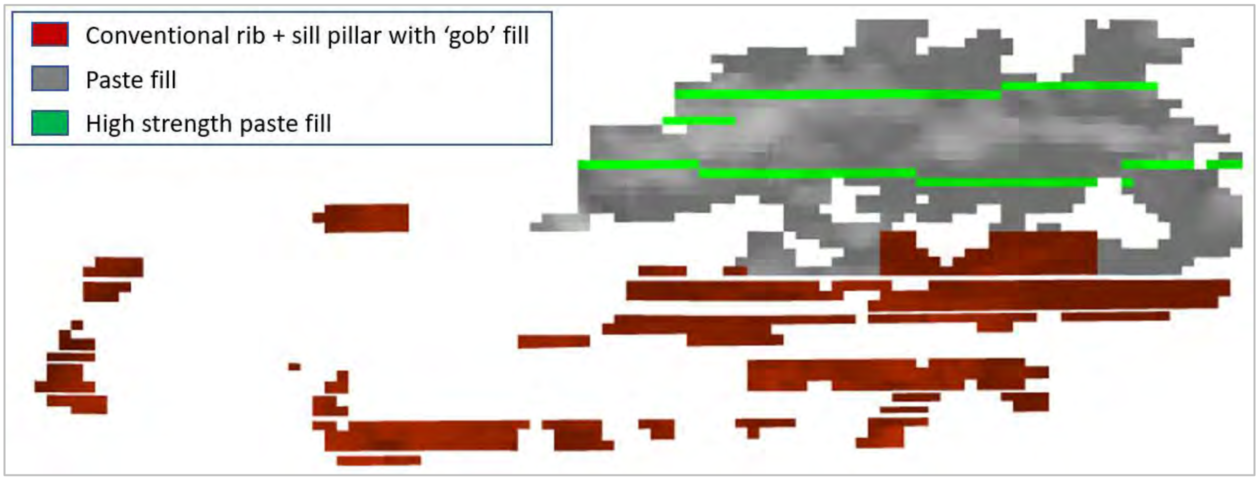

Figure 15-4: Longitudinal View, looking northeast, of Planned Backfill Methods for Vein 20 Stopes

Mining in MNV is planned to use conventional rib and sill pillars with gob backfill due to distance from the paste delivery system. Vein 10 SE is planned for strictly overhand mining using paste backfill.

For challenging geotechnical domains such as 3a (see section 16.2 for detailed explanations of the geotechnical domains), paste backfill will yield superior results than had been previously envisioned using large rib pillars and short stope strike lengths. However, alternative mining methods such as Cut-and-Fill mining should also be studied as a trade-off in order to optimize the value of these domains. As seen in Figure 15-5, the trade-off study should be completed before 2022 to allow for potential changes before mining is planned in the domain.

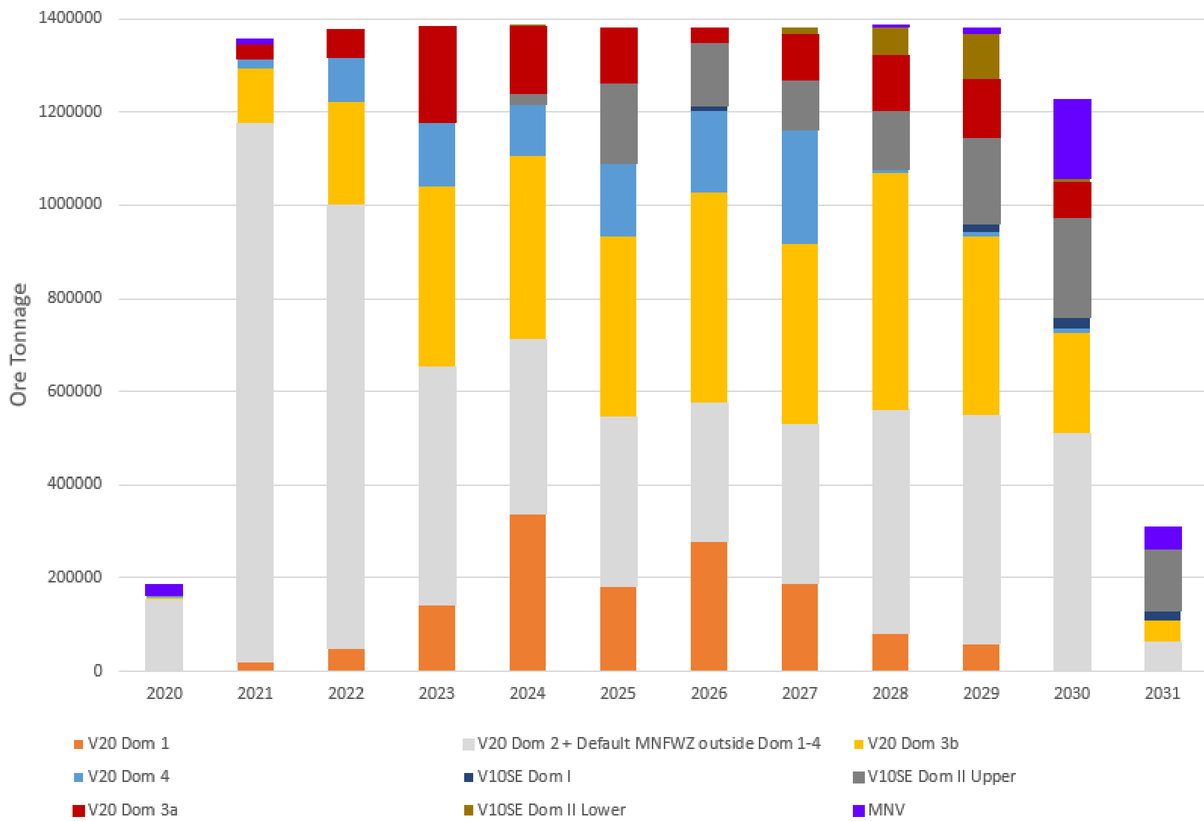

Figure 15-5: Ore Source by Geotechnical Domain, Total Tonnes

15.4 Dilution and Mining Losses

The stope shapes generated by MSO include planned dilution internal to the wireframes. An additional allowance for unplanned dilution is then added based on several defining input parameters. Dilution was applied as zero-grade with density of 2.65 t/m^3. The mining method and mining sequence do not generate significant backfill dilution.

15.4.1 Planned Dilution

Planned dilution is included interior to the walls of designed stope wireframes. This planned dilution is a result of the natural undulation and curve of the narrow vein deposits found at Cozamin when employing the long-hole open-stoping mining method. Planned dilution internal to each stope wireframe is minimized by varying the strike and dip of the hangingwall and footwall planes, however only 4-point planes are considered in this reserve estimate. Since a considerable amount of the reserve volume is planned to be mined using fan drilling in the stoping procedure, further optimizations of reserve shapes may be possible by adding additional plane points where applicable.

Additional planned dilution in stope solids presents in some areas of relaxed dip, where stope walls are intentionally mined including additional waste dilution in order to establish steeper hangingwall and footwall angles that allow for broken ore to flow to the extraction level and to maintain geotechnical stability with limited overbreak or sloughage.

Planned dilution in development shapes is accounted for in the development drives where either the mineralized domain is narrower than the development or the development is placed along the footwall and a part of the excavated development volume is outside of the mineralized domain.

15.4.2 Unplanned Dilution

Unplanned dilution was included in most stope wireframes as a linear expansion into the hangingwall and footwall by an expected distance. In a few instances a certain additional amount of unplanned dilution was added formulaically to account for geotechnical information that was received after the MSO stopes had already been generated. The expansion distance for unplanned dilution is based on actual observations and geotechnical assessments of the vein dip and rock quality as expected according to the geotechnical domain model.

Total planned and unplanned dilution percent tonne-weighted averages by zone can be found in Table 15-9.

Table 15-9: Total Dilution (%) Tonne-Weighted Average by Domain

Vein	Stope Dilution (%)	Development Dilution (%)	Total Dilution (%)
V20 (incl. V09, V10NE, V18)	24.7%	19.2%	24.0%
V10SE	19.5%	13.6%	18.4%
MNV	19.4%	N/A	19.4%
Total	24.1%	18.4%	23.4%

The Qualified Person for this section considers the dilution estimates an accurate reflection of actual operating performance at Cozamin as compared to recent reconciliation efforts. Although the dilution parameters for the Reserve Estimate are consistent with operating data and similar to other narrow-vein long-hole open-stoping operations, improvements in engineering, planning, long-hole drill control, and explosives use and design should be investigated by the Cozamin technical staff to better control overbreak and reduce dilution.

15.4.3 Backfill Dilution

An additional but minor source of dilution is backfill mucked during stope cleanout. Backfill dilution is encountered in long-hole benches that are mucked out on a floor of gob backfill, or waste rock placed as a running surface on top of paste backfill. Additionally, “endwall” dilution from the sides of paste backfill stopes will be encountered as mining retreats laterally. Both forms of dilution are considered insignificant and have not been included in the mineral reserve estimate but will be monitored and recorded by Cozamin staff.

15.4.4 Mining Losses

Approximately 72% of Cozamin's Life-of-Mine tonnage is planned for backfill with paste. The majority of paste areas will be mined overhand, allowing for nearly complete extraction while improving geotechnical performance. On select levels, mining below high strength paste will occur, with pillars remaining at half of the stope height. This half-pillar requirement may be reduced over time if operational experience demonstrates robust performance.

In areas planned to be mined with conventional backfill, the design of the Cozamin Mine considers both horizontal (sill) and vertical (rib) unrecoverable geotechnical support pillars that remain in-situ after the mining extraction process. The volume occupied by sill pillars is variable and depends on host rock quality, vein thickness, depth, and open stope strike. Historically the extraction ratio has been approximately 74% in zones mined conventionally. The extraction ratio is considered typical of other operations utilizing the LHOS mining method with the inclination and geotechnical conditions encountered at Cozamin.

Sill pillars are left between conventional stoping panels, spaced approximately 57.5 m apart vertically. These pillars provide geotechnical support to the surrounding excavations and allow for the independent mine sequencing of stoping panels. Sill pillar thickness (measured along dip) was set equal to the true thickness of the vein domain in the location of the pillar. This 1:1 ratio is considered conservative and is revised during mining operations to safely maximize extraction ratio based on actual local conditions. Sill pillars reduce the extraction ratio of stopes and are accounted for as a volume-reducing geotechnical mining loss fraction applied to stopes in areas where sill pillars are designed.

Rib pillars are left on each conventional extraction level, spaced regularly depending on local geotechnical characteristics. Rib pillars provide geotechnical support to the surrounding excavations and separate backfill cells, acting as a barrier for the unconsolidated backfill. Rib pillar thickness (measured along strike) was determined by tributary area calculations performed by Golder Associates (Golder) and detailed in Section 16.2. Rib pillars reduce the extraction ratio of stopes and are accounted for as a volume-reducing geotechnical mining loss fraction applied to stopes in areas where rib pillars are designed.

15.5 Risks to Mineral Reserve Estimate

Capstone considers that the classification and reporting of the Mineral Reserves is in accordance with CIM, 2019. Cozamin is an operating mine with experience utilizing the current mining methods throughout the metal price cycle. The modifying factors that impact the Mineral Reserve estimate are well understood and are based on operating and historical data where possible and appropriate. Risks to the Mineral Reserve estimate as outlined in this section include, but may not be limited to:

- Major changes to financial assumptions including metal pricing, treatment charges and refining charges (“TC/RCs”), and exchange rates.
- Changes to existing permits or permitting procedures.
- Local vein variability caused by model smoothing.
- Unanticipated deviation of performance or assumptions during the transition to paste backfill

Capstone is not aware of any other mining, metallurgical, infrastructure, permitting, or other relevant factors not covered in this NI 43-101 Technical Report that could materially affect the Mineral Reserve estimate.

15.6 Recommendations and Opportunities

Recommendations

- As further exploration and infill-drilling continues, and empirical understanding of the physical characteristics of the orebody develops, continued revision of mining methods to optimize safety and economics may be necessary. This recommendation should be overseen by Cozamin and Corporate technical staff as part of their regular duties, however mining and geotechnical engineering consultants may be required by 2023 to review new approaches at an anticipated cost of approximately US$80,000 to $120,000.
- Alternatives to haulage in upper levels of the MNFWZ Vein 20 should be assessed. Cozamin staff should continue to develop plans to reduce truck haulage in upper levels by implementing a system of ore passes and finger raises. Implementing this design and procedural change could create improvements in haulage safety, ventilation quality, and operating costs. This recommendation should be completed by the Cozamin technical staff as part of their regular duties.

Opportunities

- A trade-off study between the current method and alternative methods should be completed by the Cozamin technical staff as part of their regular duties in order to optimize the value of the ore within domain 3a. The trade-off study should be completed before 2022 to allow for potential changes before mining is planned in the domain.
- Since a considerable amount of the Mineral Reserve volume is planned to be mined using fan drilling in the stoping procedure, further optimizations of reserve shapes may be possible by adding additional plane points where applicable. This opportunity should be completed by the Cozamin technical staff as part of their regular duties.

16 Mining Methods

The Cozamin Mine is entirely mined using underground mining methods. The mine has been operated by Capstone since 2006 and has almost exclusively employed the longitudinal long-hole open stoping (LHOS) mining method for bulk ore extraction over the period. As an operating mine with experience in the LHOS method, the procedures, mine designs, and all required mining equipment and infrastructure required to support the extraction of ore are well understood. A primary component of this Technical Report is to describe the introduction of paste backfill, with delivery of paste underground planned to begin by January 2023.

16.1 Mining Method and Design

Cozamin uses LHOS as the primary bulk mining method, supported by horizontal drifting to develop the access for stoping. Historically, Cut-and-Fill mining methods and a version of the Modified AVOCA mining method have been employed at Cozamin but are not used in this Mineral Reserve estimate. The LHOS mining method has proven to be a scalable method for use at Cozamin, allowing production to steadily increase since Capstone took ownership.

Stopes have been backfilled with unconsolidated waste rock (“gob”) without the addition of binding agents in recent years. With the planned commissioning of filtration and paste plants in January 2023, approximately 72% of the Reserves volume will be filled with paste backfill, within the remainder being gob fill. Figure 16-1 illustrates the LHOS mining method with gob fill as it is applied to the Cozamin Mine. Shown below is a section of one major level, split into three sub-levels. Major levels are separated by sill pillars and extend along strike to each extent of the vein domain being mined.

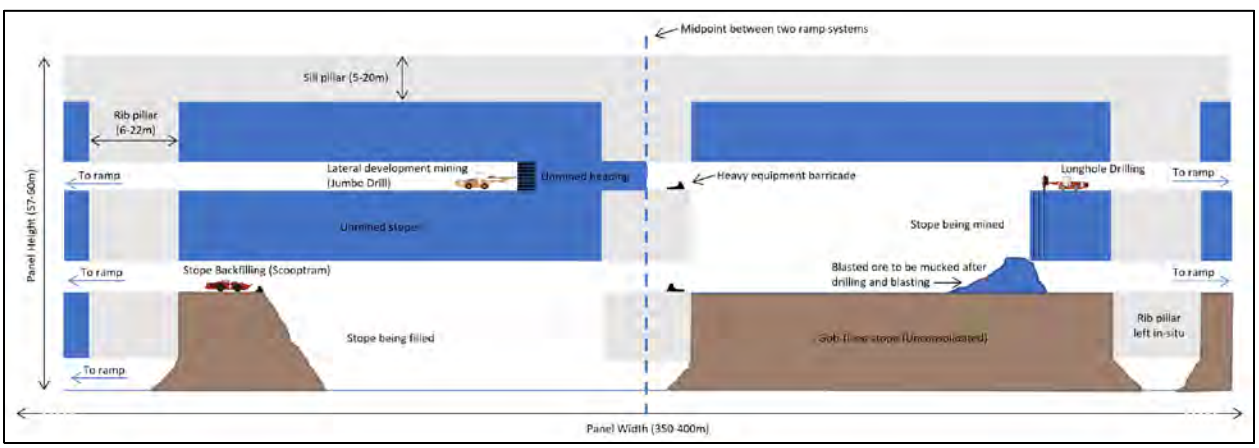

Figure 16-1: Single Vein Longitudinal LHOS Mining Method Diagram using Conventional Backfill

Longitudinal long-hole open stoping operates along or parallel to the strike of the vein. The orientation of the method means that the hangingwall and footwall of the vein will form the sidewalls of the stope. The method is commonly used in narrow-vein mines where the orebody continues for a large extent along strike and dip. LHOS requires competent rock in the hangingwall and footwall in order to support a large void. As employed at Cozamin, the LHOS method is entirely bottom-up extraction on retreat within stoping panels. Although the method requires high capital development ramp to access the development levels, much of the sublevel development necessary to expose stopes is mined economically as ore production as the cuts can be kept within the vein.

Cozamin backfills each stoping sublevel prior to mining the sublevel above. The backfill used in conventionally mined areas is unconsolidated waste development rock from other areas of the mine.

The production schedule is based on a general rule set of mining dependencies. When ramp development reaches stoping levels, in-vein production development begins expanding from the access along strike in both directions. Each of the approximately 57 m to 60 m panels consists of three sublevel production development drifts. The stoping activity starts when the upper and lower sublevel development drifts for the lowest stoping sublevel are completed. Long-hole drills are used to drill down-holes (up-holes on third sublevel) from the upper sublevel to the lower sublevel. These holes are loaded with an explosive product (usually ANFO prill, but sometimes emulsion in wet conditions) and blasted in 2 m to 6 m strike lengths. The blasted muck is removed by load-haul-dump (“LHD”) muckers on line-of-sight remote control and then the drilling cycle repeats.

Stoping proceeds from the outside (furthest away from the access along strike) back to center. Stoping is continued uninterrupted for up to 72 m along strike (this distance varies according to local geotechnical conditions), the entire distance between rib pillars forming a stope “cell” after which a vertical rib pillar is left in-situ. The stoping resumes after leaving the rib pillar and this pattern continues until mining reaches the central access point.

After a single cell is mined, loose backfill is deposited in the empty cell from the upper sublevel by an LHD mucker. This loose fill creates the floor of the stoping activities for the next level above. After three sublevels are mined in this bottom-up, outside-in sequence, a horizontal pillar is left separating the completely mined and filled panel from the panels above and below. The mining activities continue in the panels above and/or below and the pattern is repeated. The sequence is constrained to vertical columns with a length of less than 200 m along strike as measured from the ramp access for the level. The division of columns in this manner allows for parallel mining activities to occur at several locations along strike simultaneously.

The majority of stopes are to be filled with paste backfill beginning in January 2023. These areas will be largely mined overhand and require little to no pillars left behind. The strength characteristics and distribution system of the paste are described in section 16.5. Barricades are engineered for each pour to ensure stability while the paste cures and attains strength sufficient for mining to continue laterally in the direction of mining retreat. When mining on top of paste, a thin layer of rock is spread to ensure a level surface with sufficient traction.

A limited number of areas have been planned to mine underneath high-strength paste, the characteristics of which are described in section 16-5. As shown in Figure 16-2, half-height rib pillars are to be left in the level immediately below the high-strength paste, until site experience is sufficient to demonstrate that mining can proceed safely without the use of such pillars.

Figure 16-2: Single Vein Longitudinal LHOS Mining Method Diagram Mining Under High Strength Paste Backfill

Detailed mine development layouts were prepared by Cozamin for the LOMP. The general dimensions of the various development headings are detailed in Table 16-1.

Table 16-1: Standard LOMP development dimensions

Development	Dimensions
Ramps	5.0 m wide x 5.0 m high
Sublevels (usually mined to the extent of the ore)	4.0 m wide x 4.5 m high
Access cross-cuts, draw points	4.0 m wide x 4.5 m high
Raises	3.1 m/3.6 m bore diameters

16.2 Geotechnical Considerations

Caution to Readers: This item contains forward-looking information related to mining methods, dilution and recovery estimates, the mine production plan and ground support requirements for Cozamin Mine. The material factors that could cause actual results to differ materially from the conclusions, estimates, designs, forecasts or projections in the forward-looking information include, but are not limited to, any significant differences from one or more of the following material factors or assumptions that were applied in drawing the conclusions or making the estimates, designs, forecasts or projections set forth in this Item, as follows: geotechnical and hydrogeological characteristics, geology model, rock quality and strength parameters, and in-situ ground stresses.

The Cozamin underground mine comprises a series of sub-parallel copper and lead-zinc rich veins dipping north at 45° to 70° and striking approximately east-west at the MNV and northwest-southeast at the MNFWZ. The mining width can vary between 2 m and 15 m, depending on the vein thickness. The hangingwall horizon generally is composed of rhyolite with some local shale and phyllite. The vein material is competent, being a mix of quartz and massive sulphides. The shale is locally metamorphosed to phyllite. The footwall material is generally volcanic, including rhyolite and andesite with some local diorite. The mine maintains a three-dimensional model of lithological contacts and these are used for planning of the location of development openings and stope design purposes.

The mine continues to advance the understanding of the mechanical properties for each of the main rock units, sub-divided by geomechanical domains. Extensive core logging and underground mapping have been conducted to derive rock mass rating ("RMR") and Q values for these domains. In terms of geological structures, Cozamin geologists map all significant occurrences encountered underground and include them in the three-dimensional model.

Exposed igneous rocks are typically competent and exhibit similar geotechnical characteristics and therefore can be lumped into the same broad geotechnical domain. The sedimentary and metamorphic rocks, shale and phyllite, are similar geotechnically and are included as a single geotechnical domain although localised reduced rock mass quality in the phyllite is observed and special ground control considerations are often required, particularly below 750 m depth. The veins are assigned the strength of the rock type they are hosted in for purposes of geotechnical assessment.

The igneous rocks exhibit high intact rock strengths of up to 150 MPa but the presence of micro-defects in rocks near the veins reduce the unconfined compressive strength ("UCS") values to approximately 100 MPa. The veins themselves exhibit similar intact rock strengths to the igneous rocks. The metamorphosed sedimentary rocks (shale and phyllite) are typically foliated and exhibit lower intact rock strengths than the igneous rocks with unconfined compressive strength of typically 50 MPa. Rock mass quality in the igneous rocks and the veins are higher than in the shale and phyllite.

Ground conditions and intact rock strengths typically deteriorate in proximity to cross-cutting fault zones (typically striking perpendicular or orthogonal to the veins) due to increased fracturing and alteration. Vein parallel faults are present in both the footwall and hangingwall of the MNV which can increase local stope dilution, but these do not appear to be as prevalent in the MNFWZ. Rib pillars are typically left in place where cross-cutting faults intersect the veins. There is a fault that runs sub-parallel to the MNV that is generally present on the hangingwall. There are also numerous sub-vertical slip planes, which cut across the lenses. Ground conditions in the waste rock at depth are expected to deteriorate to a certain extent as metamorphic horizons are encountered and as induced mining stresses are experienced. Ground support practices have been modified to address these situations.

Observed ground conditions and in-situ stress information available for the mine location suggest that horizontal stresses are less than the vertical stress due to the overburden load. Geomechanical instrumentation is routinely used at Cozamin, mainly in the form of instrumented cable bolts in wider stopes and intersections, particularly where contact zone alteration is encountered in cross-cutting fault zones.

16.2.1 Geotechnical guidelines for lower MNFWZ Mining

For the bulk of the future reserves of the mine present in the lower MNFWZ and the east extension of that area, the bulk of the Vein 20 stopes will be wholly excavated in the igneous rock mass but shale and phyllite zones are present locally in the footwall of the stopes. The proposed Vein 10 mining in the lower MNFWZ is in a more complex geotechnical situation than the Vein 20 mining with more shale and phyllite anticipated, particularly in the hangingwall (Golder, 2019).

The lower MNFWZ is roughly between elevations of 1,500 and 1,800 masl, which ranges from between approximately 850 m deep and 1100 m deep, depending on overlying topography. The area is roughly 300m in vertical height and 1500m long (along strike).

Much of the Vein 20 mining is in rhyolite and mining conditions there are expected to be like what has been encountered in recent mining in the last five years in the upper MNV and MNFWZ mining except for increased depth. Localized portions of Vein 20 and much of Vein 10 are expected to encounter more challenging ground conditions than have been encountered in the past due to an increasing prevalence of shale and phyllite in the permanent development openings, the stope development and in the stope walls themselves. Additionally, higher stress conditions than encountered in past development are expected due to the greater mining depths. These issues cause a reduction in achievable extraction due to an increase in the requirement for pillars to control wall dilution relative to what has been required in much of the mine's previous production.

Recommendations for required stope and pillar geometry designs in the lower MNFWZ and the east extension for typical vein widths of 6 m are summarized in Table 16-2 below. These recommendations are based primarily on anticipated geotechnical conditions derived from empirical open stope span stability assessments and numerical and empirical pillar stability analyses using input based on site observations, stope performance data and geotechnical core logging data.

Table 16-2: Recommended Pillar and Stope Dimensions by Depth and by Geotechnical Domain.

Depth (m)	IGNEOUS				PHYLLITE/SHALE			
	Rib Pillar Width (m)	Sill Pillar Height (m)(3)	Extraction Ratio (%)	Max. Sub-Level Height (m)(4)	Rib Pillar Width (m)	Sill Pillar Height (m)(3)	Extraction Ratio (%)	Max. Sub-Level Height (m)(4)
<500	11.0	7.4	78%	16.5	15.7	11.2	69%	16.5
500-750	13.5	9.4	73%	16.5	19.6	14.4	62%	13.5
>750	15.7	11.2	69%	16.5	23.1	17.3	56%	12.5

Table 16-2 Notes:

1. For an assumed 6 m thick vein (measured normal to vein dip), dipping no shallower than 55°.
2. Based on a rib pillar center-to-center spacing of 78 m, and a sill pillar center-to-center spacing of 57.5 m (vertical).
3. Sill pillar height measured vertically.
4. Sub-level height measured vertically and includes 4.5 m tall drift.

Reduction in the rib pillar center-to-center distance would also reduce the potential for wall control and dilution in the poorer rock quality zones (phyllite/shale) if constant sub-level heights are to be maintained. Mining operations have reported that reduced strike lengths have been used to reduce wall control issues.

Designs require variable rib and sill pillar dimensions with depth. The pillar thicknesses summarized in Table 16-2 result in extraction ratios ranging from 78 to 69% in the igneous rocks and from 69 to 56% in the phyllite/shale, varying with depth. These design parameters are based on an assumed vein thickness of 6 m normal to dip, a vein dip of 55° or greater, a 78 m center-to-center rib pillar spacing, and a 57.5 m center-to-center vertical sill pillar spacing. Based on these design dimensions, achievable sub-level heights are expected to be 16.5 m (vertical) in the igneous rocks, however hangingwall stability in the phyllite/shale result in the need to reduce sublevel height at depth, to 13.5 m below 500 m and to 12.5 m below 750 m. The pillar widths and resultant extraction ratios in Table 16-2 are generally considered conservative due to a number of assumptions related to mine geometry and geotechnical parameters.

The following are additional considerations related to mine design and geotechnical stability:

- The pillar design summarized above approximately adheres to the minimum pillar width to height ratio guidance of 1:1; this should always be maintained for pillar design.
- If mining of adjacent veins is to be added to the reserve in the future, such mining may not be feasible if they are too close together, but unless cemented fill is adopted the footwall stopes should be mined before stopes on the hangingwall side.
- Cross-cutting fault zones can be left as rib pillars, but they may need to be larger than those required to be left in un-faulted areas depending on the intact compressive strength of the rock mass.

Ground support requirements will increase with depth in the lower MNFWZ and the MNFW east extension as pattern rebar is now being used in the stopes in the lower MNFWZ stope development. Increasing thicknesses of shotcrete and reduced round lengths are required in development in shale and phyllite, and spiling may be required in the lowest rock mass quality areas. Development openings wider than 10 m in igneous rocks and 7.5 m in shale and phyllite rocks should have a provision that 50% will require long tendon (e.g. cable bolts) support.

To date, mining operations have reported that stope stability has been challenging in poorer quality rock zones (phyllite/shale), particularly in areas of reduced dip, and reducing open span strike lengths has been effective. No reports of pillar instability, with the exception of local structurally controlled issues, have been made indicating that the extraction ratios and pillar sizes outlined in Table 16-2 are suitable.

16.2.2 Geotechnical Guidelines for Upper MNFWZ Mining

Geotechnical drillhole data from twenty-two (22) holes that intersected Vein 20 in the Upper MNFWZ were used for geotechnical characterization purposes to support development of mine design guidelines (Golder, 2020). The Upper MNFWZ is roughly between elevations of 1,800 masl and 2,250 masl, which ranges from between approximately 350 m deep and 850 m deep, depending on overlying topography. The area is roughly 400 m in vertical height and 1600 m long (along strike).

Vein 20 in the Upper MNFWZ was subject to a geotechnical characterization study distinct from the information presented in Section 16.2.1. For the bulk of the future mining in the upper MNFWZ the Vein 20 stopes will be wholly excavated in mixed lithologies and is more complex geotechnically than the lower MNFWZ.

The geotechnical characteristics of the stope hangingwalls is critical to assessment of maximum open stable spans due to the reduced dip in portions of the upper MNFWZ Vein 20 mining. Distinct zones of diorite, rhyolite, shale, phyllite and mixed lithology zones are present in the hangingwall of the Vein 20 stopes as shown in Figure 16-3, based on the RQD, ISRM strength estimate, and lithology logged along each drillhole intersecting Vein 20. Domain III has been further separated based on the spatial variability of poor (Domain IIIa) and good (Domain IIIb) rock quality. Shale dominant lithologies are present in the hangingwall rocks of Domain IIIa.

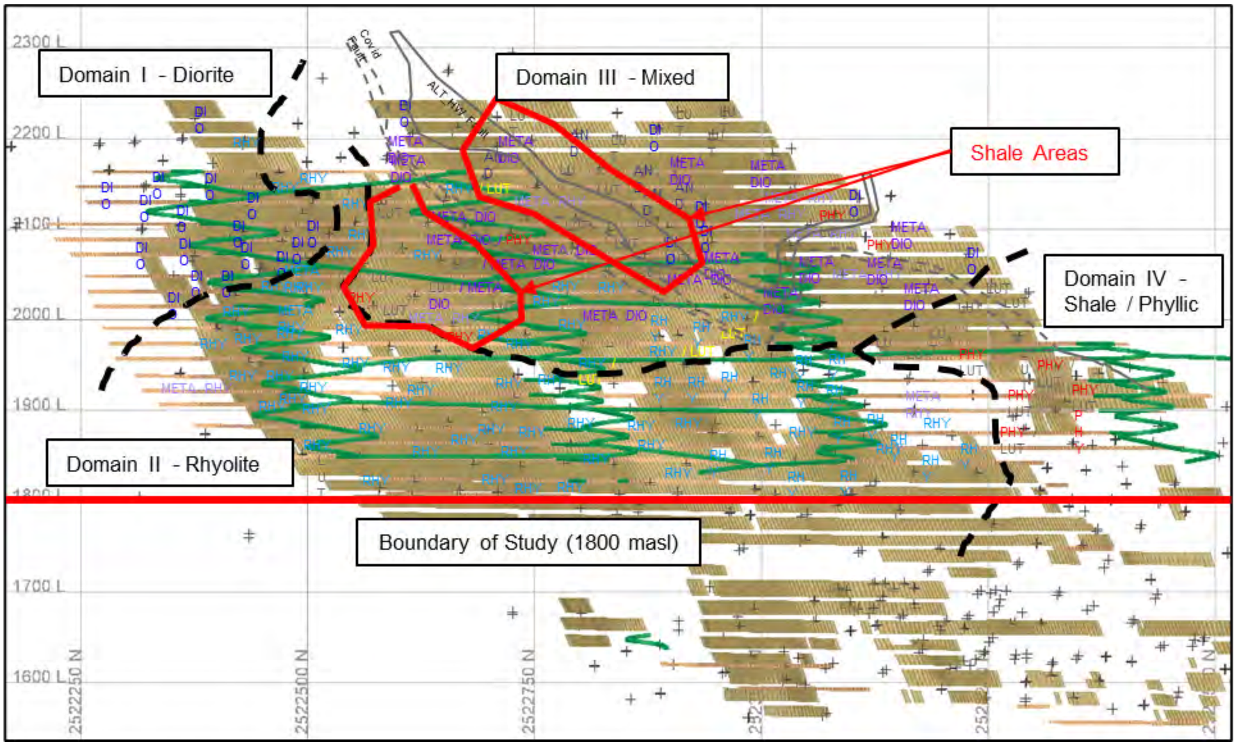

Figure 16-3: Longitudinal view, looking north, of the upper MNFWZ Vein 20 hangingwall geotechnical domains with lithology of borehole pierce points shown (early stope model shown)

Domain II will be characterized by a hangingwall of predominantly rhyolite, while a combination of diorite, metadiorite, rhyolite, and shale is present in the hangingwall of Domain III. Mining in Domain I will be characterized by a hangingwall composed of diorite, and mining in Domain IV will take place in a hangingwall of phyllite and shale. The hangingwall of Domain III was spatially divided further into a Poor and Good domain.

The footwall of Vein 20 includes mixed rock types and has been characterized as a weighted average of logged geotechnical parameters.

A summary of geotechnical parameters used to represent each domain is shown in Table 16-3. Descriptive rock mass strength and deformability parameters included in Table 16-3 include:

- constant **mi** which is a fundamental parameter required for the Hoek-Brown (HB) criterion to estimate the strength of rock materials.
- Rock Mass Rating, **RMR_{76}** (after Bieniawski 1976)
- Rock Mass Quality, **Q'** (after Barton et al, 1976)

Table 16-3: Summary of descriptive geotechnical parameters used to represent each domain identified in the upper MNFWZ, Vein 20.

Domain	Intact Rock Strength (MPa)	mi	RMR76 (a)	Q' (a),(b)
Domain I Diorite HW	100 (f)	25 (d)	68	18 (18 – 25)
Domain II Rhyolite HW	80 (g)	25 (d)	62	10 (8 – 19)
Domain IIIa Combined HW -Poor	50 (f)	6 (d)(c)	52	6 (4 – 10)
Domain IIIb Combined HW -Good	80 (h)	25 (d)	67	21 (16- 34)
Domain IV Shale/Phyllic HW	50 (f)	6 (d)(c)	52	4 (3 – 12)
Domain V Vein/Ore Body	95((g)	16 (c)	67	19 (14 – 31)
Domain VIa Combined FW - Poor	40 (h)	15 (d)	52	5 (4 – 11)
Domain VIa Combined FW - Good	75 (h)	12 (d)	66	20 (17 – 25)

Notes:
(a) Weighted Average.
(b) Ranges in brackets (30th - 70th percentiles).
(c) From previous work.
(d) From literature, Hoek E. 2007. Practical Rock Engineering.
(e) Vein used HW/FW strength in previous work.
(f) Upper bound of Field ISRM 50th Percentile.
(g) 50th Percentile from Point Load Test data.
(h) Mid-range of Field ISRM 50th Percentile.

A significant portion of the dip of Vein 20 in the upper MNFWZ is less than 50º which is generally shallower than the bulk of the stopes in the lower MNFWZ as shown in Figure 16-4. These shallow dips could have a significant impact on shallow dipping stopes.

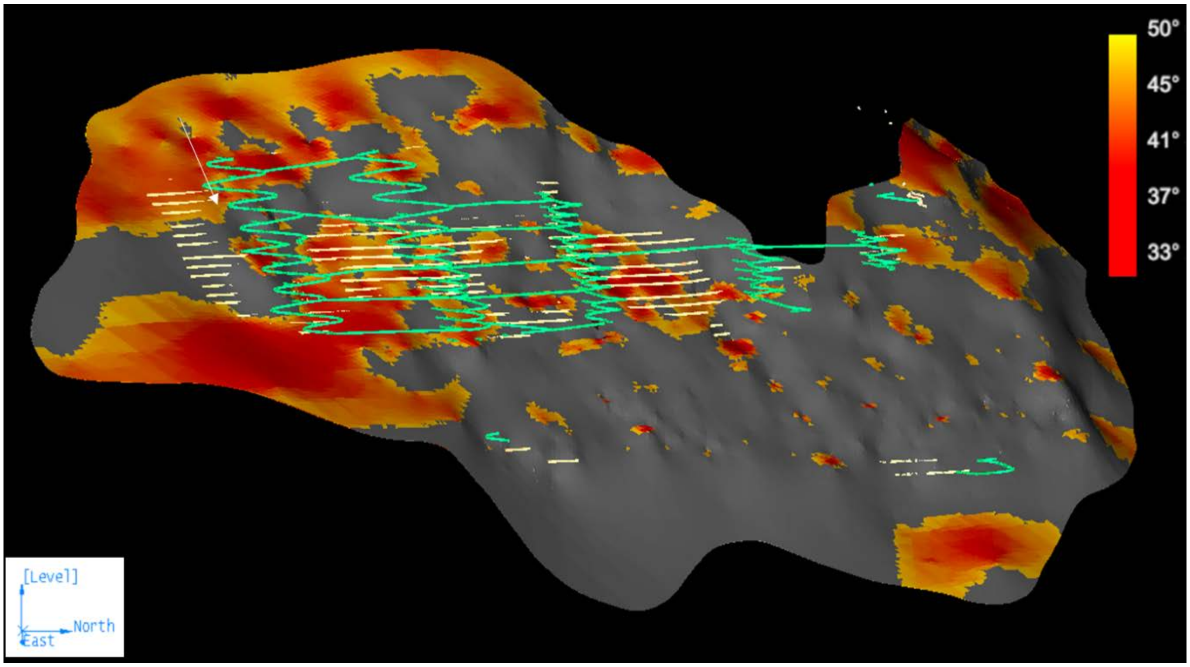

Figure 16-4: Distribution of dip in the MNFWZ, Vein 20 (dip > 50º is grey), view looking west

Empirically based stope size and dilution assessments were performed for the geotechnical domains defined in Table 16-3 using the relevant range of vein thickness and dip values for each domain. Key mine design guidance on the default open stope size (maximum non-backfilled stope void size of 72 m on strike by 16.5 m vertical) includes:

- Domain I, IIIb, and IV are anticipated to be stable at the default design stope size.
- Domain II will require a reduced strike length of 35m for roughly 30% of stopes to maintain HW stability.
- Domain IIIa, which represents 12% of Domain III, will require a reduced stope strike length of 35m for the majority (approximately 66% of the domain) in order to maintain HW stability.

Alternative mining methods could be investigated for Domain IIIa. It should be noted that locally poor ground areas can exist in all domains, but the advice provided is in support of reserve calculations and should be achievable on average.

A summary of wall slough (unplanned dilution) estimates for hangingwalls and footwalls for each Domain based on a range of dip and stope strike length presented in Table 16-4. Note that dilution estimate for stope end walls was up to 0.5m and this also applies to stope backs where the stope width exceeds the top cut drift width (i.e., stope back partially supported). The term ELOS refers to Equivalent Linear Overbreak Slough (After Clark and Pakalnis, 1997) which provides an estimate of the amount of slough that will fall off the walls.

Table 16-4: Vein 20 upper MNFWZ Wall Slough Estimates Summary

a) Hanging Wall – 35 m Strike Length

Domain	ELOS (m)	Min. Acc. Dip (°)	% < Min. Acc. Dip	% > Min. Acc. Dip
I	>2	24	0.0%	100.0%
	>1	35	0.8%	99.2%
	>0.5	46	40.8%	59.2%
II	>2	40	12.3%	87.7%
	>1	57	87.5%	12.5%
	>0.5	77	99.9%	0.1%
IIIa	>2	66	91.3%	8.7%
	>1	90	100.0%	0.0%
	>0.5	90	100.0%	0.0%
IIIb	>2	26	0.1%	99.9%
	>1	38	0.9%	99.1%
	>0.5	49	31.5%	68.5%
IV	>2	36	1.2%	98.8%
	>1	51	37.4%	62.6%
	>0.5	69	90.0%	10.0%

b) Footwall – 35 m Strike Length

Domain	ELOS (m)	Min. Acc. Dip (°)	% < Min. Acc. Dip	% > Min. Acc. Dip
I	>2	8	0.0%	100.0%
	>1	18	0.0%	100.0%
	>0.5	31	0.0%	100.0%
II	>2	11	0.0%	100.0%
	>1	23	0.1%	99.9%
	>0.5	41	15.9%	84.1%
IIIa	>2	9	0.0%	100.0%
	>1	20	0.0%	100.0%
	>0.5	34	0.2%	99.8%
IIIb	>2	7	0.0%	100.0%
	>1	19	0.0%	100.0%
	>0.5	32	0.1%	99.9%
IV	>2	5	0.0%	100.0%
	>1	17	0.0%	100.0%
	>0.5	28	0.0%	100.0%

c) Hanging Wall – 72 m Strike Length

Domain	ELOS (m)	Min. Acc. Dip (°)	% < Min. Acc. Dip	% > Min. Acc. Dip
I	>2	33	0.2%	99.8%
	>1	43	14.4%	85.6%
	>0.5	54	77.4%	22.6%
II	>2	49	54.5%	45.5%
	>1	66	99.0%	1.0%
	>0.5	90	100.0%	0.0%
IIIa	>2	77	99.0%	1.0%
	>1	90	100.0%	0.0%
	>0.5	90	100.0%	0.0%
IIIb	>2	35	0.3%	99.7%
	>1	47	22.1%	77.9%
	>0.5	58	69.7%	30.3%
IV	>2	45	14.2%	85.8%
	>1	60	65.7%	34.3%
	>0.5	79	98.2%	1.8%

d) Footwall – 72 m Strike Length

Domain	ELOS (m)	Min. Acc. Dip (°)	% < Min. Acc. Dip	% > Min. Acc. Dip
I	>2	20	0.0%	100.0%
	>1	33	0.2%	99.8%
	>0.5	47	46.6%	53.4%
II	>2	24	0.1%	99.9%
	>1	38	7.3%	92.7%
	>0.5	59	91.6%	8.4%
IIIa	>2	21	0.0%	100.0%
	>1	35	0.3%	99.7%
	>0.5	51	40.8%	59.2%
IIIb	>2	21	0.0%	100.0%
	>1	35	0.3%	99.7%
	>0.5	51	40.8%	59.2%
IV	>2	19	0.0%	100.0%
	>1	31	0.2%	99.8%
	>0.5	45	14.2%	85.8%

These dilution values can be used to determine estimates of unpanned wall slough for variable dip areas, although a minimum stope dip of 45º is anticipated to be used for open stope design.

Mine layouts in the upper MNFWZ of Vein 20 require variable rib and sill pillar dimensions due to changes in rock mass quality, Vein 20 thickness and orientation, and changes in stress (with depth). Tributary area assessment was used to determine minimum rib (strike) pillar size determination. Due to high variability of the vein thickness and dip, several assumptions were used in the assessment:

- Minimum mineable vein thickness of 1.5 m.
- Minimum sill pillar thickness of 5 m applied to stopes with a vein thickness less than 5 m.
    - center to center rib pillar spacing is 78 m and 39 m.
- A 1:1 thickness rule was applied to all sill pillars in areas where the vein thickness was greater than the calculated minimum from tributary area.

A summary of the recommended sill and rib pillar dimensions for each domain are presented in Table 16-5. Resulting extraction ratios for the specific geotechnical domain on a particular level are included. Numerical stress analyses can be applied in the future to refine required pillar sizes as these pillar sizes and resulting extraction ratios are considered conservative overall.

Table 16-5: Minimum Sill and Rib Pillar Thickness with Corresponding Extraction Ratio for 78 m and 39 m center-to-center Rib Pillar Spacing (39 m spacing in parentheses) mining of Vein 20 in the upper MNFWZ

Level	Domain 1			Domain 2			Domain 3a			Domain 3b			Domain 4		
	Sill Pillar Height (m)	Rib Pillar Width (m)	Extraction Ratio (%)	Sill Pillar Height (m)	Rib Pillar Width (m)	Extraction Ratio (%)	Sill Pillar Height (m)	Rib Pillar Width (m)	Extraction Ratio (%)	Sill Pillar Height (m)	Rib Pillar Width (m)	Extraction Ratio (%)	Sill Pillar Height (m)	Rib Pillar Width (m)	Extraction Ratio (%)
2128	5	7.6 (5.8)	85 (81)	5	9.8 (7.3)	83 (79)	6.2	18.0 (13.1)	74 (67)	6.2	12.5 (9.3)	79 (73)	-	-	-
2071	7.6	11.0 (8.5)	78 (73)	8.8	14.3 (10.9)	73 (68)	10.6	22.0 (16.6)	65 (57)	10.6	14.8 (11.5)	71 (64)	-	-	-
2013	7.6	11.5 (8.8)	77 (72)	6.4	14.6 (10.8)	77 (71)	6.9	21.1 (15.3)	71 (63)	6.9	14.7 (10.9)	76 (70)	-	-	-
1956	5	6.4 (4.9)	86 (83)	5.5	15.7 (11.4)	77 (71)	5	18.3 (13.1)	75 (68)	5	12.9 (9.5)	80 (75)	7.6	15.0 (11.2)	75 (69)
1898	5	5.6 (4.4)	-	5	12.2 (9.0)	81 (76)	5	14.0 (10.2)	79 (74)	5	9.7 (7.2)	83 (79)	5	11.9 (8.8)	81 (76)
1841	-	-	-	5	14.8 (10.7)	78 (73)	-	-	-	-	-	-	5	12.1 (8.9)	81 (76)
1783	-	-	-	6.5	19.5 (14.2)	72 (65)	-	-	-	-	-	-	5	10.9 (8.1)	82 (77)

Table Notes:
1. Average vein thickness used for each level of each domain.
2. Based on a rib pillar center-to-center spacing of 78 m (39 m for reduced length), and a sill pillar center-to-center spacing of 57.5 m (vertical).
3. Sill pillar height measured vertically.

The following are additional considerations related to mine design and geotechnical stability:

- The pillar design summarized above approximately adheres to the minimum pillar width to height ratio guidance of 1:1; this should always be maintained for pillar design.
- If mining of veins adjacent to Vein 20 (for example Vein 10) is to be added to the reserve in the future, such mining may not be feasible if they are too close together, but unless cemented fill is adopted the footwall stopes should be mined before stopes on the hangingwall side.
- Cross-cutting fault zones can be left as rib pillars, but they may need to be larger than those required to be left in un-faulted areas.

As described above, much of Vein 20 will be mined greater than 7 m width. For drifts over 7 m width, additional ground support will be required to ensure long term stability. Increased drift dimensions also carry an increased risk of exposure to ground fall prior to and during support installation. As such, all efforts to avoid opening a span greater than 7 m during development should be made. Should the top or bottom cut development need to exceed 7 m width, special deep anchorage should be installed in cycle as directed by site geotechnical personnel.

As development progresses and poor rock masses are exposed in the hanging wall and footwall, a testing program specific to validating current ground support standards should take place (e.g., bolt pull testing, deformation monitoring, increased inspections, overbreak/underbreak review). This testing program should be aimed at validating design standards and proper support installation procedures, particularly in zones of poor rock mass quality. If deemed ineffective, modifications to the current ground support standards should be implemented for the poor rock masses (e.g., shotcrete, tighter bolts spacing, shorter round lengths).

16.2.3 Geotechnical Guidelines for Implementation of Paste Fill

The current mining method employed at Cozamin requires leaving rib and sill pillar behind to support the hanging wall and prevent instabilities within the vein. Implementation of a paste backfill system will allow for nearly 100% ore extraction, as the paste fill removes the necessity of rib and sill pillars for vein stability.

Presented here are the preliminary paste strength requirements and mining constraints related to paste backfill implementation to assist Cozamin with economic evaluation and input parameters for the mine plan. (Golder, 2021a)

Critical to the planning for implementation of paste backfill is incorporating delays due to cure time of the paste fill. Due to the vein characteristics and proposed mining method, only two faces of exposure are possible at Cozamin. These include vertical faces and underhand faces. Vertical faces will be exposed due to the retreat stoping sequence when a stope is blasted along strike of a previously paste-filled stope. An underhand face of the stope fill will be exposed from mining vertically and encountering a paste fill abutment.

In total, six empirical methods were utilized to assess possible failure modes for paste fill. Paste strength requirements are identified for each failure mode based on rock mass parameters and stope geometries identified during the National Instrument (NI) 43-101 Base Case geotechnical analysis complete by Golder in 2020. The six methods are as follows:

- Free standing strength
- Simplified shear (ACI)
- Flexural Bending
- Caving
- Rotational
- Block Sliding

Each empirical method, also referred to as the failure mode, is evaluated based on known input parameters. Required paste strengths were assessed based on the likelihood of failure type and then compared to paste strength testing completed by Capstone.

Rotational, caving, and sliding failure are typically less critical, as long as the sill thickness is more than one half the unsupported span (Stone, 1993). Caving failures can be induced by poor quality fill production, trash left in stope sills, or poor sill preparation leaving very uneven sills. Rotational failures can occur if the hanging wall of the undercut begins to ravel, reducing the confinement of the paste-filled stope above. Block sliding failures can occur when the weight of the paste plug overcomes the frictional forces between the paste and stope walls, typically when stope geometries trend to extreme height-to-width ratios. For these reasons, flexural failure is considered the most likely failure mechanism.

Table 16-6: Paste strength requirement summary

Mining Sequence	Method Reference	Failure Mode	Min. UCS Required (MPa)
Adjacent to Paste Fill	Mitchell (1982)	Free-Standing	0.22
Below Paste Fill	American Concrete Institute (ACI)	Simplified Shear	1.00
	Mitchell (1991)	*Flexural Bending*	*0.45*
		Rotational[1]	*12.00*
		Caving[1]	*2.90*
		Block Sliding[1]	*2.80*

Table Notes:
1. Less critical so long as the sill thickness is more than half the unsupported span.

Table 16-6 presents the paste strength requirements based on empirical calculations. Free-standing, vertical faces in paste should cure to a minimum of 212 kPa prior to blasting near, or against, the paste fill in question. Mining underneath paste will require a minimum strength of 1.0 MPa for strike lengths of 30 m, or less, for all anticipated vein dip angles and span widths. When mining underneath previously paste-filled stopes, 5-m strike length rib pillars should be planned for and implemented. Calculated strength requirements for caving, rotational, and sliding failures do produce higher values than those identified above, but due to geometric constraints (the sill thickness is more than ½ the unsupported span) these failures are unlikely. Golder does not recommend designing paste strengths based on these failure mechanisms. Figure 16-5 compares the required paste strengths for ACI method, flexural, and free standing face to the various mix design testing strengths provided by Capstone.

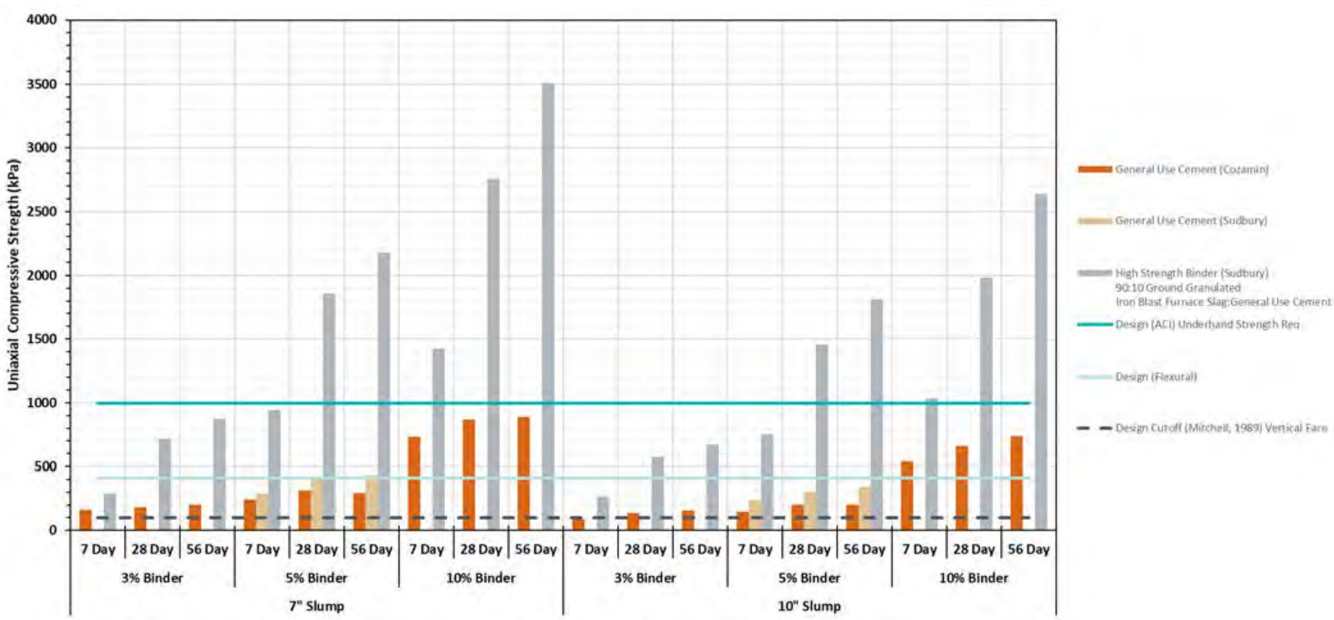

Figure 16-5: Required paste fill strengths compared to testing data

Based on high level mine plans provided by Capstone, there will be three levels of stopes that will be mined underneath. These levels will require the 1 MPa strength paste fill. Figure 16-6 shows approximate locations of the high strength paste will be mined beneath.

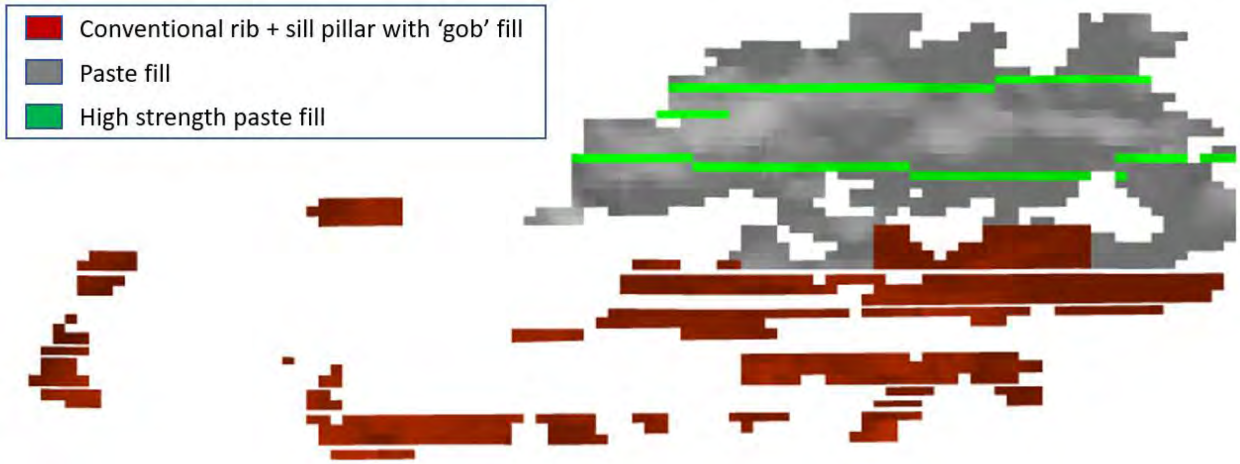

Figure 16-6: High level mine plan for high strength paste locations, view looking northeast

16.2.4 Geotechnical Guidelines for Vein 10SE Mining

Initial efforts attempted to correlate rock mass quality for Vein 10 to those identified previously in the Vein 20 characterization work. Unfortunately, due to increased geologic complexity and greater alteration it was determined that a separate stand-alone characterization effort would be required. Geotechnical drillhole data from fifty (50) holes that intersected Vein 10 in the Upper MNFWZ were used for geotechnical characterization purposes to support development of mine design guidelines. (Golder, 2021b) Vein 10 is roughly between elevations of 1,900 masl and 2,400 masl, which ranges from between approximately 435 m deep and 650 m deep, depending on overlying topography. The stoping area is roughly 450 m in vertical height and 480 m long (along strike). In the area of review, Vein 10 is offset from Vein 20 to the Northeast by a minimum of 100 m. Vein 10 primarily dips from 40 to 60 degrees to the Northeast with small sections of steeper and shallower undulations on a scale that does not impact the stability assessments discussed here.

The Vein 10 proposed mining zone was subject to a geotechnical characterization study distinct from the information presented for the MNFWZ. The proposed mining in Vein 10 the stopes will be wholly excavated in mixed lithologies and is similarly complex geotechnically as the upper MNFWZ.

The geotechnical characteristics of the stope hangingwalls is critical to assessment of maximum open stable spans due to variation to the hangingwall dip throughout the planned Vein 10 mining. Distinct zones of diorite, rhyolite, shale and mixed lithology zones are present in the hangingwall of the Vein 10 stopes as shown in Figure 16-7.

Based on the RQD, ISRM strength estimate, and lithology logged along each drillhole intersecting Vein 10, two separate domains have been assigned to the Vein 10 hangingwall (Domains I and II), and single domain values assigned to the vein itself (Domain III) and the footwall (Domain IV) rock mass as inputs for the stope stability assessments. The geotechnical domain assignments for the hangingwall of Vein 10 are shown in Figure 16-8.

While the hangingwall dip and rock mass quality constrain the stope size overall, the vein quality and width are important as they will impact the ground support systems required for development. The footwall rock mass quality generally will not impact the stope sizing but it does impact the ELOS factors.

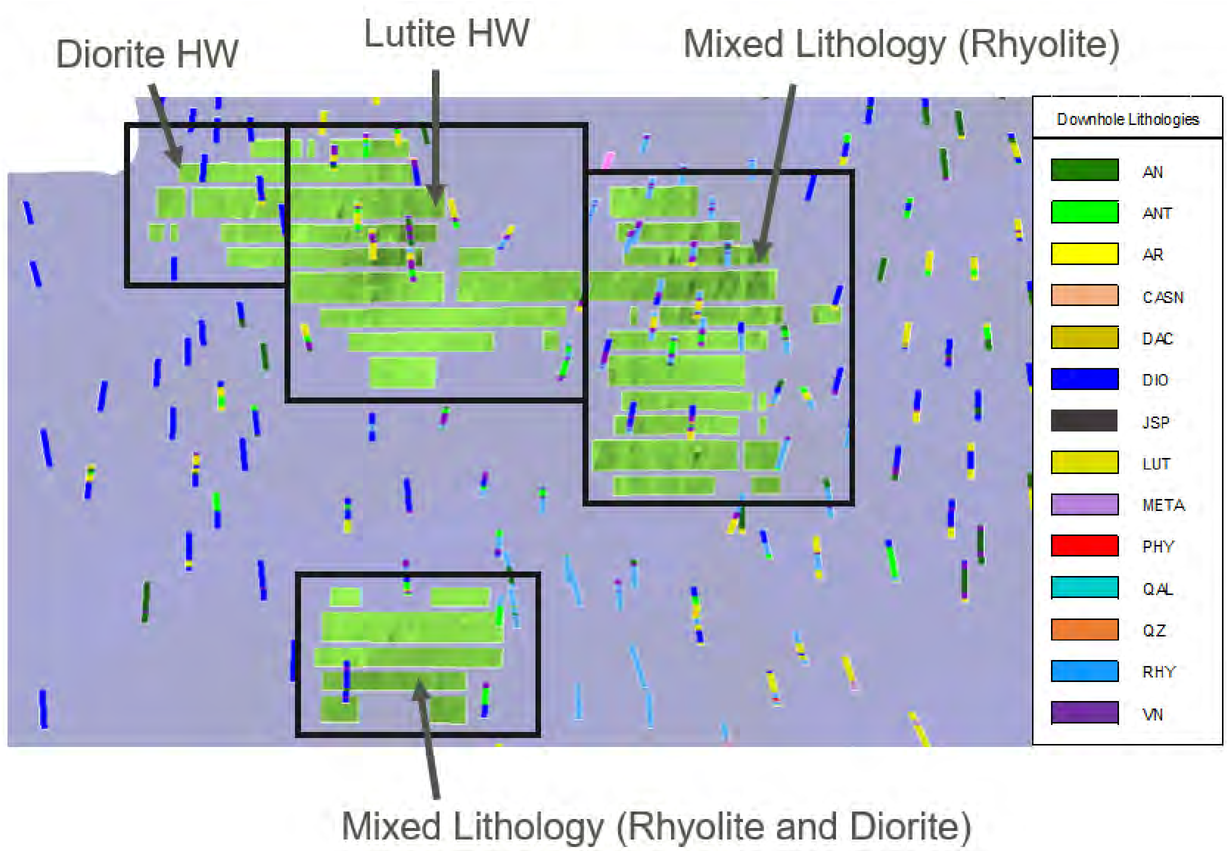

Figure 16-7: View of the various lithologies that comprise the Vein 10 hangingwall, looking southwest

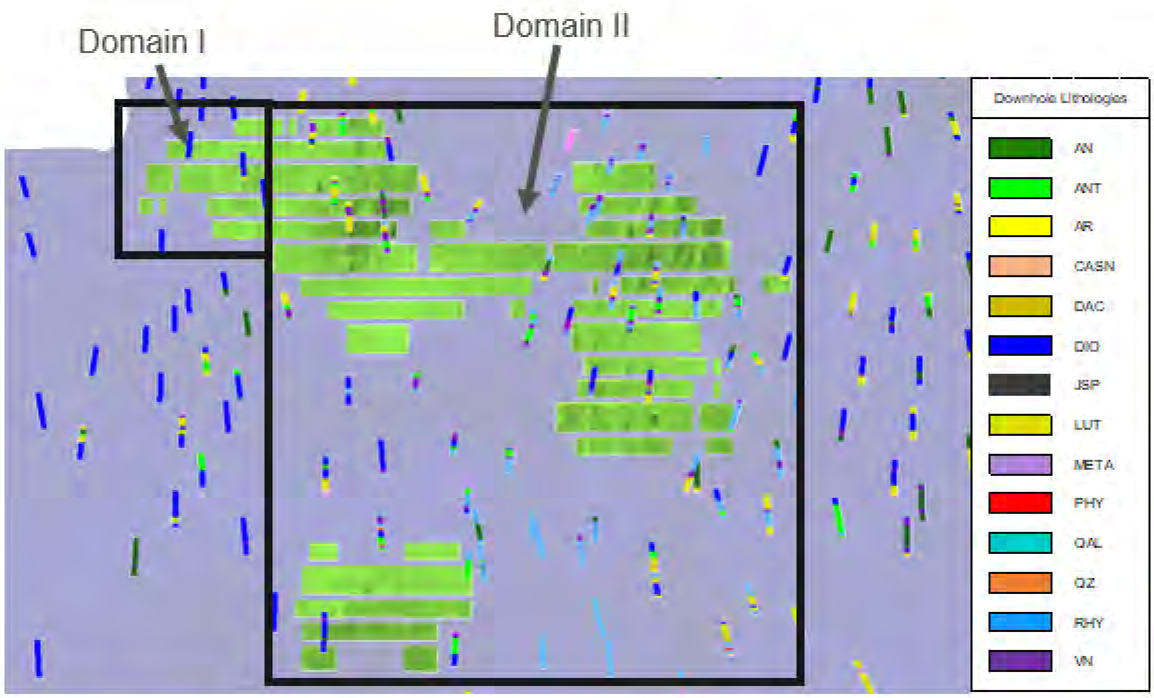

Figure 16-8: Geotechnical domain assignments for the hangingwall of Vein 10, looking southwest

The footwall of Vein 10 includes mixed rock types and has been characterized as a weighted average of logged geotechnical parameters.

A summary of geotechnical parameters used to represent each domain is shown in Table 16-7. Descriptive rock mass strength and quality parameters included in Table 16-7 include:

- Uniaxial compressive strength (**UCS**)
- Rock hardness (**R values**)
- Rock Mass Quality, **Q'** (after Barton et al, 1976)

Table 16-7: Rock mass strength and quality parameters for Vein 10 mining areas.

Domain	Parameter	Vein 10 Lower and Upper Bound	Vein 10 Representative Value	Vein 20 Representative Value
Domain I (Diorite HW)	UCS (Mpa)	R4	75[1]	100
	Q'	4 to 6	6[2]	18
Domain II (Mixed HW)	UCS (Mpa)	R4	75[1]	50 to 80
	Q'	4 to 16	10[2]	4 to 10
Domain III (Ore Vein)	UCS (Mpa)	R3 to R4	75[1]	95
	Q'	3 to 16	10[2]	19
Domain IV (All Footwall)	UCS (Mpa)	R3 to R4	50[3]	40 to 75
	Q'	4 to 17	9[2]	50 to 20

Table Notes:
1. Average of R4 ISRM strength range
2. Weighted average of data within 5m of Vein 10
3. Lower bound of R4 ISRM strength range

A summary of wall slough (unplanned dilution) estimates for hangingwalls and footwalls for each Domain based on a range of dip and stope strike length presented in Table 16-8. Note that dilution estimate for stope end walls was up to 0.5m and this also applies to stope backs where the stope width exceeds the top cut drift width (i.e., stope back partially supported). The term ELOS refers to Equivalent Linear Overbreak Slough (After Clark and Pakalnis, 1997) which provides an estimate of the amount of slough that will fall off the walls.

These dilution values can be used to determine estimates of unpanned wall slough for variable dip areas, although a minimum stope dip of 45º is anticipated to be used for open stope design.

Please note that Domain II is split into two ELOS categories for this study. Stress is an input factor included in the ELOS estimation and has been estimated using the depth of the mining and the weight of the overburden, therefore the upper and lower stoping horizons have been assessed separately within Domain II.

Table 16-8: Vein 10 Stope Wall Sloughing Estimations Summary

Vein 10 Hanging Wall

Strike Length	Domain	ELOS (m)	Minimum Acceptable Dip (°)	
			Vein 10	Vein 20
72m	I[1]	>2	42	33
		>1	55	43
		>0.5	69	54
	II[2]	>2	42	45
		>1	55	60
		>0.5	70	79
	II Lower[2]	>2	52	45
		>1	70	60
		>0.5	90	79
35m	I[1]	>2	31	24
		>1	44	35
		>0.5	59	46
	II[2]	>2	32	36
		>1	46	51
		>0.5	61	69
	II Lower[2]	>2	41	36
		>1	59	51
		>0.5	82	69

Vein 10 Footwall

Strike Length	Domain	ELOS (m)	Minimum Acceptable Dip (°)	
			Vein 10	Vein 20
72m	I[1]	>2	23	20
		>1	35	33
		>0.5	54	47
	II[2]	>2	32	19
		>1	56	31
		>0.5	NP[3]	45
	II Lower[2]	>2	52	19
		>1	NP[4]	31
		>0.5	NP[5]	45
35m	I[1]	>2	10	8
		>1	21	18
		>0.5	34	31
	II[2]	>2	19	5
		>1	37	17
		>0.5	90	28
	II Lower[2]	>2	35	5
		>1	90	17
		>0.5	NP[5]	28

Table Notes:
1. Values compared with Domain 1 (Diorite) from Vein 20 ELOS values.
2. Values compared with Domain 4 (Lutite) from Vein 20 ELOS values.
3. Point plots at midpoint between >0.5 and >1.0 ELOS lines at 90° dip.
4. Point plots at midpoint between >0.5 and >1.0 ELOS lines at 90° dip.
5. Point does not cross >1.0 ELOS line.

Unlike Vein 20, Vein 10 will be soley mined utilizing paste fill. Therefore, no tributary area calculations have been complete, or rib and sill pillar size requirements provided. Based on the stope plans provided by Capstone, it is anticipated that no rib or sill pillars will be needed for Vein 10 stoping.

16.2.5 Guidelines for Mining Vein 20 Extension

The area of study for the Vein 20 Extension (V20E) is roughly between elevations of 2,250 masl to 2,330 masl, which indicates approximate depths from 270 m to 350 m. The area included in the extension is roughly 80 m in vertical height and 1600 m long (along strike). Figure 16-9 shows the area of study for V20E in relation to the original area for study for Vein 20 discussed in Section 16.2.2 and Figure 16-10 shows the domain extensions in relation to the original domain assignments.

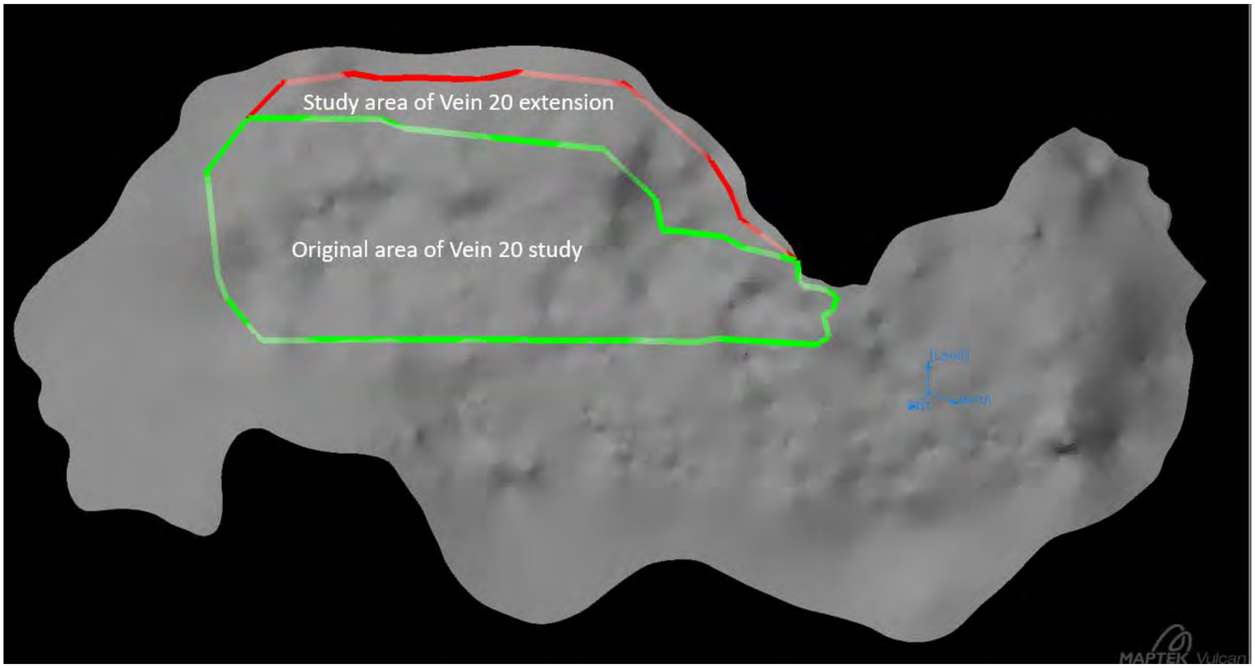

Figure 16-9: Study area of Vein 20 extension, looking southwest

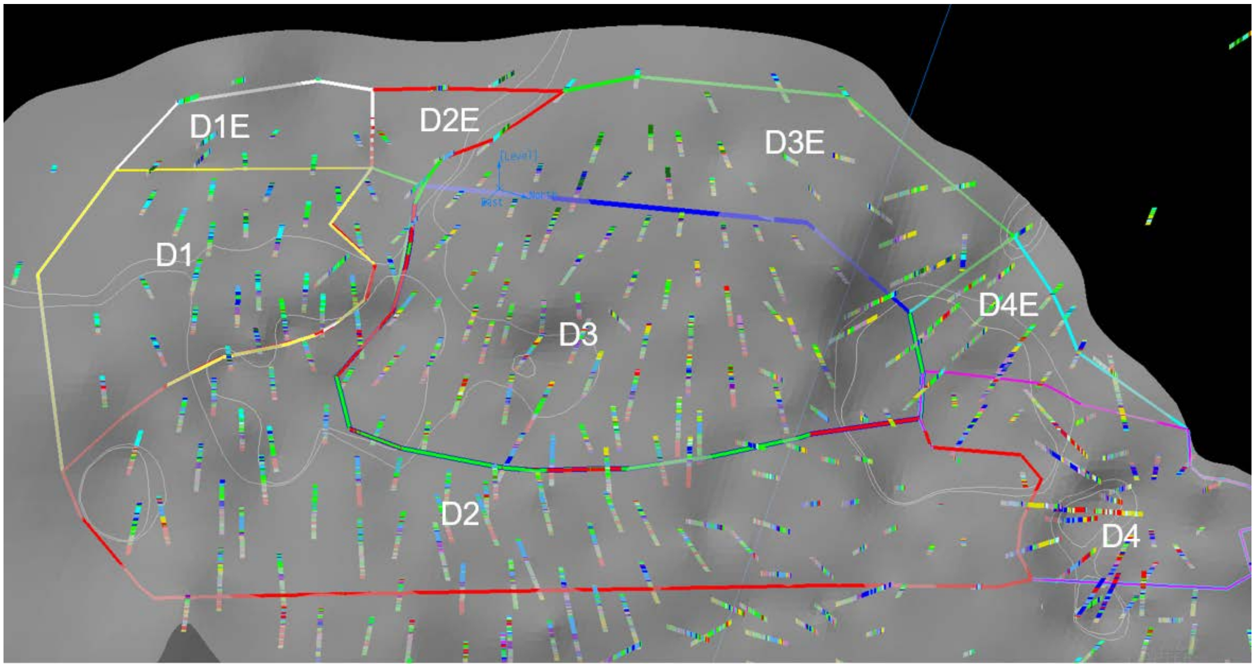

Figure 16-10: Domain extensions relative to original domain assignments with DDH holes, looking southwest

Initial efforts to correlate rock mass quality for the vertical extension of Vein 20 to those identified previously in the Vein 20 characterization work proved mostly successful based on the geotechnical domaining information presented in Section 16.2.2. Comparing the lithology from drill core data within 5 m from the hangingwall contact, Golder was able to confirm continuity of three of the four hangingwall domains identified in Section 16.2.2:

- Domain I characterized dominantly by Diorite
- Domain II characterized dominantly by Rhyolite
- Domain IV characterized dominantly by metamorphics (shale and phyllite)

In the original study, Domain III was characterized by “mixed” lithology (Rhyolite, Phylite, and Shale), yet the dominate lithologies identified in the V20E study were Shale and Andesite.

Visual conformation of the lithology domains identified for the V20E was completed by reviewing core photos. This again confirmed three of the four domains were continuous near vertically into V20E except for Domain III.

No laboratory testing for rock mass properties of lithologic samples from any drilling within the V20E area has been completed. Therefore, a comparison of average R-Hardness, RQD, RMR, and Q’ values between the original V20 dataset to the V20E dataset was completed to further determine if any variation of the lithologic units could be identified. Table 16-9 shows the data compiled for the comparison.

Table 16-9: Summary of data compiled for rock mass property comparison of V20 and V20E lithologic units

Domain	Zone	ISRM Average	RQD Average	RMR Average	Q' Average
1	HW_5m	4.5	92	68	18
1E	HW_5m	4.1	90	66	27
2	HW_5m	3.5	78	62	10
2E	HW_5m	4.5	92	71	40
3a	HW_5m	3	64	52	6
3b	HW_5m	4.5	93	67	21
3E	HW_5m	4.2	75	59	18.5
4	HW_5m	3	73	52	4
4E	HW_5m	3.8	90	62	20
V20	FW_5m	4	92	66	17
V20_E	FW_5m	3.9	84.5	60.5	19

The conclusion drawn from the lithologic comparison, visual inspection of core photos, and comparison of rock mass properties between the V20 and V20E areas of study are as follows:

- Domains 1,2, and 4 can be extended with the same domain parameters applied to the extension areas.
- Domain 3E has different lithology and domain parameters than the original Domain 3.
- Rock mass parameters in Domain 3E most closely resemble those assigned to 3b and are recommended to be used for mine planning going forward.
- Original V20 FW domain parameters can be applied to all extended domains.

16.2.6 Recommendations

The QP recommends the following studies, anticipated to cost approximately US$250,000, and work be completed (included as part of Cozamin Mine's operation costs):

- Geotechnical assessment of variable mining methods for upper MNFWZ geotechnical domain 3a and provision of mine design guidelines.
- Continue to map rock mass conditions underground and combined with geotechnical core logging, develop a 3D geomechanical domain model.
- Record stope, pillar, and ground support performance underground in a manner that assist with validation of design approaches.

- Continue development of a formal ground control management plan (GCMP) that summarises different mine design (stope and pillar) and ground control requirements in different geotechnical domains.
- Continue training of personnel in geotechnical mapping and to identify poor rock conditions and execute remediation ground control work where needed.
- Use stope and development opening performance, including ground support performance, to verify the geotechnical domain model and the design of stope and pillar sizes and ground control. Update the GCMP accordingly.
- Continue to conduct systematic bolting in new headings and adjust ground support in areas of weaker rock mass conditions or in higher ground stress zones.
- Upgrade ground support to current standards in permanent active areas such as ramps, main drifts and shops. This recommendation is being implemented on site and is included in the current operating cost model.
- Define local regional stress field characteristics to develop a reliable geotechnical numerical stress model and provide supporting data to verify geotechnical assumptions used for design are correct.
- Optimization of the paste fill mix specifically for vertical exposure will be an opportunity to reduce costs once the paste plant is operational and effectively producing a quality product. The required strength provided above is for the “worst case” scenario, where the stope width is the controlling factor and set to a width of 24 m. As paste performance data is collected and the paste plant operation becomes well understood, creating a mix design for varying stope widths can be an opportunity to reduce costs of paste fill.
- Mining underneath paste fill is often a difficult transition for the operation teams. Golder suggests that the Cozamin team set up a test mining area, where crews can gain experience mining underneath paste fill away from other mining zones or other critical sections of the mine.
- In addition to a 30-m maximum strike length for stopes being mined underneath previously paste-filled stopes, Golder recommends that 5-m long (strike length) and minimum half the stope height rib pillars be left in place between stopes. This will help prevent any instability issues that may arise during the stoping underneath the paste fill and provide a stable work area if recover is required. Golder notes that the necessity of this practice may be reviewed once significant operational experience is achieved and geotechnical data is collected and a strong case is put forth to eliminate, or reduce, this requirement.

- High level mine plans for stopes to be mined underneath indicate vertical offset at ramp accesses to due grade preference. The impacts of this offset was not part of this study and should be reviewed relative to paste fill stability prior to execution.

16.3 Mining Shapes and Stope Designs

Identification of the mineable portions of the MNV and MNFWZ Mineral Resources was aided by the iterative use of *Maptek Vulcan Mine Stope Optimizer* ("MSO"). The resource block models for the MNV and MNFWZ used in the stope optimization process are found in Table 16-10.

Table 16-10: Resource Block Models Used in Stope Optimization

Vein System	Block Model File	Created By
Mala Noche Vein (MNV)	resmod_mnv_july2017.csv	J. Vincent, P.Geo.
Mala Noche Footwall Zone (MNFWZ)	NSR325 Block Model December 2020 V2 and NSR31 with waste.csv	Garth Kirkham, P.Geo., FGC.

MNV stope dimensions were not updated for the October 2020 Reserves estimate, due to lack of changes in the block model. These stopes form a small portion of the overall Reserve, and the procedures for generating these stopes are described in the October 23, 2020 Technical Report for Cozamin. Although MNV stope dimensions were not changed, their NSR valuations and potential inclusion in the current Reserves were impacted by updates in the recovery formulae and NSR formulae in the San Rafael Zinc zone, and less significantly by inclusion of filtration costs in determination of NSR cut-off.

Stope designs were significantly updated for MNFWZ, described in the following paragraphs. The MNFWZ model was prepared for use in MSO by importing into *Vulcan* BMF format, and validating in *Deswik.CAD* mining software by performing spot block value checks, spot stope interrogation checks, and by reproduction of grade-tonnage reports. Fields required for use by MSO were added to the model, including fields to store NSR values, geotechnical domains, vein dip, and royalty payability. Blocks were sub-celled to honor actual mined-out volumes and established pillars, which were then assigned zero density and zero grade, respectively.

Unplanned dilution parameters were included as variables to inform MSO. Dip measurements and geotechnical domain attributes were used to estimate ELOS of the hangingwall and footwall at 78 m and 39 m center-to-center pillar strike separations, and 20 m open stope strike lengths using tables provided by Golder (Table 16-4). These attributes were then populated as block model variables and validated manually using spot checks. Scripts were then executed on the BMF model files to prepare all relevant variables for use in MSO.

Stope geometries were constrained by a framework of two-dimensional polygons perpendicular to the general strike of MNFWZ that was generated by Cozamin staff. These polygons represented actual or planned mining levels spanning the entirety of MNFWZ. Sublevel drives were commonly designed at a 1-2% positive gradient for drainage and generally follow standard development dimensions. The polygons were then further subdivided into 20m widths along strike, resulting in a cross-sectional representation of the eventual three-dimensional stopes that would be produced by MSO.

Stope dimensions were constrained by both practical limits of the mining method, such as minimum 50 degree wall angle and minimum 2m stope width, as well as geotechnical limitations. The limitations used are consistent with industry best practices and reflect the methods currently in use at the Cozamin mine.

Initial MSO runs were performed at $40/tonne NSR cut-off values with regular stope framework dimensions described above. The results of these optimizations were also compared against optimizations at $50, $60 and $65 NSR cut-offs to validate similar treatment of stopes in zones at several cut-off values. This comparison confirmed acceptable differences in the use of different cut-off values in initial optimization steps. In all measurements, performing initial optimizations at lower cut-off values resulted in additional zero-grade planned dilution volume being included in the optimized stope solids which solidifies the procedure as a conservative approach. For certain domains that received updated geotechnical information after the MSO runs were complete, an additional amount of unplanned dilution was added formulaically.

The results of the MSO included shapes generated in previously depleted areas containing unmineable remnants, as well as areas of Inferred resource classification. These shapes were removed manually and were checked by Cozamin staff. The resultant shapes were used to define the potential limits for mine access and infrastructure design. Cozamin staff then designed all required ramps, access drives, parallel waste drives, ventilation raises, sumps, and other miscellaneous capital development.

The expected zero-grade linear dilution and calculated diluted tonnes, diluted volume, diluted metal grades, and diluted NSR value for each strike length selection were then added as attributes to each stope. These attributes were validated manually using spot checks and by visualizing regions colorized by value ranges.

The stopes were filtered by the break-even NSR cut-offs listed in Table 15-6, ranging from $48.04 to $56.51 depending on backfill method and anticipated stope length. Stopes exceeding the cut-off were passed to the access economics test. Stopes with diluted NSR values less than the cut-off were assessed again using shorter strike lengths and passed to the access economics test if the resultant diluted NSR exceeded the cut-off.

The volumes where sill pillars and rib pillars were required were removed from the stopes passing this initial economic test. Sill pillars were removed by applying a mining loss factor to top sub-level stopes in each panel equivalent to a 1:1 ratio between vein true thickness and sill pillar height (along dip). Rib pillars were placed according to the steps outlined above in the selection of stope strike length, using tributary area calculations completed by Golder as shown in Table 16-5.

Passing stopes were finally assessed for capital access costs. Calculated value in excess of the NSR cut-off for isolated levels or islands of stopes were compared to the capital access cost of reaching those areas. If the excess above cut-off was not sufficient to pay for the access, the entire volume was removed from the Mineral Reserve estimate.

The resultant shapes were reviewed by Cozamin staff manually, considering any possible disqualifying site-specific modifying factor not included in the Resource block model.

16.4 Mine Access and Material Handling

The Cozamin Mine is accessed by two ramp declines. The approximately 430 m shaft is located centrally between the MNV and the MNFWZ and is used for ore hoisting only. Ore is brought to the crusher at the mill by means of haulage through the Guadulapana Ramp decline and through the hoist. The second decline, the San Ernesto Ramp is smaller in section than the Guadulapana Ramp and is used primarily for light vehicle passage, however the smallest of the three truck sizes used at Cozamin can utilize this decline when it is beneficial to do so. Waste generated by development activities in the mine is sometimes also brought to surface by means of truck haulage when insufficient backfilling capacity is available.

Ore is mucked from stopes and in-ore development using LHD vehicles and then transferred into trucks. Ore is either hauled to surface via the Guadalupana Ramp or taken to the San Roberto shaft and dumped on the grizzly-crusher system. Oversized material left on the grizzly is broken up using a hydraulic rock breaker. Hoisted material from the San Roberto shaft is loaded into surface trucks and is transported to the truck scales. Trucks are weighed on a truck scale located near the mill, after which the material is dumped into the Run of Mine (“ROM”) stockpile. Ore is then re-handled from the ROM stockpile to the primary jaw crusher by a loader. Oversized material is broken by a mobile hydraulic rock breaker.

Historically, the mine has been the bottleneck for production at Cozamin. The processing plant was operated intermittently, starting up when the ROM stockpile is full and shutting down when the remainder in the stockpile and the inflow from ongoing mining operations is insufficient to continue to feed the processing circuits at capacity. An internal Material Handling Study (“MHS”) in 2018 concluded that the under-utilized processing plant is estimated to be capable of crushing, grinding and beneficiating an additional annual average of 842 tpd if such feed were available. The MHS then studied a variety of material handling solutions to close the gap between current mine production levels and mill capacity.

The first stage of the MHS identified the current hoisting and haulage resources as the limiting factor in mine production. The hoist is utilized at capacity and production from the shaft rarely exceeds 2,000 tpd. A traffic study concluded that truck haulage capacity is limited by the bi-directional use of the Guadulapana Ramp for ore haulage. The estimated impact of this traffic to the current truck fleet is a reduction of approximately 35% of the potential truck haulage system capacity. The compartmental nature of the LHOS mining method used at Cozamin allows multiple mining areas to be accessed simultaneously, as long as sufficient development has been completed. Cozamin Mine has a long history of stable relationships with mining contractors, which account for the entire truck haulage efforts and the bulk of development efforts. The scalable nature of contract mining, along with unused capacity for development and ore production using the current equipment fleet provides the foundation that mine production would be capable of matching the rate of a new haulage, hoisting or novel ore movement solution.

Solutions considered in the MHS included hoist upgrades, new hoisting infrastructure, vertical conveyors, standard conveying in steep decline and innovative solutions such as the *Railveyor* technology. The final recommendation from the study leveraged the geometry of the Cozamin orebodies and ramp systems to propose a design for a one-way truck haulage loop that greatly eliminates the impact of traffic stemming from both uphill and downhill traffic in the current Guadulapana Ramp.

The one-way haulage loop was completed in December of 2020 and is shown in Figure 16-11. Capital expenditure considered in this design included the development of approximately 1,600 m of decline between the lowest part of the San Rafael ramp system to the top of the planned San Jose II ramp system. Connecting these two ramp systems (approximately 1 km @ -12% gradient) plus approximately 600 m of development at -12% gradient from approximately 100 m down-ramp from the Guadulapana portal to the top of the San Rafael ramp system (The Upper Guadulapana Ramp), combined with the “contrafrente” lateral drift system in the MNFWZ, provides the opportunity to eliminate bi-directional traffic in all but the active mucking areas and the first 600 m of the Guadulapana Ramp.

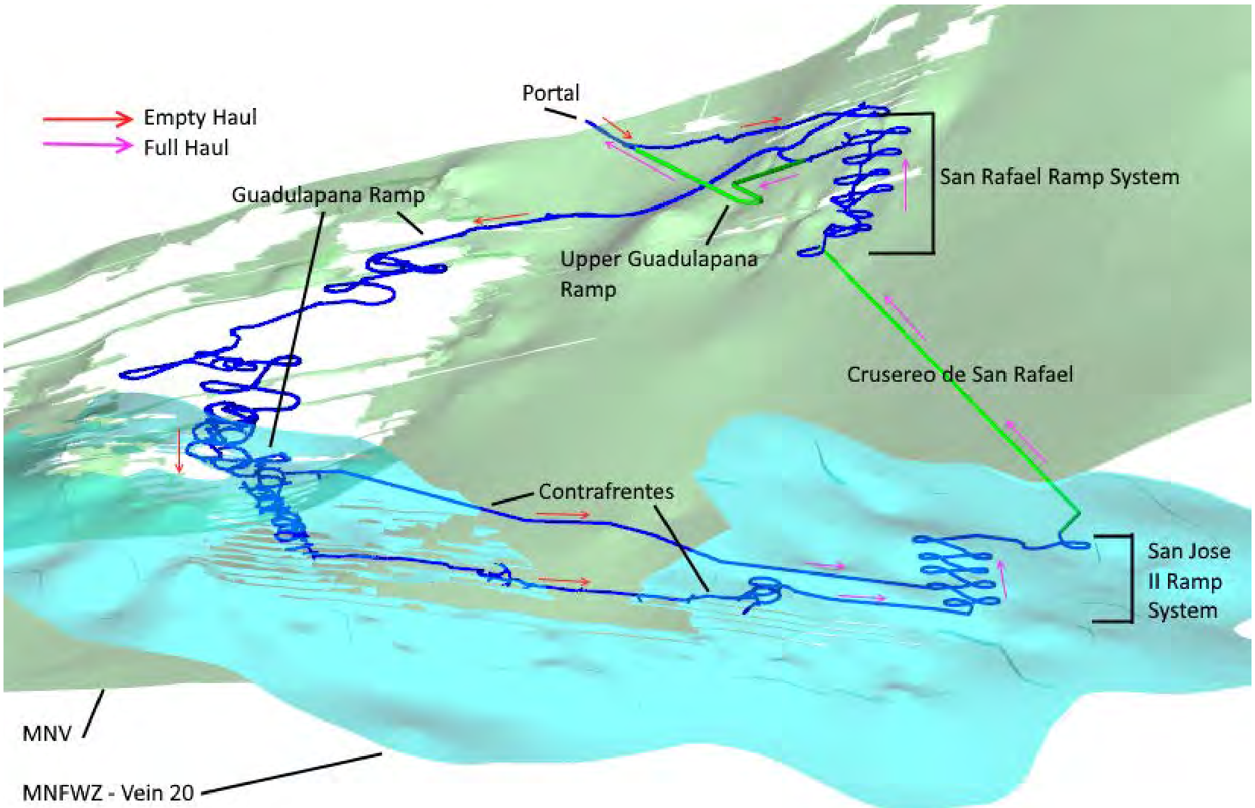

Figure 16-11: One-way Haulage Loop, view looking down with plunge of +20° and azimuth of 35°

The combined effort to develop both the San Rafael and San Jose II ramp systems and develop the 1,600 m considered in the MHS required approximately 5.3 km of capital development, including approximately 500 m of off-centerline support development (i.e. muckbays, electrical substations, pump stations, etc.).

Construction of the one-way ramp started in January 2018 and was completed in December of 2020. During the construction period, development of intra-mine accesses and preparation of ready-to-blast mineral inventory was prioritized to allow a production increase of approximately 30% to 3,780 tpd upon the completion of the Crucero de San Rafael and the Upper Guadulapana Ramp.

Alternatives to haulage in upper levels of the MNFWZ Vein 20 should be assessed. Cozamin staff should continue to develop plans to reduce truck haulage in upper levels by implementing a system of ore passes and finger raises. Implementing this design and procedural change could create improvements in haulage safety, ventilation quality, and operating costs.

16.5 Paste Backfill

A pre-feasibility study of a tailings dewatering and paste backfill system was completed in December 2020 (Paterson & Cooke, 2020), and the information in this section is based on that study. A feasibility study is underway and is expected to be completed in March 2021. The objective of the paste backfill system is to utilize paste as a ground support medium to increase the mine's extraction ratio by eliminating the need for most pillars.

The nominal design flow rate of the proposed paste plant is 86.5 m³/h, as required to meet the backfill requirements of the LOMP presented in this report. Average annual paste backfill production rates and utilization rates are presented in Figure 16-12.

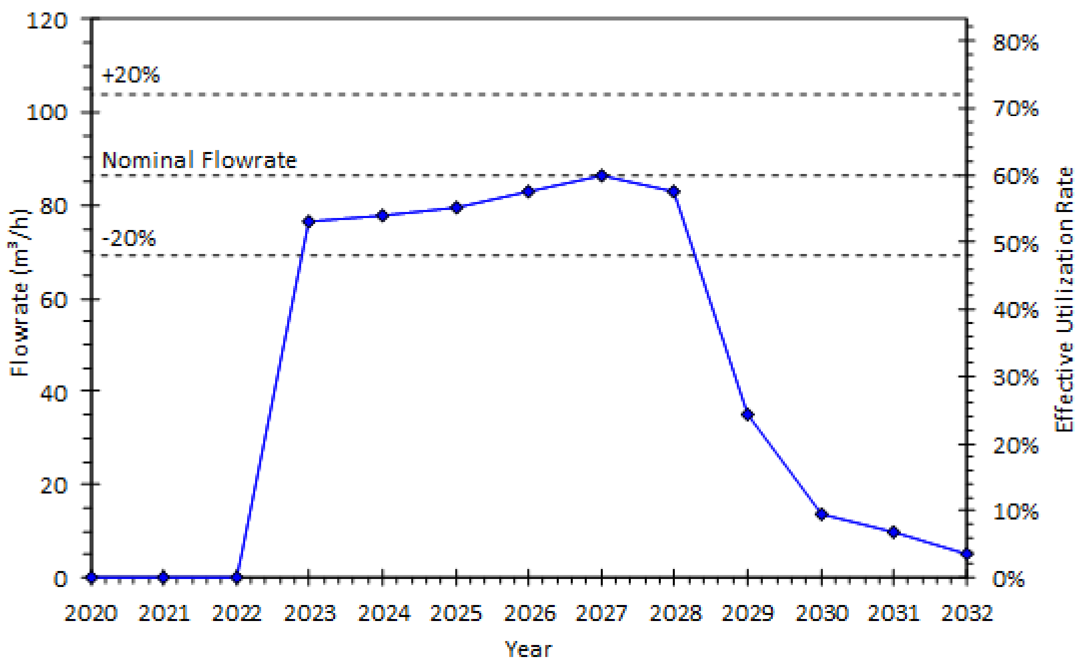

Figure 16-12: Paste Plant Throughput and Effective Utilization by Year

Cemented paste backfill requires a minimum strength to ensure wall stability in vertical exposures and for mining underneath paste. The recommended paste strength requirements for vertical and horizontal exposures are 212 kPa and 1000 kPa, respectively, based on geotechnical analyses. Stopes should be backfilled as soon as reasonably practicable and should be tight filled to minimize potential for instability. A summary of estimated binder contents and cure times needed to achieve the required strength requirements are summarized in Table 16-11. Subsequent studies have shown that cement should be commercially available for similar cost that allows 212kPa to be achieved after only 7 day cure time, and therefore this improved timing has been incorporated into the mine plan scheduling.

Table 16-11: Estimated Binder Content to Achieve Target Strength

Recipe	Target Strength	Cure Days	Binder Content
Paste Recipe 1	212 kPa	28 Days	4.2%
Paste Recipe 2	1000 kPa	28 Days	12.9%

Surface infrastructure needed to dewater tailings and produce paste backfill are discussed in Section 18. Paste will be delivered to underground workings via two surface boreholes located next to the paste plant (Figure 16-13). The surface boreholes will break though on Level 10 and interlevel boreholes off Level 10 will be used to access individual levels as mining progress.

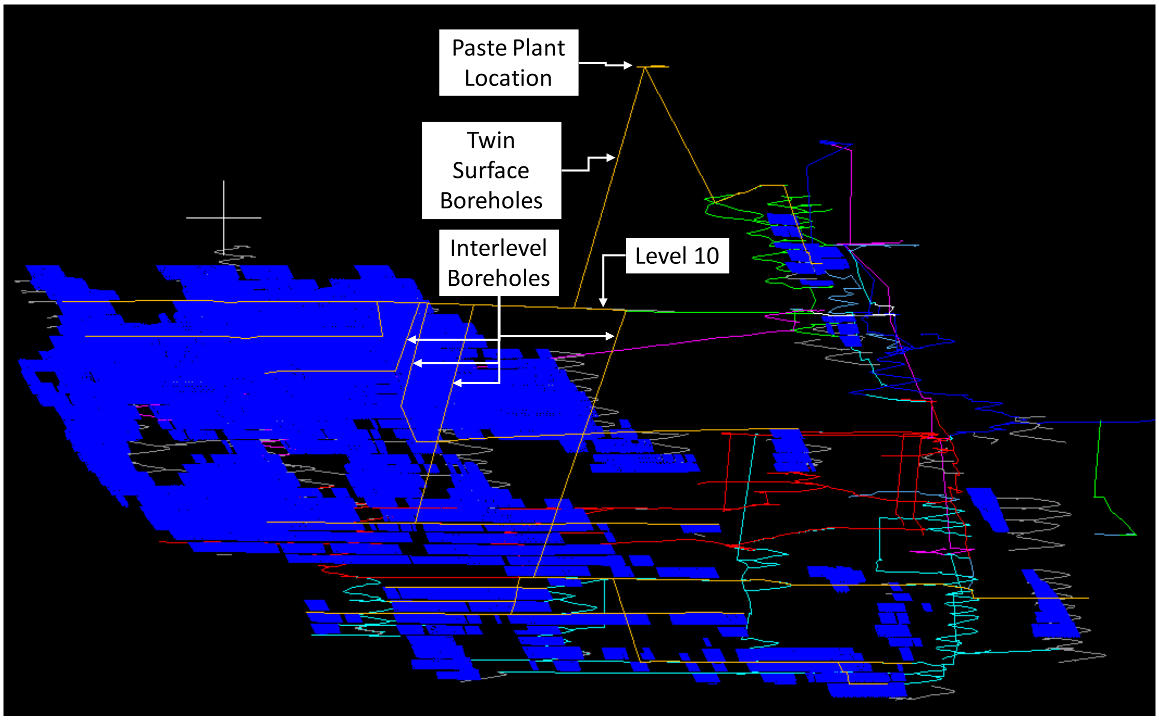

Figure 16-13: Underground Paste Distribution System, view looking west

Distribution of the paste to the various working levels will be accomplished by manual switch-overs from the main trunk line(s) to the level piping and eventually the stope piping. Instrumentation will be installed in key locations to report pressure data back to the plant operator. Manual valves will be installed just before the stopes to allow for diversion of flush water away from the stope to a containment area provisioned for by the mine.

This underground distribution system will be flushed with water before and after each pour, namely pre-flush and post-flush. Pre-flush is used to check for blockage in the system, to confirm the routing is correct and to wet the lines so the paste will maintain the moisture content as it travels down the system. This flush water will be diverted away from the stope and will report to the mine dewatering sumps.

16.6 Mine Ventilation

The underground workings are ventilated using a push pull system with intake and exhaust fans located on surface, and booster fans underground delivering 1,050,550 CFM (496 m^3/s) of fresh air through the MNV and MNFWZ. Fresh air enters the mine through the San Roberto shaft, Guadalupana ramp, San Ernesto ramp and nine separate ventilation raises. Approximately 67% of the exhaust air leaves the mine through two principal ventilation raises and the rest through the old workings above the current San Rafael orebody. Underground booster fans, internal raises, and ventilation doors transport the fresh air to the desired locations.

There are currently four dedicated main mine fans. Exhaust routes are configured to serve the different areas of production (Figure 16-14).

- 620 hp Zitron injection fan at the Robbins #10 raise for western zones
- 620 hp Zitron exhaust fan at the Robbins #23 raise for central zones
- 620 hp Zitron exhaust fan at Estacion #14 for eastern zones
- 772 hp Zitron exhaust fan at the Don Robbins 818m raise serving V20 SW

A variety of booster and level fans are used where needed to direct fresh air to production areas and include:

- 19x 30-50 hp fans
- 11x 50-100 hp fans
- 6x 115 hp fans
- 2x 150 hp fans
- 3x 250 hp fans

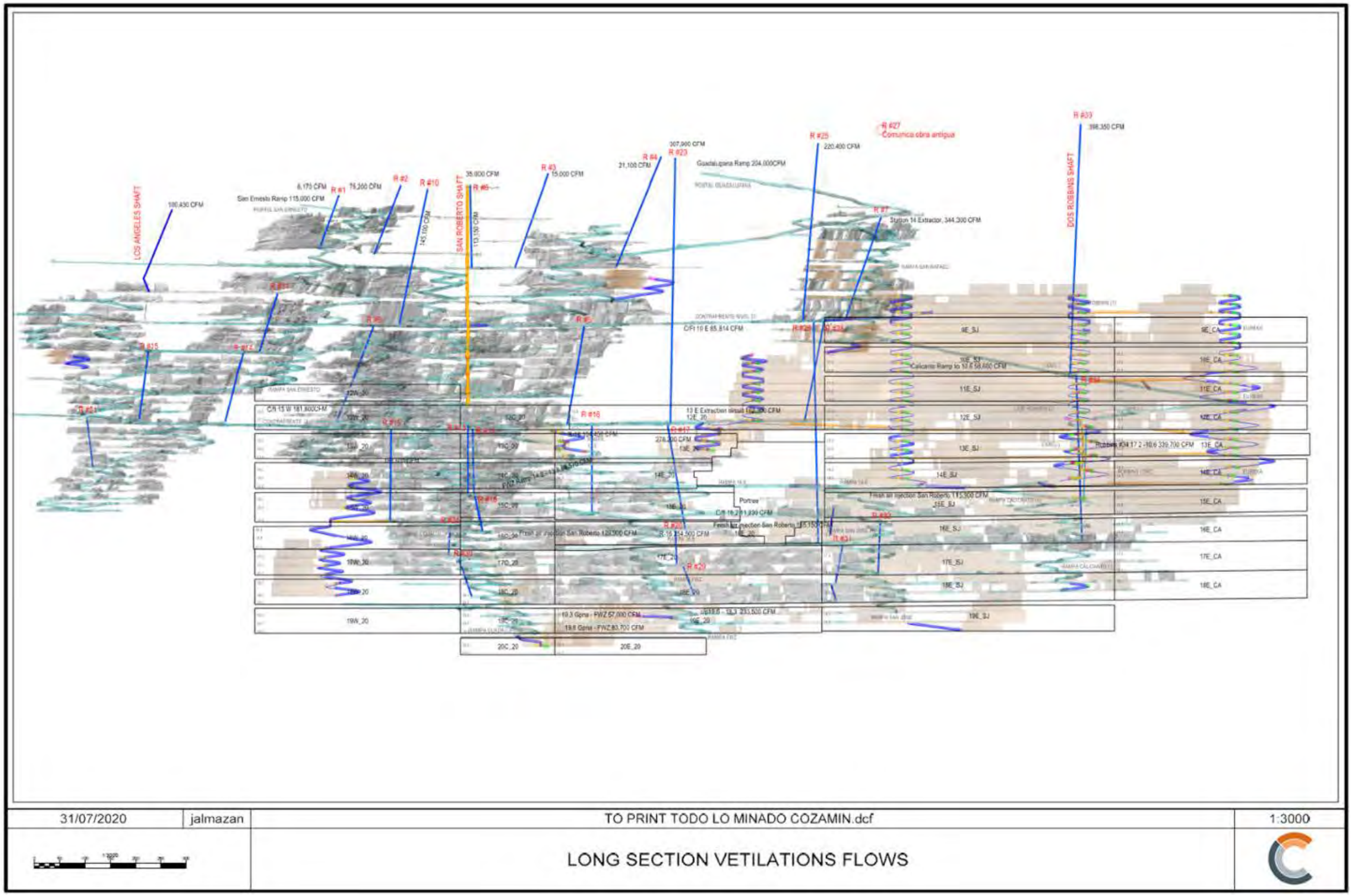

Figure 16-14: Cozamin Ventilation Network Section, looking to the northeast at 55°

16.7 Mine Dewatering

No significant constraints relating to groundwater have been encountered, nor are they anticipated.

Cozamin's mine dewatering system is shown in Figure 16-15. The mine dewatering system is centrally located in the San Roberto mine. The system uses a series of sump levels to assist with the decantation process. The western regions of the mine use five submersible pump stations on different levels and transfer water along Level 10 to the central pump station. The San Roberto zone and MNFWZ use a combination of submersible and horizontal pumps to transfer water to Level 10. Level 10 uses a 100 HP submersible pump to transfer water to Level 8. Vertical pumps are located on Level 8 to transfer water to surface for process water. A small portion of water is recirculated back into the mine for use by mining equipment and processes.

Upgrades to the dewatering system are in progress in anticipation of mine expansion. Four main pump stations are planned in on Levels 19.6, 14.8, 12.2, and Estacion #16 to manage drainage from production areas and inflows from the new excavations. Future dewatering needs are modeled according to predicted inflows based on past mining experience in the MNV and MNFWZ. Unanticipated inflows would require additional pumping infrastructure, however since the mine is developing from the bottom upwards, no impacts to production or additional operating risk are expected.

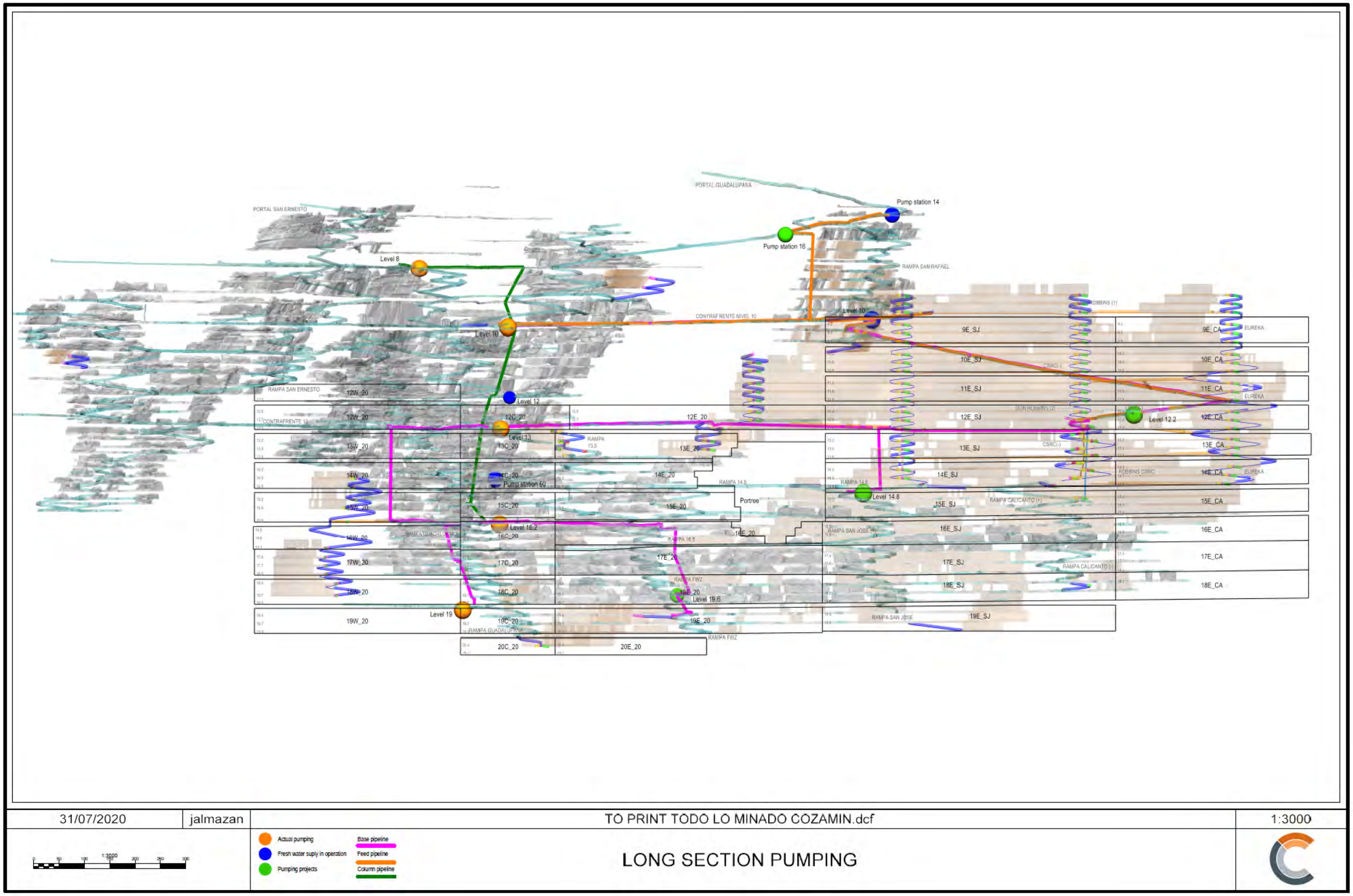

Figure 16-15: Cozamin Dewatering Network, Section looking to the northeast at 55°

16.8 Mobile Equipment

Cozamin has a fleet of modern mobile equipment composed of Capstone-owned and contractor-owned equipment. Capstone personnel concentrate on production and internal mine haulage. Contractors are used on site for haulage and capital development that exceed the current Capstone fleet capabilities. Table 16-12 highlights the Capstone fleet and Table 16-13 shows the contractor fleet.

Table 16-12: Capstone-owned Major Mobile Equipment

Equipment Type	Model	No. of Units
Load-haul-dump ("LHD") Scoops	LH 410 Sandvik (4.6 m^3)	11
	Toro 006 Sandvik (3.0 m^3)	1
Jumbo Drills	Axera 5 Sandvik 16 ft	2
	DD-311-40 Sandvik 16 ft	1
Long-hole Drills	DL310 Solo Sandvik	1
	DL311 Solo Sandvik	2
	DL331 Solo Sandvik	1
Haul Trucks	TH430 Sandvik – 18m^3	2
Rock Bolters	DS 311 Sandvik	4
Rock Scalers	853 S8 Paus	2
Motor Grader	G930 Volvo	1
Telehandlers	Caterpillar (1x TH360B; 2x TL642C)	3
Backhoe Loaders	416F2 Caterpillar	2
Surface Haul Trucks	International/Volvo/Mercedes-Benz	5

Table 16-13: Current Contractor-owned Major Mobile Equipment

Equipment Type	No. of Units
Load-haul-dump ("LHD") Scoops	8
Jumbo Drills	9
Rock Bolters	9
Haul Trucks – Total Available	79
Haul Trucks/shift - 5m^3	7
Haul Trucks/shift - 14m^3	20

16.9 Production Schedule

The LOMP does not include any significant stockpiling of low-grade material. It includes all Mineral Reserves reported in this Technical Report. Figures may not sum due to rounding.

Table 16-14 shows the LOMP production schedule.

Table 16-14: Cozamin LOMP Production Schedule

	Nov-Dec 2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Cu Production (M lbs)[1]	7.0	51.2	56.5	65.2	65.9	57.8	57.4	57.3	42.2	35.2	23.3	4.1
Ag Production (M troy ozs) [1]	0.21	1.52	1.65	1.76	1.84	1.72	1.75	1.67	1.48	1.38	1.20	0.34
Pb Production (M lbs) [1]	0.2	0.1	0.0	0.0	0.6	6.1	5.6	4.2	6.7	10.9	9.8	5.9
Zn Production (M lbs) [1]	1.4	0.71	0.0	0.0	1.1	9.8	7.7	6.6	12.0	16.7	20.1	8.4
Tonnes milled (M tonnes)	0.19	1.36	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.23	0.31
Cu Grade (%)	1.78	1.79	1.94	2.22	2.25	1.99	1.97	1.97	1.46	1.26	0.97	0.68
Cu Recovery (%)	96.1	95.6	96.0	96.2	96.2	95.5	95.7	95.7	94.6	91.5	88.9	87.3
Ag Grade (g/t)	43.7	41.8	43.8	45.8	48.1	46.2	46.8	44.6	41.3	40.7	43.5	51.6
Ag Recovery (%)	81.6	83.8	85.0	86.3	86.3	83.8	84.4	84.6	80.4	76.5	69.9	67.0
Pb Grade (%)	0.13	0.05	0.04	0.02	0.04	0.23	0.22	0.17	0.26	0.41	0.46	1.09
Pb Recovery (%)	46.2	8.3	0.0	0.0	53.8	86.3	85.6	83.8	85.1	86.5	78.5	79.2
Zn Grade (%)	0.73	0.41	0.28	0.23	0.26	0.64	0.52	0.46	0.59	0.78	1.04	1.67
Zn Recovery (%)	46.9	5.8	0.0	0.0	14.1	50.5	49.2	47.2	66.8	69.7	71.1	73.5

NOTES:
1. Contained metal in concentrate
2. Cozamin's LOMP has been updated based on the Mineral Reserves as of October 31, 2020.

16.10 Opportunities

- A study will be initiated in 2021 to assess alternative mining techniques with the objective of lowering costs and dilution to convert resources to reserves. Possible alternatives that will be studied include Cut-and-Fill, Drift-and-Fill and ore sorting technology.
- Cozamin is assessing the opportunity to rapidly implement a Cemented Rock Fill (CRF) system to allow the safe and economic recovery of additional pillars. This includes areas mined prior to the planned start of paste backfilling in 2023, and/or where it is not economic to deliver paste. Preliminary results indicate that CRF could be implemented with low capital cost in advance of 2023, and additional study is underway.
- Cozamin is assessing the opportunity to identify areas where strictly overhand mining with gob backfill may allow the option to leave no sill pillars.
- The possibility of initiating paste backfilling earlier than 2023 is being investigated. Cozamin is assessing a package of used tailings filters that could potentially allow more rapid filter plant construction, along with other options.
- The paste backfill pre-feasibility study makes a number of conservative estimates for equipment and materials costs, geotechnical stability and other factors. The feasibility study currently underway includes additional laboratory testing and more detailed system design. It is expected that this feasibility study may identify opportunities for capital and operating cost savings, and for increased pillar recovery through optimization of the mine plan.
- Recovery of pillars in areas mined in the past is being investigated using paste fill and other techniques. Cozamin has left unmined pillars needed for geotechnical stability throughout its mine life and will continue to do so until paste backfill is available. Typically, conventional backfilled areas have been designed to leave approximately 26% of the total mineralization behind in pillars.
- Stope dilution in the deeper areas of the northwest end of the MNFWZ have been high compared to other long-hole open stope mines, driven by narrow veins and local geotechnical conditions. As mining progresses away from this area, an initiative is underway to reduce dilution site-wide through improved engineering, planning, long-hole drill control and optimized explosives design guided by a team of consultants and site experts.

17 Recovery Methods

17.1 Introduction

Mr. Gregg Bush visited the Cozamin Mine in August of 2019 in connection with an evaluation of alternative tailing disposal sites. In his previous capacity as Senior Vice President and Chief Operating Officer of Capstone Mining Corp., Mr. Bush visited the mill in June 2018. Mr. Bush has been in close contact with the Plant Manager during the development of this Technical Report, tracking the mill performance. The mill remains largely as described in previous technical reports. Some minor modifications to the crushing and milling circuits were completed in late-2020 and others are planned during Q1-2021 which will sustain the higher mill throughput projected in the LOMP presented herein.

The Cozamin mill has processed increasing tonnages from the San Rafael resource since mid-2018. The review of the process flowsheet focuses on confirming that the current flowsheet is capable of delivering the projected throughput requirements during the 2020 to 2030 fiscal year periods. In the early years ore contribution will be primarily form the MNFWZ. The zinc ores from the 10 Vein will begin to be processed in late 2024, and contribution from this area, along with San Rafael will contribute to the end of the planned mine life. An analysis of actual plant performance during the 2019 and 2020 year during high throughput periods was also used to confirm the findings and to confirm that the actual recovery performance of the plant was consistent with the recovery projected by the algorithms provided by Blue Coast Metallurgy Ltd. Additionally, a test was conducted using ore mined from the San Jose extension area of the MNFWZ during a continuous 11-day period in May of 2020. In addition, one of the planned mill head replacements planned for early 2021 was completed in January 2021 (Ball Mill No. 2). These test period are considered relevant to the mill performance projections in this report as the test material closely matched predicted future ore hardness from the MNFWZ, and provided several data points for confirmation of the revised recovery algorithms developed by Blue Coast Metallurgy Ltd. for this update.

The mine production profile does not reach the projected maximum mining rates until early 2021. It is anticipated that minor modifications to the plant, as outlined below, will be required in order to sustain the peak milling rates required by that time.

17.2 Process Design Criteria

The objective of the plan presented is to maximize the mine production for the remaining mine life. The design calculations for the processing plant were focused on identification of potential bottlenecks in the mineral processing circuit under the expected mining rates going forward.

Table 17-1 provides the basic process design criteria used to determine the required capacity for the plant and to confirm the capacity of the existing facility and recommended modifications to remove any potential bottlenecks. Projected unit operation availabilities and utilizations are based on actual plant performance over the past year. Overall mill mechanical availability has been reduced from the previous estimate of 95% to a more conservative 90% based on long-term projections at the higher operating demands of the revised mine plan with sustained higher throughputs with higher grades and with operation of the zinc and lead circuits over a longer period.

Table 17-1: Selected Process Design Criteria

Parameter	Units	Value
Average Plant Throughput	dry t/d	3,780
Operating Day	hours	24
Plant Feed Grade Capacity	%Cu	2.6
Crusher Availability	%	83.3
Crusher Utilization	%	80.0
Crusher Operating Time	%	68.0
Mill Availability	%	90.0
Mill Utilization	%	98.0
Mill Operating Time	%	88.2
Ore Bond Work Index	BWi @212 microns	18.5
Mill Feed Size	microns	6300
Mill Product Size	microns	230
Copper Concentrate Grade	%Cu	25
Copper Filter Availability	%	87.0
Copper Filter Utilization	%	95.0
Plant Fresh Water Consumption	m^3/t	0.82

17.3 Process Plant Overview

There is an existing process plant at Cozamin mine. Actual mill performance, together with the expected capacities achievable with the installed equipment, was used to assess the maximum practical sustainable mill throughput target for this study. The Cozamin mill has historically been constrained by the maximum achievable mining rates. However, improved materials handling now possible with the increased Reserves and favorable Reserves geometry, will allow that constraint to be removed or increased as mine improvements are implemented. The maximum mining rate that is expected in the new mine plan is 3,780 t/d beginning in late Q1 2021.

The evaluation consisted of a review of the process flowsheet for any potential bottlenecks at the expected peak mining rates from 2021 onwards and assessing the feasibility of removal of those bottlenecks with minimal capital expenditure. The evaluation is broken down by unit process in the mill, including the crushing plant, the grinding plant, flotation, concentrate filtering and tailing handling. A mass balance based on a mill throughput rate of 180 tonnes per hour (“tph”) (3,980 tpd calendar or 4,500 tpd nominal) based on a projected 88.2% operating time. This would provide a one standard deviation over the average mill throughput needed to sustain the peak mining rates based on current mill operating variability. The output of this mass balance was used to check against the capacity of the installed equipment.

In addition, the actual flotation recoveries of copper, zinc and silver on a daily basis during a test run of San Jose material were checked against the algorithms developed by Blue Coast Metallurgy Ltd. to confirm the ability of the existing operation to meet the projected recovery targets. Copper and zinc recovery performance during the 11-day test period were checked against the recovery algorithms.

It is relevant to note that during June of 2020 the mill operated at an average hourly throughput of 167 t per operating hour, which compared with a targeted throughput of 169 t per operating hour. The operating results during the May test period with San Jose material, together with the sustained mill performance in June, support the conclusion that the plant is physically capable of processing 3,780 t/d on a sustained basis with very minimal debottlenecking of the crushing and milling circuits to accommodate the slightly harder ores expected in the future. The anticipated circuit modifications are discussed below.

Following the installation of the new Ball Mill No. 2 head in January 2021 monitoring of the mill performance confirms expectations that, together with the remaining modification planned for March of 2021, the mill will be able to meet or exceed the throughput expectations outlined in this plan.

17.4 Crushing Plant

The crushing process flow sheet is illustrated in Figure 17-1. Ore is presently trucked from the headframe bin and underground ramps to a surface stockpile for blending to produce a consistent copper feed grade. The surface stockpile of approximately 10,000 tonnes is reclaimed by a front-end loader that feeds the material to a 100tonne bin. Ore reports to the 0.5 m x 0.9 m primary jaw crusher via belt feeder. An average crushing capacity of 230 tph would be required based on an 85% overall crushing plant availability and a 80% utilization. Peak hourly throughputs would likely exceed 280t/h. The existing primary crusher is capable of sustaining this throughput rate. A second feed bin and feeder are installed that will allow the crushed underground ore, which represents approximately 45% of the total feed at the targeted production level, to bypass the surface jaw crusher. This ensures ample excess primary crushing capacity. A vibrating grizzly which would unload the surface primary crusher was planned for installation in 2019. This modification was not completed. This modification will need to be completed prior to increasing the throughput on a sustained basis in order to ensure targets are met with reasonable crushing availability and utilization rates.

Primary crusher product is conveyed to the secondary 1.52 m x 3.66 m vibrating screen ahead of the 1.22 m secondary standard head cone crusher. Screen oversize is fed to the secondary crusher with screen undersize combined with secondary crusher product. This material is conveyed to a 1.83 m x 4.88 m vibrating screen with oversize material conveyed to the tertiary crusher (Metso HP4) and undersize material being conveyed to the fine ore bins, for the two main ball mill circuits and original ball mill circuit. Tertiary crusher product is returned to the 1.83 m x 4.88 m screen. The secondary/tertiary crushing plant has been audited at steady state with throughput above the 280 tph target demonstrating the capacity of the plant to operate at this level with all motors drawing loads well below their rated maximums. Two 1,200-tonne capacity fine ore bins are available each feeding one of the two primary grinding lines in the milling circuit. Each bin provides approximately 20 hours storage for the respective grinding line at the current milling rate. This would drop to approximately 12 hours at the projected rates. This would require all extended maintenance activities in the crushing circuit to be scheduled together with the mill maintenance program. In addition, spare bowls and mantles for the secondary and tertiary crushers would be required to ensure rapid turn-around on steel changes.

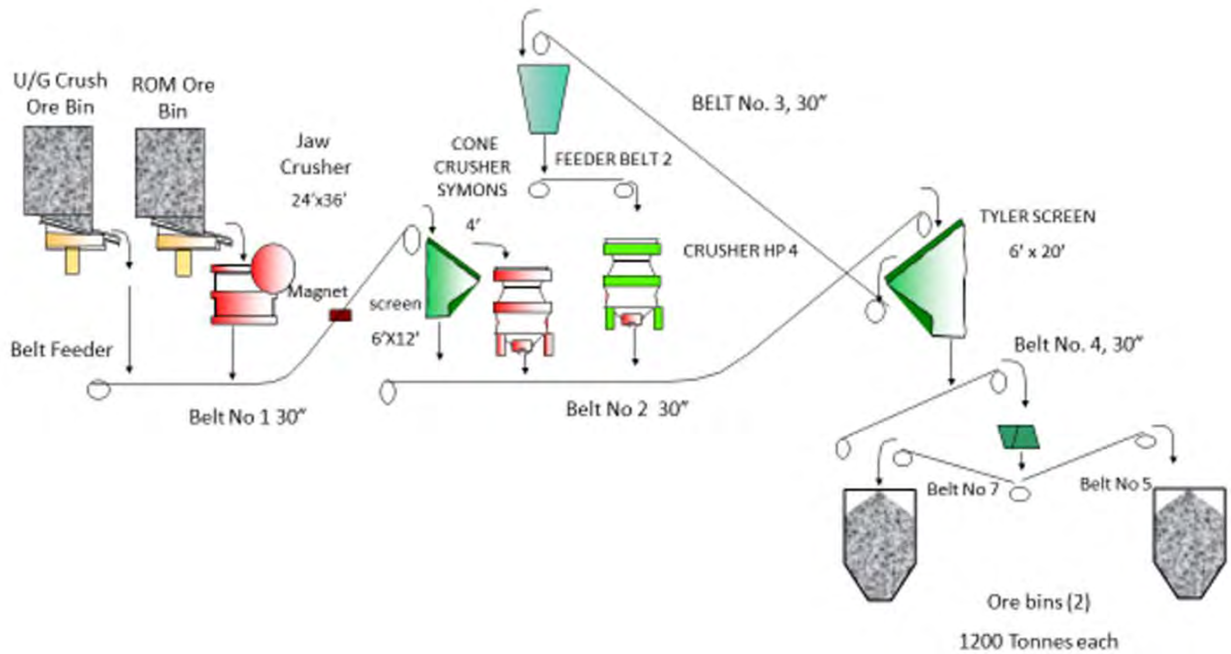

Figure 17-1: Crushing Flow Sheet

Operating data from 2019 suggests that while the crushing circuit has regularly achieved average hourly throughputs near the targeted levels, the circuit has yet to be tested at the sustained production levels expected in the future. The expected increase in ore hardness would likely stress the tertiary portion of the circuit at the higher end of the hourly throughput range required to sustain the target average throughput at the currently planned circuit availability and utilization. Circuit auditing and modeling indicate that crushing capacity is limited by the tertiary screening efficiency, resulting in overload conditions in the tertiary crusher. The planned installation of higher efficiency screening was competed in October 2020. Circuit performance following the installation of the high-efficiency screen has surpassed the average throughput required to sustain the projected throughput. Installation of the fines by-pass for the underground ore will be critical to reach the projected peak throughput.

17.5 Grinding

The current milling process flow sheet is presented in Figure 17-2. The milling section is composed of two primary ball mills operating in parallel. Each mill is 3.65 m in diameter by 4.27 m long. The original ball mill (2.8 m in diameter by 1.6 m long) grinding circuit was recommissioned to provide additional grinding capacity when mining the Avoca zone in 2013 and 2014 and again in 2018 to support the increase in throughput associated with processing the San Rafael ores. It is believed that some additional capacity would be needed to meet the grinding rates with the harder San Jose ores projected from 2021 onwards. This can be achieved by modifying the current mill discharge arrangements to increase the energy input capacity of the two primary grinding mills. This project has been approved and the No. 2 mill head was replaced in January of 2021, while the No. 1 mill head is scheduled for replacement in mid-March. Both primary mills have 1,500 hp motors installed, but are operating at approximately 1,000 hp draft with the current internal configurations, which includes a discharge trommel insert that has allowed increasing the mill loading to approximately 40%. The modified discharge end design would increase the effective grinding length from 3.32 m to 4.12 m, a 23% increase. Performance of the No. 2 mill following the modification has confirmed the expected performance.

Grinding product size is an 80% passing (P80) 230 microns. Each ball mill is operated in closed circuit with a cyclone pack composed of 0.66 m diameter cyclones. Cyclone underflow reports back to the respective grinding mill with the cyclone overflow from both circuits reporting to a common flotation conditioning tank.

Lime is added to the grinding circuit for pH control throughout the circuit. Flotation reagents including a zinc depressant and a potential modifier are also added to the grinding circuit.

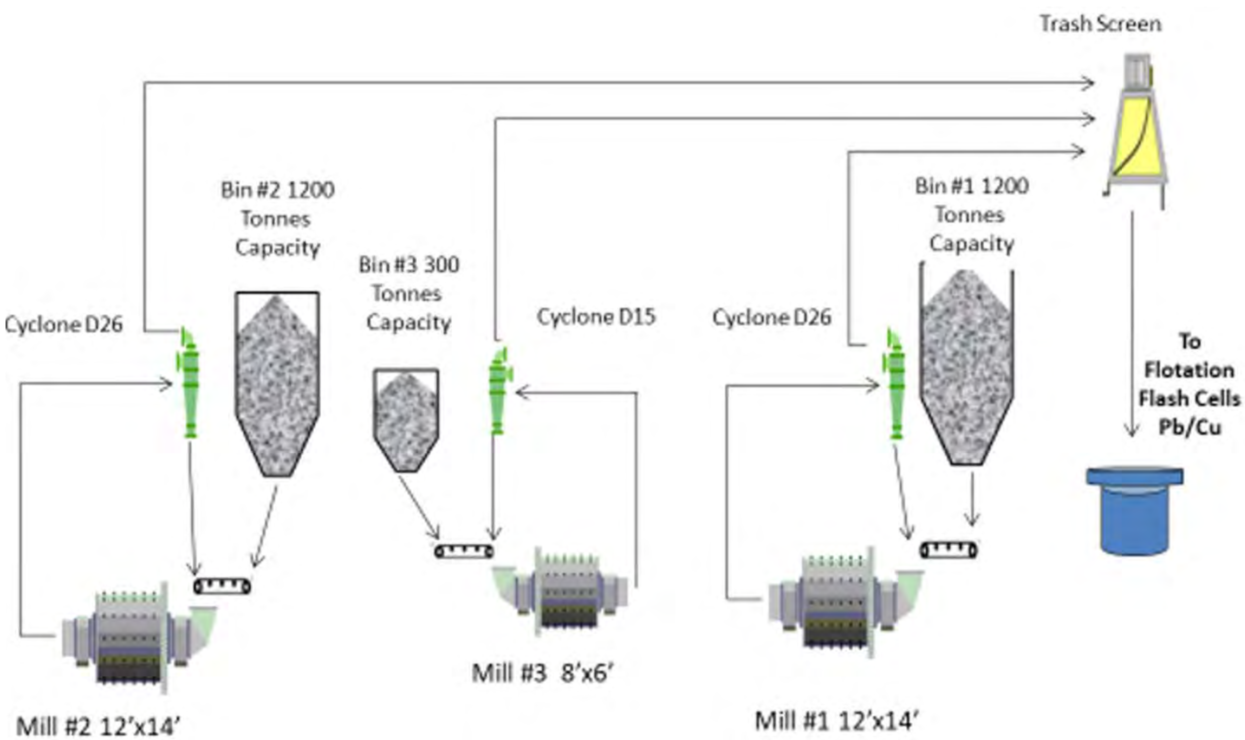

Figure 17-2: Milling Flow Sheet

17.6 Flotation

The original process flow sheet has been expanded to include a tank flotation cell for the recovery of copper and lead for each grinding line. Figure 17-3 illustrates the current flotation flow sheet at Cozamin. Slurry from the grinding circuit is transported to the tank flotation cells for initial copper flotation. Concentrate from this initial stage of flotation reports directly to the copper cleaning circuit. The current mine plan does not contemplate production of lead concentrates from 2021 through 2026.

Tailings from the tank cells report by gravity to banks of rougher and scavenger flotation cells (6-OK 16 cells) for additional recovery of copper. The copper rougher concentrates report to a two-stage cleaning system. The original second stage cleaner cells have been replaced with a column cleaner which has improved the overall concentrate grade.

Copper rougher flotation tailings report to the zinc conditioner tank prior to zinc rougher flotation, where reagents are added to depress deleterious minerals and activate the zinc mineralization. The zinc rougher concentrate reports to a closed circuit regrind for additional liberation of zinc mineralization. Products from the regrind circuit reports to two stages of zinc concentrate cleaning. A column cell has been added to the circuit to improve zinc concentrate grade. Tailings from the first cleaner stage report to final tails.

The capacity of the existing flowsheet was confirmed by comparing calculated residence times at the projected nominal throughput with standard laboratory depletion times. The retention times are 2.5 times the laboratory requirement at 180 tph. In addition, actual shift results from the San Jose trial period in May 2019 with throughput rates at those levels were checked against the recovery algorithms provided by Blue Coast Metallurgy Ltd. and are in line with those projections. Copper grades going forward are consistent with those in the updated mine plan. Zinc grades are expected to remain near the threshold for operability of the zinc circuit from late 2021 until late in the mine life. The mine plan will assume that zinc production ceases at that time and will be restarted when the remaining San Rafael ore is processed beginning in 2027. In operational practice, the zinc circuit can be started on an opportunistic basis when grades merit zinc production over the slight impact on saleable silver production loss when producing zinc.

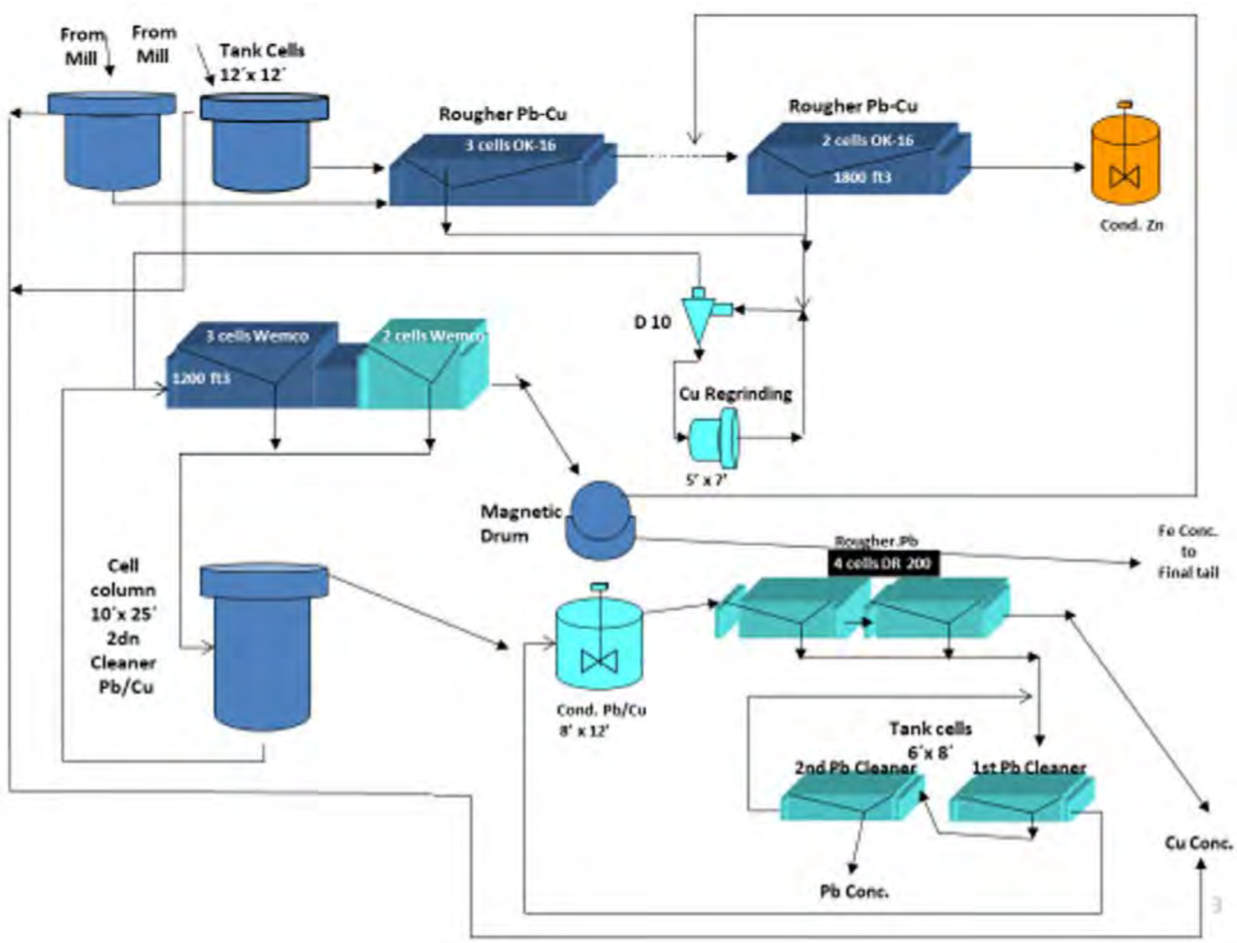

Figure 17-3: Copper Flotation Flow Sheet

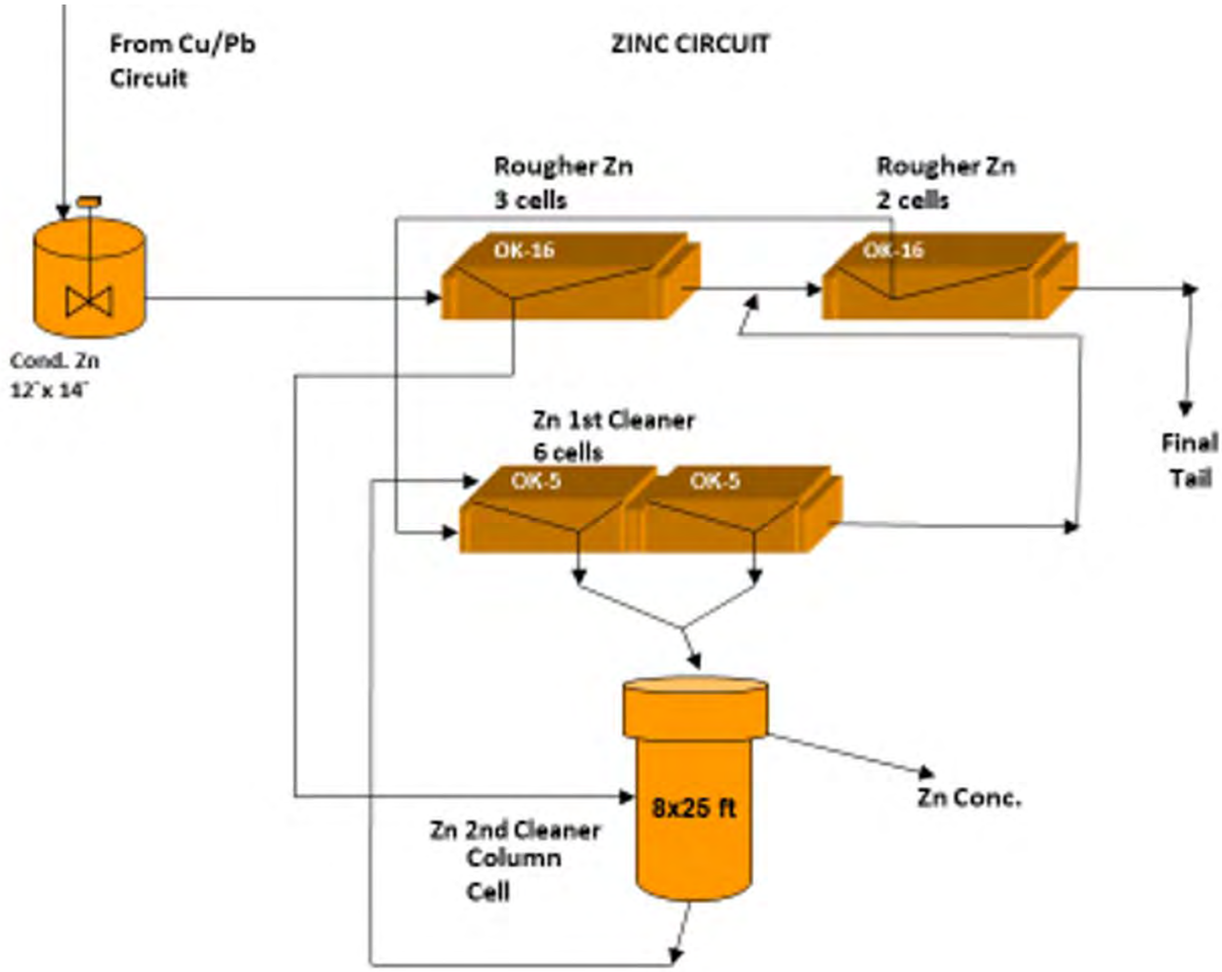

Figure 17-4: Zn Flotation Flow Sheet

17.7 Concentrate Dewatering and Filtration

Copper concentrate is pumped to the 16 m diameter concentrate thickener. Underflow from the thickener is pumped to a holding tank and then filtered in a Larox pressure filter (Figure 17-4). Product moisture is approximately 10%. Copper concentrate can be stored in the inside bins (capacity 1,500 tonnes) or outside on a concrete pad (capacity 4,000 tonnes). Concentrate is trucked to port daily (approximately 600 km) and sampled as the material is transferred to the port warehouse and becomes the property of the buyer.

Higher copper feed grades are anticipated in the future. At the expected peak grades of 2.6% copper, the existing Larox filter would not be able to achieve the required peak capacity of approximately 400 tpd of dry concentrate. The current capacity of the Larox system is approximately 265 tpd. Peristaltic thickener underflow pumps, as well as higher pressure filter feed pumps are planned to be installed in early 2021 that will increase the cycle productivity from the current 2.0 to 2.2 t/cycle to 2.6 t/cycle, equivalent to 340 tpd. The increase in capacity will provide sufficient filtration capacity for most operating conditions. When additional capacity is required, the existing stand-by drum filter has sufficient capacity to filter an additional 200 tpd.

Zinc concentrate is pumped from the 8 m diameter thickener to the 1.3 m diameter x 4 m disc filter. Product moisture is approximately 10% and is stored in the inside bins with a capacity of 1,000 tonnes. The material is then transported to the port and sampled the same as the copper concentrate.

Lead concentrate is pumped from a 4 m diameter thickener to a 1.3 m diameter x 2 m long drum filter. The final moisture is approximately 8% and this material is stored inside (capacity 400 tonnes) prior to shipment by truck to the port. All concentrate trucking is done by a third party. All trucks are weighed both empty and full at the mine site and the port.

With the zinc grade restriction applied, all concentrate handling equipment is capable of handling the increased flow projected in the Cozamin LOMP.

The concentrate trucks are all equipped with GPS to monitor progress between the mine site and the port. The concentrate trucks are scheduled to operate in a convoy to maximize security.

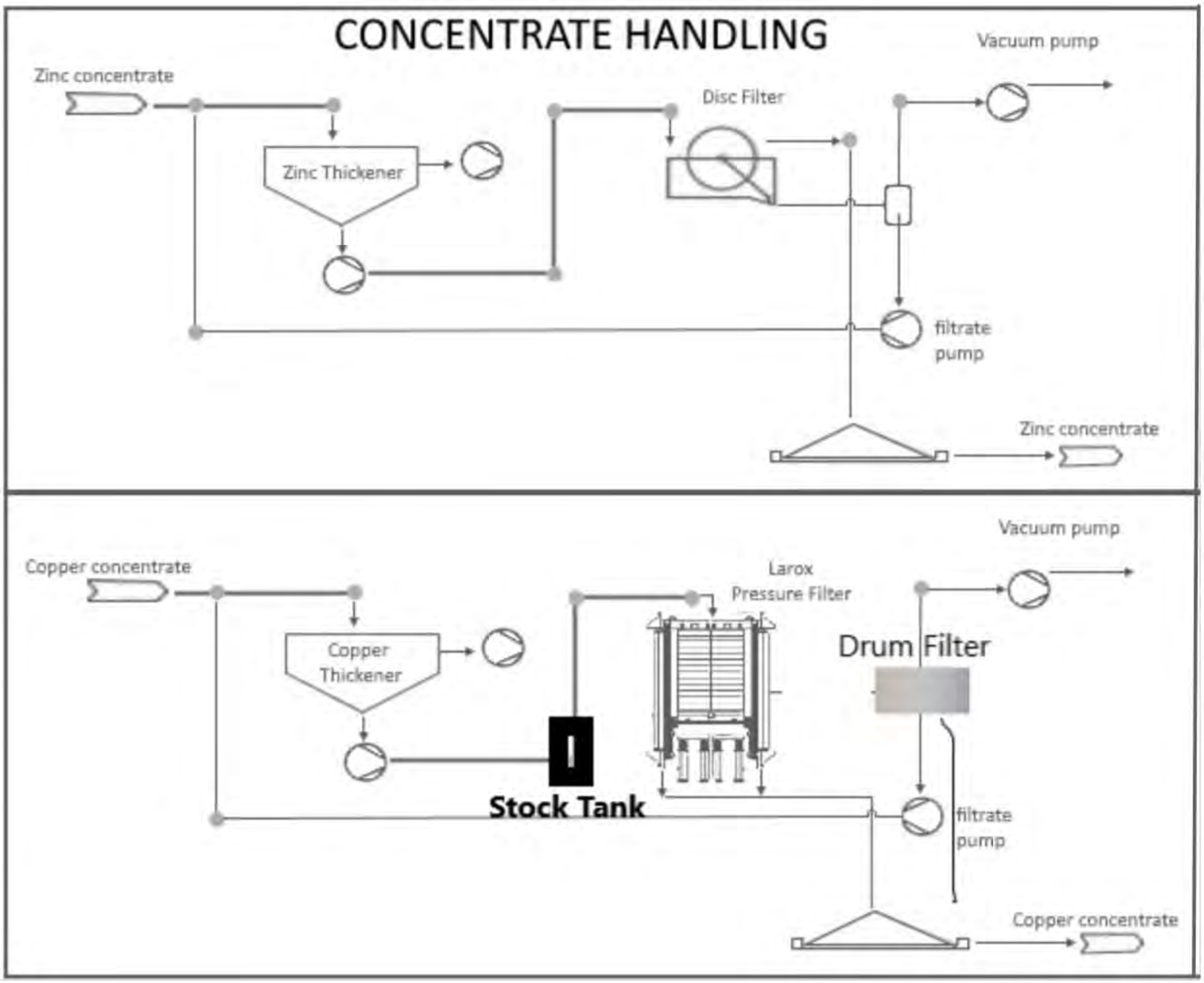

Figure 17-4: Concentrate Handling Flow Sheet

17.8 Tailings Handling

Tailings are currently pumped from the plant at approximately 32% solids to the thickener, where tailings achieve approximately 40% to 42% solids and are subsequently pumped to the TSF for disposal (Figure 17-5). Cozamin TSF maintenance personnel deposit tailings in the TSF via D-20 and D-10 Krebbs cyclones in paddocks approximately 50 m long (normal to the dam crest) and 25 m wide (parallel to the dam axis). The paddocks allow operations personnel to limit the embankment length over which the beach is constructed, mitigating the risk of slimes and water accumulating along the embankment crest. This deposition method allows for better water management and higher overall tailings densities.

When tailings segregation using cyclones is not possible, the tailings bypass the thickener and direct tailings discharge takes place in the southwestern portion of the TSF. Following discharge into the impoundment, the coarse tailings particles settle out of the slurry in the beach area while the water with slimes continues to flow towards the reclaim pond area at the lowest point in the southeastern portion of the impoundment. Water pooled within the tailings pond is either evaporated on surface or reclaimed and sent back to the mill facility for re-use via a barge pumping system and water return pipeline. At present, there is capacity within the existing TSF to store approximately 6 Mt of tailings. As discussed in Section 18, alternative tailings management approaches using filtered tailings are being developed at a feasibility level to provide the additional storage capacity required for the LOMP presented in this report.

The rated capacity of the tailings thickener is 168 tph of tailings (180 tph of fresh mill feed) at a target 68% solids underflow. The actual operating range below 50% solids would provide upside to this limit. In current operation the system operates at less than 15% of the rated torque and is not considered a risk at the future throughput rates.

As the tailing impoundment height is increased, additional pumping capacity may be required. This will be achieved by installing a booster station on the existing sixth level to provide additional capacity for the increased elevation and higher flows.

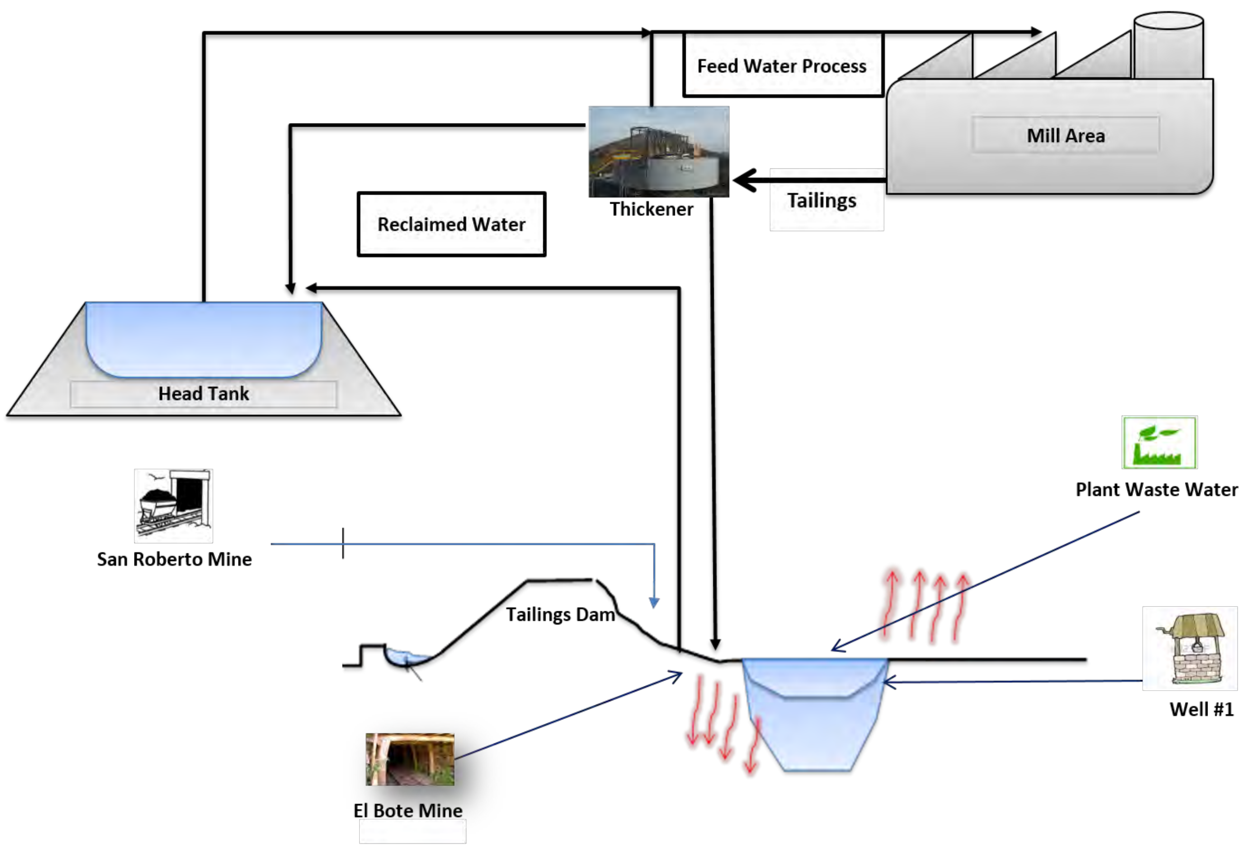

Figure 17-5: Current Tailings Handling Flow Sheet

It is expected that the current slurry tailing deposition system will be transitioned to a filtered tailings system by 2023. As discussed in Section 16 and Section 18, underflow from the existing thickener will be pumped to a tailings dewatering plant. From this plant, a portion of the tailings will be transported to the adjacent paste plant to produce backfill, and a portion of the tailings will be transported to a stockpile. Material from this stockpile will be transported by truck and placed on the filtered tailings storage facility.

17.9 Recommendations Related to Recovery Methods

The QP recommends the following upgrades:

- Construct mill upgrades as described in Section 17, including a grizzly at the primary crusher and fines bypass to final product and increased tailings pumping capacity before production rates increase in 2021. In addition, purchase spare sets of mantles and bowls for the secondary and tertiary crushing circuits to reduce maintenance downtime. The costs of these recommendations have been added to the capital estimate and sum to a rounded US$250,000 to be spent in 2021.
- Install modified mill discharge head Ball Mill 1 to increase mill power utilization. The head is on site and installation is scheduled for the first quarter of 2021.
- Copper filtration capacity is adequately covered by the existing installation with the back-up drum filter that is currently installed. However, this circuit will be stretched at high mill copper grades, and this was the rationale for reducing overall mill availability to 90% from 95%. Further work needs to be completed to evaluate the installation of an additional concentrate filter to reduce the risk of unplanned outages caused by filtration upsets and to improve filtered concentrate moisture contents.

17.10 Comments on Section 17

The Cozamin plant facility cannot meet the requirements of the LOMP without some relatively minor upgrades to the existing facilities. These modifications which are outlined in the relevant sub-sections above have been identified by Cozamin staff. The modifications will ensure the mill is able to consistently meet the planned production rates going forward. The qualified person for this section recommends that these upgrades be completed before Q2 of 2021.

18 Project Infrastructure

18.1 Regional Infrastructure

The Cozamin Mine is located in the Morelos Municipality of the Zacatecas Mining District. The mine and processing facilities are located near coordinates 22º 48' N latitude and 102º 35' W longitude, approximately 3 km north of the city of Zacatecas.

The city of Zacatecas lies between several major Mexican cities along the Mexican Federal Highway system. The city is intersected by major highways that connect it to the larger cities of Aguascalientes, San Luis Potosí, Monterrey, Durango, and Guadalajara. A major railway operated by Ferromex services Zacatecas and services the city through a terminal in Torreón. The Class 1 railway connects the region to Mexico City to the south and to the southern border of the United States to the north. The General Leobardo C. Ruiz International Airport lies 18 km northwest of the city and connects passengers to destinations in Mexico and the United States.

18.2 Mine Underground Infrastructure

As an operating mine, all mining-related infrastructure, with the exception of the proposed tailings dewatering and paste backfill system, is presently in place at Cozamin. This includes hoisting and haulage systems, underground crusher and storage bins, access ramps and lateral development, electrical power distribution systems, compressed air systems, water distribution systems, communications networks, and maintenance shops.

Existing mining-related infrastructure includes:

- San Roberto Production Shaft; 2x – 5 tonne skips; 2,000 tpd capacity
- San Ernesto Ramp; Primary maintenance access
- Guadalupana Ramp; Primary truck haulage access
- Underground jaw crusher with rock breaker and crushed rock storage bin
- Three main lateral inter-ramp haulage drifts; Level 14.8, Level 16.2, and Level 17.2
- 36 ventilation raisebores; Total length 6,089 m
- 3x Main 13.2 kV power feeder cables; one in each decline, and one in Vent Raise #10
- Underground 13.2 kV substations; 10x – 750 kVA, 1x – 1000 kVA, 1x – 1500 kVA
- Compressed air, mine-use water, and dewatering pipelines
- Fiber-optic and wireless radio communication networks
- Contractor mobile maintenance shop with 4 heavy equipment bays
- Capstone mobile maintenance shop with 4 heavy equipment bays
- Dewatering pumps:
    - 8x – 100 hp pumps
    - 12x – 30 hp pumps
    - 20x – 7-15 hp pumps
- Ventilation Fans:
    - 1x – 772 hp Zitron Main Fan
    - 3x – 620 hp Zitron Main Fans
    - 5x – 150-250 hp Booster Fans
    - 17x – 85-115 hp Level Fans
    - 19x – 30-50 hp Auxiliary Fans

18.3 Mine Surface Infrastructure

As an operating mine, all surface infrastructure, with the exception of the tailings dewatering and paste plants, is presently in place at Cozamin. This includes power, pipelines, crushing and conveying facilities, all milling and processing infrastructure, maintenance facilities, roads, and a tailings storage facility with related infrastructure.

The buildings and infrastructure facilities at Cozamin include all buildings, pipelines, pump stations, electrical systems, laydowns, ore storage pads and roads shown in Figure 5-1. The principal surface facilities at Cozamin include:

- Process Plant;
- Site Laboratory;
- Power Sub Station;
- Plant Maintenance Building;
- Mobile Equipment Maintenance Building;
- Mine Entrance Building;
- On Site Back-up Generators;
- Stockpiles;
- Guadalupana and San Ernesto Ramps;
- San Roberto Hoist Room;
- Mine and Geology Offices;
- Waste dump;
- Tailings Storage Facility;
- Administrative Offices;
- Dining Areas; and
- Recreational Complex / Auditorium.

18.3.1 Electrical Infrastructure

Power is currently being supplied to the mine site from the national power grid with a current approval to draw 7.5 MW. Cozamin has requested an increase to 9.5 MW and pending approval and training from CENACE, the increased power is expected to be in place in March of 2021. The 115 kV line voltage is stepped down to 13.2 kV by either the main 12.5 MVA transformer or the spare 12.5 MVA transformer. Generators (both operating and back-up) on site have a capacity of 1.0 MW to back up critical mill and mine plant components.

Peak draw at increased mining rates of approximately 3,780 tpd is expected to be within the 9.5 MW with acceptable margin. The construction and installation of a filter plant for tailings may at times exceed the 9.5 MW approval, depending on the final design and location selected.

Additionally, any future consideration for mine pillar recovery using cemented rock fill or paste backfill will need to be considered. Preparations are currently underway to request the additional increase to power draw likely needed for these facilities.

18.3.1.1 Recommendations

The qualified person for this section recommends that Cozamin staff complete the following in order to ensure uninterrupted power supply:

- Assess future regional power demands and advance the permitting process to further increase line power supply based on final tailings dewatering and paste plant designs. Continue to monitor peak power draw and assess means for smoothing demand peaks. This work should be completed by Cozamin technical staff in the course of their normal duties.

18.3.2 Tailings Dewatering and Paste Backfill

Figure 18-1 shows a simplified process flow sheet for the tailings dewatering and paste plants, illustrating the basic system components. The process design of the paste plant is strongly influenced by the requirements of the underground (both mining and reticulation) and the material properties of the tailings. It is expected that the properties of the filtered tailings will remain fairly constant and the use of a continuous mixing process mixing process is therefore included in the design. Minor changes to tailings properties, binder content, water content and so forth will be controlled by specific sampling and monitoring measures included in the design to ensure a consistent backfill is produced.

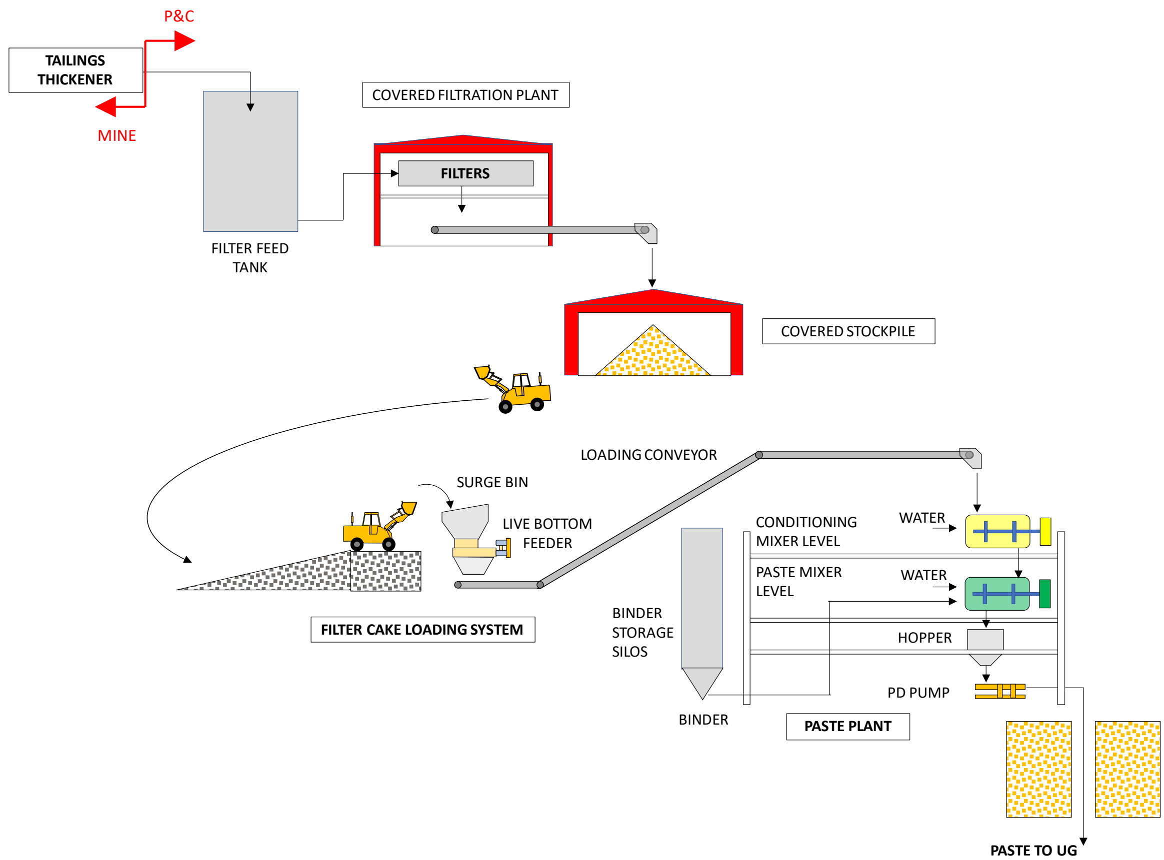

Figure 18-1: Tailings Dewatering and Paste Plant Simplified Process Flow

Tailings from the existing thickener will be pumped using thickener underflow pumps to a filter feed tank located at the tailings dewatering plant. The tailings will be fed continuously when the process plant is operating.

Filter feed pumps will draw thickened tailings from the filter feed tank and pump it to a series of pressure filters to further increase the solids content of the tailings.

Filter cake produced by the pressure filters will drop onto dedicated filter cake collector conveyors which will deposit the cake onto a tripper conveyor and deposit the filter cake within a covered stockpile building. A front-end loader will source filter cake from the stockpile and load the material into the haulage trucks to transfer the filter cake to the dry stack facility or will deposit the cake into a surge bin feeding the paste plant mixing tower.

The filter cake loading system feeding the paste fill mixing plant will consist of a surge bin being fed by a front-end loader. The surge bin will have a dedicated live bottom feeder discharging onto a dedicated filter cake conveyor to control the feed to the paste plant. The filter cake conveyor will deposit material into a conditioning mixer located at the top of the paste plant.

As filter cake discharges off the filter cake conveyor and into the conditioning mixer, process water will be added to re-pulp the filter cake into a manageable mixture and to ensure clay clumps are mixed in. The paste discharges out of the conditioning mixer and into the continuous mixer located below.

A binder system will be used to feed binder to the continuous mixer. The binder system consists of storage silos, rotary vane feeders, screw conveyors and a weigh belt feeder to control the binder addition into the continuous mixer.

The final paste from the continuous mixer is discharged into the paste hopper located below. Paste discharges out the paste hopper to a hydraulic piston type paste pump which pumps the paste to a surface borehole to access the underground workings, as discussed in Section 16.

18.3.3 Water Supply

There are three primary sources of fresh water at Cozamin: permitted wells, permitted groundwater from nearby underground mines, and discharge water from a local municipal water treatment facility. The existing baseline information and site water balance suggests that the current sources and operational water management will be sufficient for the current LOMP.

The site averages 0.82 m^3 of fresh makeup water per tonne of ore milled. There are no changes expected to tailings management practices that would modify this specific water consumption prior to the proposed transition to filtered tailings storage in 2023. On this basis, the fresh water consumption (excluding rainfall run-on to the tailings) can be expected to range from 1.13 Mm^3/a and 1.15 Mm^3/a when the mill throughput increases with completion of the one-way ramp. Water management will become more critical to the operation with the higher consumption expected beginning in Q1 2021.

Following the implementation of tailings filtration and paste backfill, specific water consumption is expected to decrease as process water is recovered from the tailings prior to their placement on the filtered tailings storage facility. A new water storage pond will be permitted and constructed at that time to replace the current tailings pond which serves as part of the site water conveyance infrastructure.

Table 18-1 provides the current and pending annual water rights at Cozamin. The water sources described are accessible year-round and do not include rainfall or mine dewatering requirements which do not require permitting. In 2019, total water consumption for processing at Cozamin was approximately 2,319,811 m^3. Cozamin used approximately 941,743 m^3 of water from its permitted water sources (40% from fresh water sources excluding rainfall). It is noted that fresh make-up water use has increased recently due to higher evaporation losses incurred from higher cyclone use for tailings beach construction.

Table 18-1: Primary Water Sources at Cozamin Mine

Source	Annual Water Rights Allocation (m^3)	Notes
Water Wells/Monarca Agreement	276,000	Well 1, 4 - Permitted
Permitted Underground mine sources	352,800	San Bartolo Shaft - Permitted
Municipal Water Treatment Plant	566,784	Under agreement with municipal government – Permitted
Current Water Rights Subtotal	1,195,584	Permitted Subtotal
Other Water Rights Pending	134,000	Los Carrera well - pending
Permitted and Pending Water Rights	1,329,584	

18.3.3.1 Recommendations

The qualified person for this section recommends that the Cozamin staff complete the following in order to ensure an efficient management of the site's water resources:

- Develop a stochastic site water balance model that will enable the site to predict and plan for potential periods of water scarcity and periods of potential excess water on site following the transition to filtered tailings storage.

It is estimated that this work will cost approximately US$100,000.

18.3.4 Tailings Storage Facility

The design of the Cozamin TSF up to Stage 5 consisted of a modified centreline raised embankment. Given the restrictions downstream to continue expanding the embankment with a centreline concept, it was decided to shift to an upstream raised embankment. Four upstream raises have been constructed (Stages 6 to 9) to elevation 2,518 masl. Up to three additional 3-m high lifts have been projected up to Stage 12 at elevation 2,527 masl. Each raise is constructed over compacted cyclone sand from the tailings beach, with the embankment constructed using compacted locally suitable materials to achieve a suitable shear strength.

A plan view and section through the highest portion of the TSF are shown in Figure 18-1 and Figure 18-3, respectively. The maximum elevation of the water pool due to a Probable Maximum Flood (PMF) is maintained at least 2 m below the dam crest, allowing for a minimum of 2 m of operational freeboard as per the original design of the TSF and requirements of the Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT).

Tailings are currently pumped from the plant at approximately 32% solids to the thickener, where tailings achieve approximately 40 to 42% solids and are subsequently pumped up to the

TSF for disposal. Cozamin TSF maintenance personnel deposit tailings in the TSF via D-20 and D-10 Krebbs cyclones in paddocks of about 50 m long (normal to the dam crest) and 25 m wide (parallel to the dam axis). The paddocks allow operations personnel to limit the embankment length over which the beach is constructed, mitigating the risk for slimes and water accumulating along the embankment crest. The deposition method allows for better water management and higher overall tailings densities.

When tailings segregation using cyclones is not possible, the tailings bypass the thickener and direct tailings discharge takes place in the southwestern portion of the TSF. Following discharge into the impoundment, the coarse tailings particles settle out of the slurry in the beach area while the water with slimes continues to flow towards the reclaim pond area at the lowest point in the southeastern portion of the impoundment. Water pooled within the tailings pond is either evaporated on surface or reclaimed and sent back to the mill facility for reuse via a barge pumping system and water return pipeline, also described in Section 17.8.

At present, there is capacity within the existing TSF to store approximately 6 Mt of tailings assuming proper tailings management continues and allows for construction of competent coarse tailings beaches for subsequent upstream raises. Alternative tailings management solutions utilizing filtered tailings are being developed at a feasibility level to provide the additional storage capacity required for the LOMP presented in this report.

Two filtered tailings storage options are currently being developed to a feasibility level design. The preferred option entails conversion of the existing slurry TSF to a filtered tailings storage facility (Option A). A backup option is also being developed, which entails conversion of a legacy tailings facility locally called “Chiripa” to a filtered tailings storage facility (Option B). Figure 18-4 shows the location of Options A and B with respect to the Process Plant. Figure 18-5 and Figure 18-6 show the plan and cross section views of the conceptual designs developed in 2020 for Options A and B, respectively. Feasibility level design of these two options is in the final stages of completion.

18.3.4.1 Recommendations

The qualified person of this section recommends that, once the Feasibility level engineering for the two alternative filtered tailings facilities is completed, permitting is advanced in parallel for both facilities and that, at least, one of the storage options is advanced to detailed engineering.

A spillway has been designed and recommended for construction from Stage 10 and onwards, which will prevent a large storm event from undermining the specified minimum beach width as the TSF raises progressively move closer to the reclaim pond.

It is estimated the engineering and permitting studies will cost approximately US$300,000.

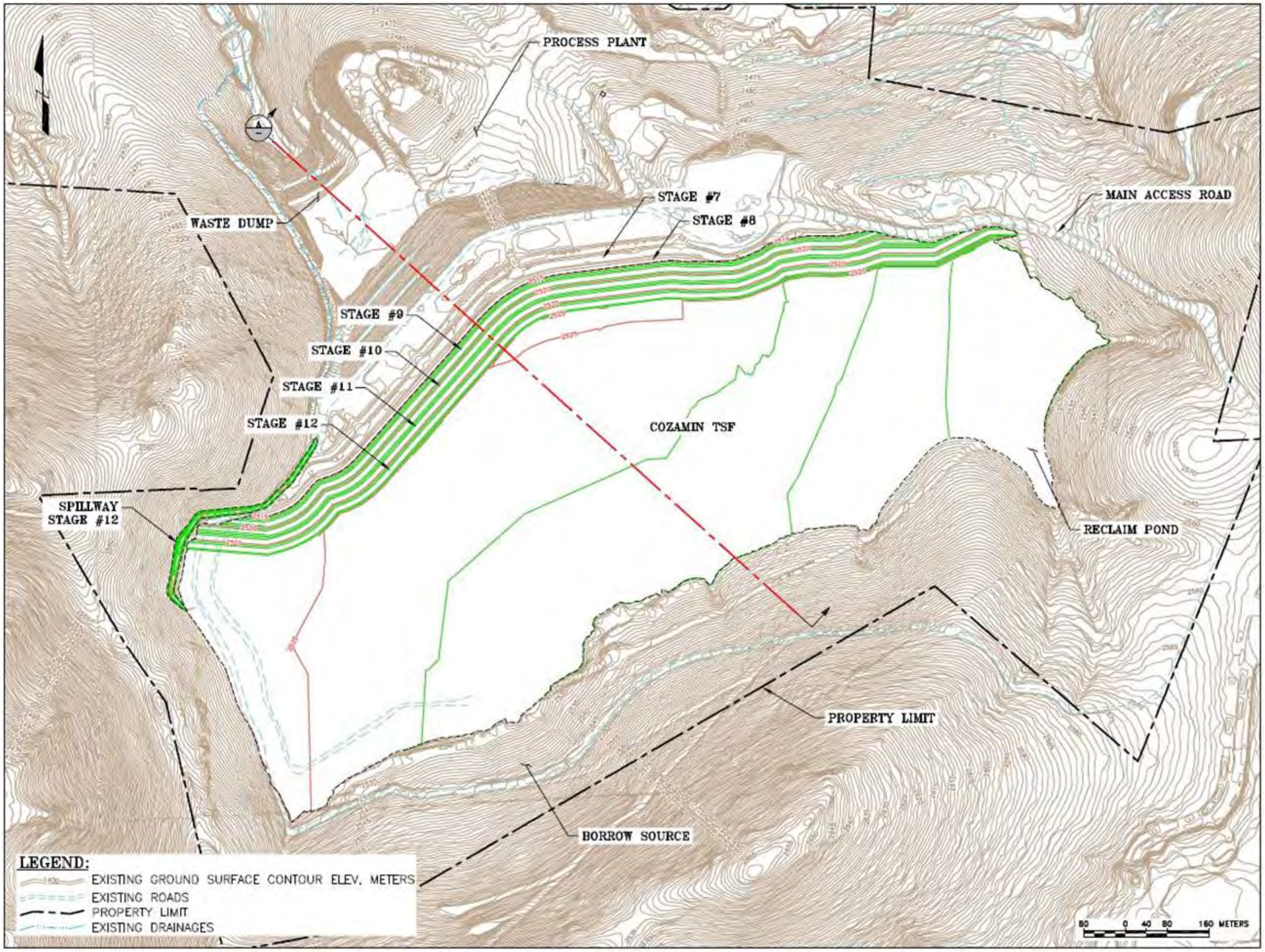

Figure 18-2: TSF Stages 6 through 12 Plan View (Wood, 2020)

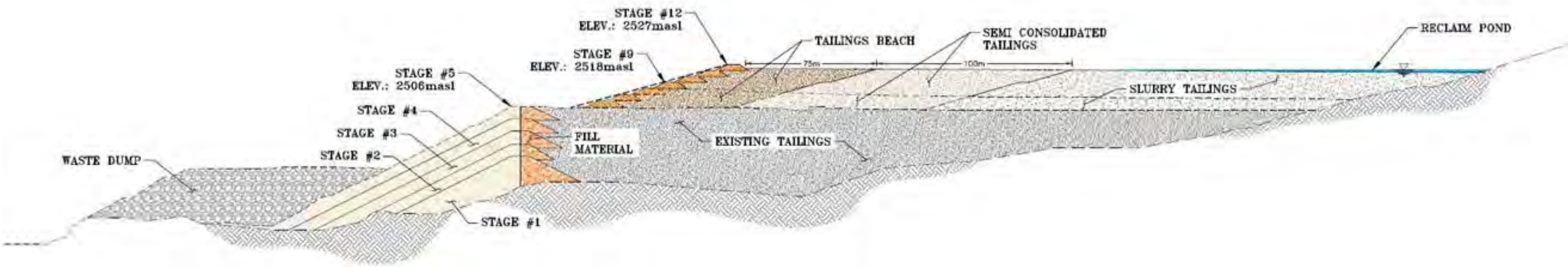

Figure 18-3: TSF Stages 6 through 12 Section View (Wood, 2020)

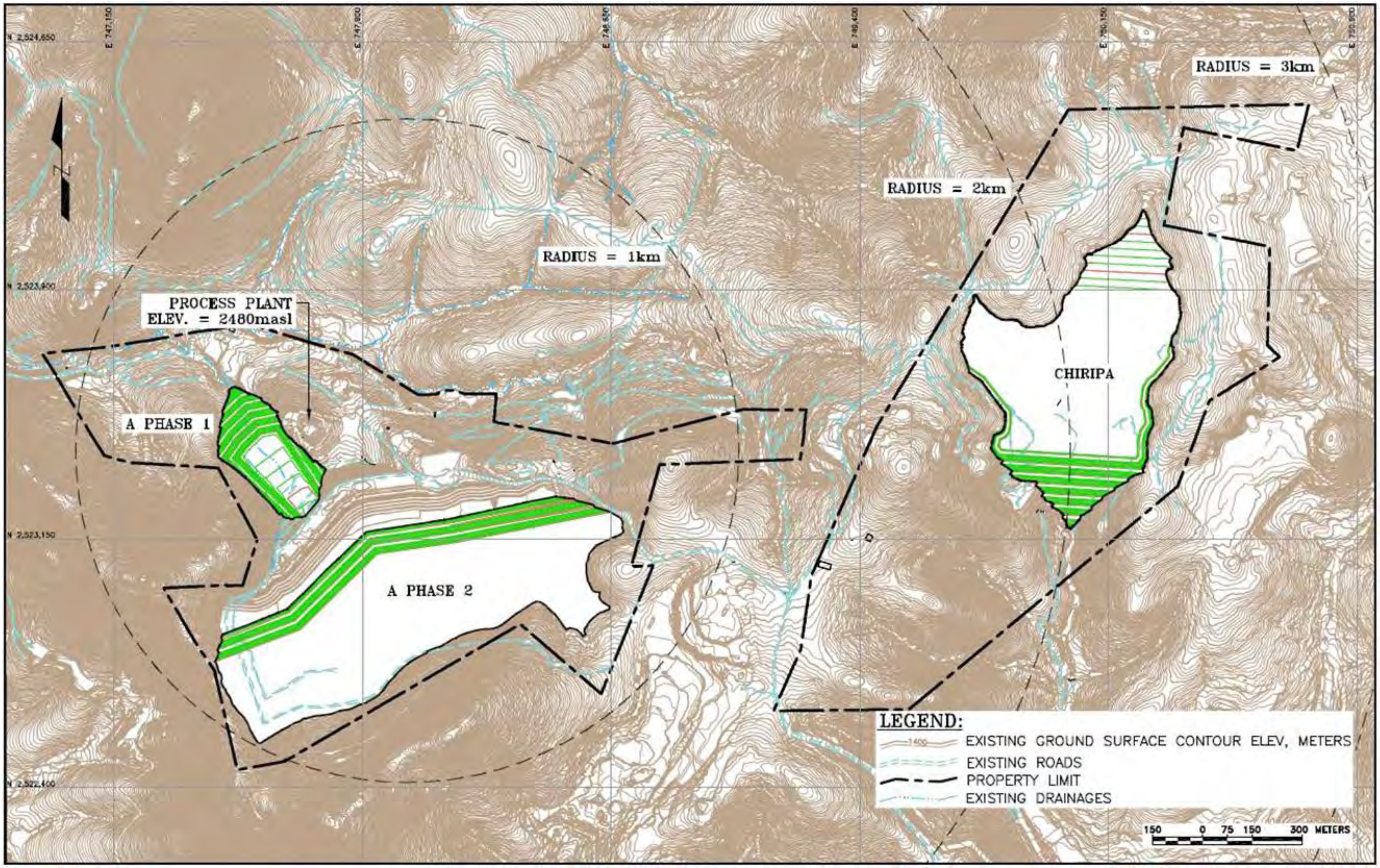

Figure 18-4: Filtered tailings storage sites being advanced to feasibility level design (Wood, 2020)

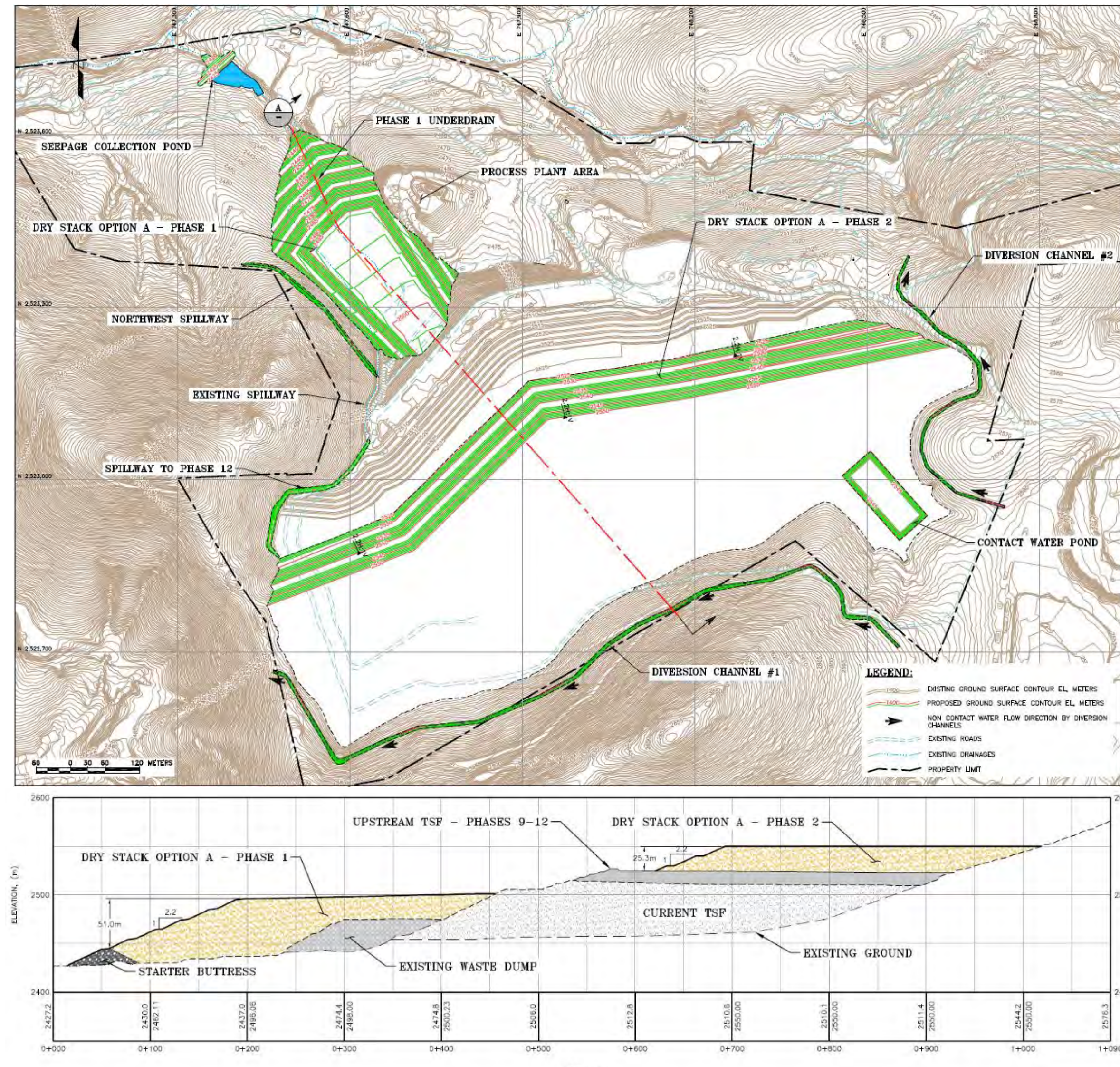

Figure 18-5: General Layout and Cross Section of the Filtered Tailings Storage Option A (Wood, 2020)

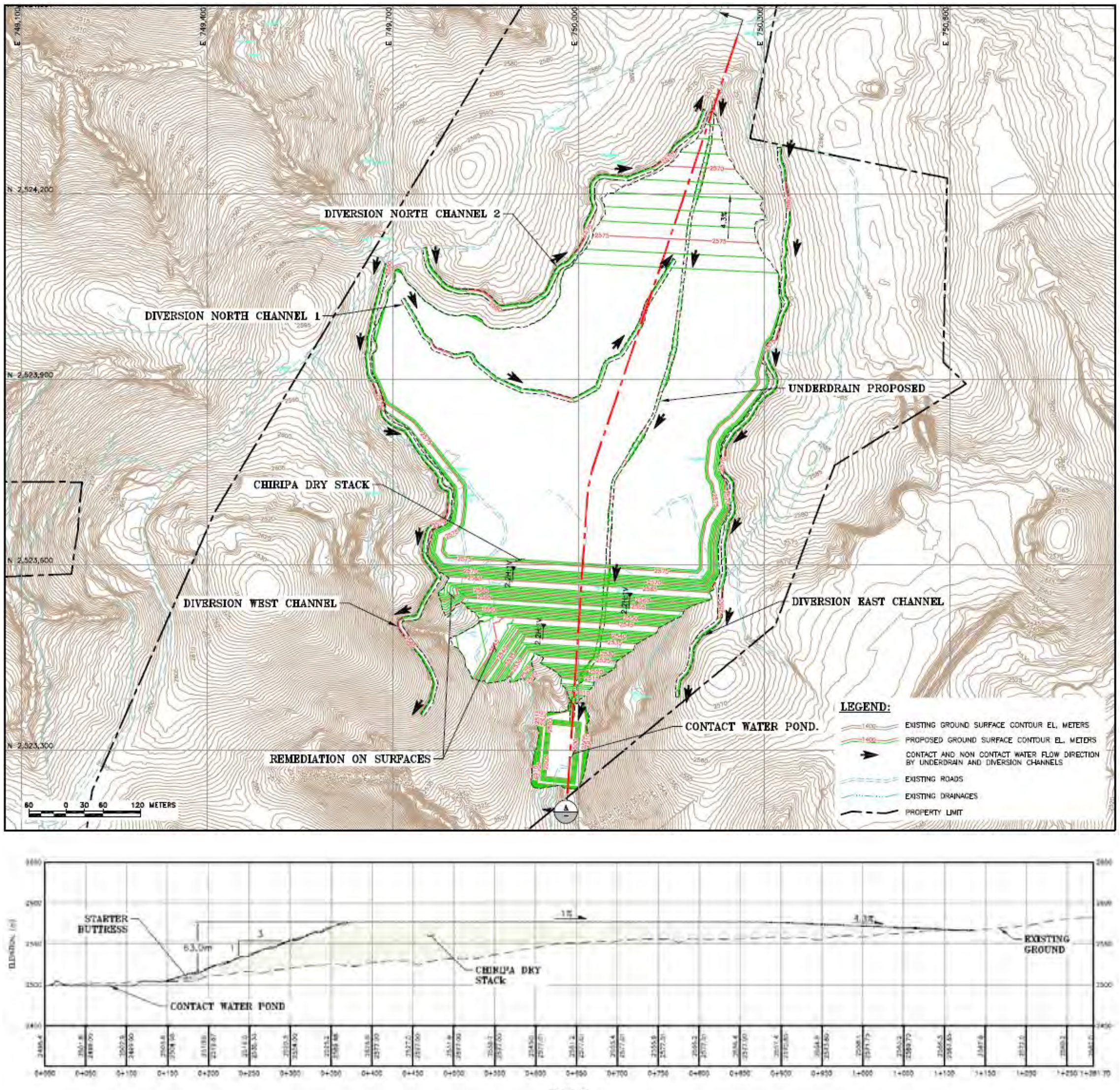

Figure 18-6: General Layout and Cross Section of the Filtered Tailings Storage Option B (Wood, 2020)

19 Market Studies and Contracts

19.1 Markets

The Cozamin Mine has been selling metal concentrates since the start of production, and under Capstone ownership since 2006. The main commodities produced at the mine are copper, zinc, and lead concentrates, along with silver contained in each of the three concentrates and gold in the lead concentrate. The metal prices assumptions used in the Mineral Resource and Mineral Reserve estimates can be found in Table 19-1. The assumed metal prices were determined using best practice techniques suggested in the 2020 CIM Guidance on Commodity Pricing (CIM, 2020). Analysis of long-term historical pricing, analyst and peer consensus pricing, and specialist consultant reports were used to forecast long term metal prices in the context of the expected life of the Cozamin Mine.

Table 19-1: 2020 Forecast Metal Price Assumptions

Metal	Unit	Mineral Reserve	Mineral Resource
Copper	US$ / lb	$ 2.75	$ 3.25
Silver	US$ / oz	$ 17.00	$ 20.00
Lead	US$ / lb	$ 0.90	$ 1.00
Zinc	US$ / lb	$ 1.00	$ 1.20

Cozamin's copper concentrate is considered a high-quality clean concentrate with low impurities (deleterious or penalty elements). Clean concentrates are in high demand for use as a blending component to improve lower quality concentrates from other sources. The zinc concentrate is lower quality due to high cadmium concentrations, limiting its global marketability. Lead concentrate is considered to be of average quality.

The metal concentrates produced at Cozamin are sold to reputable trading companies on annual contracts. Demand for the concentrates has maintained stability throughout the life of the project. Currently, three annual contracts are active and in good standing. The QP of this section is relying on the expert knowledge of Ashley Woodhouse, Marketing Manager of Capstone Mining Corp., that the terms, rates and charges of these concentrate contracts are within industry norms.

All three concentrates are sold domestically, delivered on a delivered at place ("DAP") or free on board Manzanillo basis, negating the need to secure storage facilities or arrange ocean shipping for export. The zinc concentrate can be delivered domestically, by truck, to either domestic smelters or to storage/blending facilities near the port of Manzanillo (as directed by the buyer for the monthly quotas). Lead and copper concentrate are typically delivered to facilities located in Manzanillo for blending or direct export. Transportation agreements are negotiated for a fixed price per wet metric tonne for a prescribed period (usually annually) and transported by truck to the port under contract. Cozamin's current concentrate sales agreements are summarized in Table 19-2.

Table 19-2: Metal and Concentrate Purchase Contracts

Metal (Concentrate)	Purchaser	Contract Period	% of Production	Metal Price
Copper Concentrate	Trafigura Mexico S.A. DE C.V.	2019-2021	100%	Cu: LME Cash Settlement Ag: London Silver Spot
Zinc Concentrate				Zn: LME Cash Settlement Ag: London Silver Spot
Lead Concentrate	IXM S.A.	2018-2021	100%	Pb: LME Cash Settlement Ag: London Silver Spot Au: London AM/PM fix

19.1.1 Stream Arrangement

On February 19, 2021, Capstone Mining Corp, through a wholly-owned subsidiary, entered into a definitive Precious Metals Purchase Agreement (the "Stream Arrangement") with Wheaton Precious Metals International Ltd., a wholly-owned subsidiary of Wheaton Precious Metals Corp. (collectively, "Wheaton"). Under the terms of the Stream Arrangement, Wheaton paid an upfront cash consideration of $150 million for 50% of the silver production until 10 million ounces have been delivered, thereafter dropping to 33% of silver produced by the Cozamin Mine. Wheaton will make ongoing payments equal to 10% of the spot silver price at the time of delivery for each ounce delivered to them.

Mineral Resources and Mineral Reserves at the Cozamin Mine in this Technical Report were prepared based on silver pricing assumptions stated in Sections 14 through 16 of this report rather than the ongoing payment price and amortization of the upfront payment from the Stream Arrangement. However, C1 cash costs disclosed in this Technical Report in Section 21 are shown inclusive of the impacts of the Stream Arrangement and are higher as a result of the lower silver credit.

19.2 Contracts

In addition to the concentrate sales contracts and the Stream Arrangement discussed in Section 19.1, Cozamin relies on several contractor relationships for services and supplies. The complete list of contracts in place at Cozamin can be found in Table 19-3, however, the material contracts are:

- Mineral Hauling - Various Ejido Contractors
- Land Lease – Ejido Hacienda Nueva
- Mine Development - Servicios Mineros de México S.A. de C.V., Cominvi S.A. de C.V.
- Raisebore Services - Master Drilling México S.A. de C.V.
- Diamond Drilling - Patpa Distribuciones S. de R.L. de C.V.
- Concentrate Transportation - Transportes Mineros del Cobre S.A. de C.V., Transportistas Unidos Ejido Morelos, S.A de C.V
- Sampling and Laboratory - Alfred H. Knight de México S.A. de C.V.

The QP of this section is relying on the expert knowledge of Reina Isadora Rodriguez Chavez, Supervisor de Contratos of Capstone Gold S.A. de C.V., that these contracts are considered within accepted industry practice.

Cozamin plans to sign a contract for the supply of cement related to CRF and paste backfill in late 2021. Discussions with suppliers are underway at the time of this report.

Table 19-3: Contracts at the Cozamin Mine

Contract #	Contractor	Contract Subject	Start Date	End Date	Status
CPR012-2018-21	Sandvik Mining and Construction de México S.A. de C.V.	Mining Equipment	Aug. 01, 2018	Jul. 31, 2021	VALID
ACA001-2021-23	Eulalio Medellín Medellín	Hauling	Jan. 01, 2021	Dec. 31, 2023	VALID
ACA002-2021-23	Lorena Ávila Sifuentes	Hauling	Jan. 01, 2021	Dec. 31, 2023	VALID
ACA003-2021-23	Mauro Gutierrez Castañón	Hauling	Jan. 01, 2021	Dec. 31, 2023	VALID
ACA004-2021-23	Sandra Robles Medellín	Hauling	Jan. 01, 2021	Dec. 31, 2023	VALID
ACA005-2021-23	Luis Adrián Olvera Medellín	Hauling	Jan. 01, 2021	Dec. 31, 2023	VALID
ACA006-2021-23	Felipe Avila García	Hauling	Jan. 01, 2021	Dec. 31, 2023	VALID
ACA008-2021-23	Juan Javier de León Medellín	Hauling	Jan. 01, 2021	Dec. 31, 2023	VALID
ACA009-2021-23	Juan Manuel Mireles Olvera	Hauling	Jan. 01, 2021	Dec. 31, 2023	VALID
ACA012-2021-23	Juan Medellín Cardona	Hauling	Jan. 01, 2021	Dec. 31, 2023	VALID
ACA001-2020	Reyes Gerardo Delgado Medellín	Hauling	Jan. 01, 2020	Dec. 31, 2022	VALID
ACA007-2021-23	Juan Manuel Gutierrez Villalobos	Hauling	Jan. 01, 2018	Dec. 31, 2023	VALID
ACA011-2021-23	Julian Gutierrez Hernandez	Hauling	Jan. 01, 2018	Dec. 31, 2023	VALID
ACTA 5923	Ejido Hacienda Nueva	Land Lease	Jan. 01, 2018	Dec. 31, 2048	VALID
ARR-001-2020	Raúl González Anaya y Juan Antonio Rosales Torres	Land Lease	Nov. 01, 2019	Oct. 31, 2029	VALID
CP001-2011-21	Grupo Gasolinero Rivas SA de CV	Diesel Supplier	Jul. 11, 2011	Jul. 11, 2021	VALID
CPO002_2019	Econocom México SA de CV	IT Equipment	Feb. 01, 2019	Feb. 02, 2024	VALID
CPR001-2021	Boart Longyear de México SA de CV	Drilling Supplier	Jan. 01, 2020	Dec. 31, 2021	VALID
CPR002-2020-22	Nitro Explosivos de Ciudad Guzman SA de CV	Explosives Supplier	Jan. 01, 2020	Dec. 31, 2022	VALID
CPR003-2021	Alfred H. Knight de México SA de CV	Sampling and Laboratory	Jan. 01, 2021	Dec. 31, 2023	VALID
CPR003-2020-22	Mallas y Armex de Aguascalientes SA de CV	Wire Mesh Supplier	Jan. 01, 2020	Dec. 31, 2022	VALID
CPR004-2018-21	Grupo Industrial Leijer S.A. de C.V.	Reagent Supplier	Sep. 01, 2018	Dec. 31, 2021	VALID
CPR014-2021	SNF Floerger de México SA de CV	Reagent Supplier	Jan. 01, 2021	Dec. 31, 2021	VALID
CPR015-2017-21	Técnica Eléctrica de Parral S.A. de C.V.	Electrical Supplier	May. 01, 2017	Dec. 31, 2021	VALID
CSC001-2021	Seguridad Industrial del Bajío S.A. de C.V.	Personal Protective Equipment Supplier	Jan. 01, 2021	Dec. 31, 2021	VALID
ECO001-2021	Transportes Mineros del Cobre S.A. de C.V.	Concentrate Carriers	Jan. 01, 2021	Dec. 31, 2023	VALID
ECO002-2021	Transportistas Unidos Ejido Morelos, S.A de C.V.	Concentrate Carriers	Jan. 01, 2021	Dec. 31, 2023	VALID
ECO003-2021	Constructora Parroquia SA de CV	Concentrate Carriers	Jan. 01, 2021	Dec. 31, 2023	VALID

Contract #	Contractor	Contract Subject	Start Date	End Date	Status
EXPLORACION	Consuelo Chavez Villegas	Land Lease	Jan. 01, 2021	Dec. 31, 2021	VALID
EXPLORACION	Jose Manuel Venegas Rodríguez	Land Lease	Dec. 20, 2019	Dec. 20, 2021	VALID
OMI001-2021	Servicios Mineros de México SA de CV	Mine Development	Jan. 01, 2021	Dec. 31, 2023	VALID
OMI003-2021	Master Drilling México SA de CV	Raisebore Services	Jan. 01, 2021	Dec. 31, 2021	VALID
OMI004-2019	Cominvi SA de CV	Mine Development	Aug. 01, 2019	Jul. 31, 2022	VALID
OMI006-2020	Grupo Constructor Plata SA de CV	Shotcrete Services	Oct. 01, 2020	Dec. 31, 2023	VALID
SEP001-2021	Daniel Esparza Gutierrez	Translation services	Jan. 01, 2021	Dec. 31, 2021	VALID
SGE001-2021	Patpa Distribuciones S de RL de CV	Diamond Drilling	Jan. 01, 2021	Dec. 31, 2023	VALID
SMA001-2020	Sara Abigail Hernández Urenda	Waste Management	Jan. 01, 2020	Dec. 31, 2022	VALID
SMA002-2021	Victor Daniel Velazquez Ortiz	Water Transportation	Jan. 01, 2021	Dec. 31, 2021	VALID
SMA003-2021	Ecoservicios de Zacatecas SA de CV	Septic tank and mobile bathrooms maintenance	Jan. 01, 2021	Dec. 31, 2021	VALID
SMA004-2021	Laboratorios ABC química, investigación y análisis SA de CV	Sampling and environmental studies.	Jan. 01, 2021	Dec. 31, 2021	VALID
STE010-2021	Terp SA de CV	Consultants	Jan. 01, 2021	Dec. 31, 2021	VALID
STE011-2019	Oscar Manuel Torres Ortíz	IT Services	Nov. 01, 2019	Dec. 31, 2022	VALID
STE011-2020	Servicios Eléctricos e Industriales S.A. de C.V.	Electrical Maintenance	Jan. 01, 2021	Aug. 31, 2021	VALID
CPR007-2017-19	Marubeni México S.A. de C.V.	Distribution and support tires	Jan. 01, 2020	Dec. 31, 2022	VALID
CPR011-2021-23	Sandvik Mining and Construction de México S.A. de C.V.	Mining Equipment Spare Parts Supplier	Jan. 01, 2021	Aug. 31, 2023	VALID
MME001-2021	Miguel Angel López Ayala	Light Vehicle Maintenance	Jan. 01, 2021	Dec. 31, 2021	VALID
MME002-2021	Cinthia Margarita Figueroa Flores	Light Vehicle Maintenance	Jan. 01, 2021	Dec. 31, 2021	VALID
MME003-2021	Raymundo Hernández Quiroz	Tire Maintenance	Jan. 01, 2021	Dec. 31, 2021	VALID
STE009-2021	Grupo Marro SA de CV	Vibration Analysis	Jan. 01, 2021	Dec. 31, 2021	VALID

20 Environmental Studies, Permitting and Social or Community Impacts

Requirements and plans for waste and tailings disposal are described in Section 18 of this Technical Report. The present section discusses information on environmental assessment, permitting, site monitoring both during operations and mine closure, and social or community factors related to the project.

20.1 Environmental Assessment and Permitting

This summary of the environmental assessment and permitting requirements is based on work undertaken for Capstone under the supervision of Nimbus Management Ltd., Jenna Hardy, P.Geo., FGC, Principal.

The Cozamin Mine lies within a regionally mineralized area that has seen extensive historic mining over more than 475 years. Host rocks surrounding the mineralized vein systems are anomalous in base and precious metals, providing a halo of elevated metals values that extends a considerable distance beyond known workings.

Numerous old mine workings, excavations and dumps, as well as some historic tailings are present, both on, and adjacent to, the Cozamin mine site. Some lie on mining concessions where surface rights are held by Capstone and others are held by third parties.

Environmental impacts within the mine site resulting from historic activities are evident. As well, there are obvious impacts from the present day (though sometimes intermittent) operations of surrounding mines and processing operations by third parties. The impacts have been discussed, though not necessarily completely documented, in historic reports, as well as in more recent reports completed by Capstone and its consultants.

Though local and state permits are also required, mine permitting in Mexico is regulated and administered under an integrated regime by the government body, Secretaría de Medio Ambiente y Recursos Naturales ("SEMARNAT"), the federal regulatory agency that establishes the minimum standards for environmental compliance. The federal level environmental protection system is described in the General Law of Ecological Equilibrium and the Protection of the Environment (Ley General de Equilibrio Ecológico y la Protección al Ambiente or "LGEEPA"). Under LGEEPA, numerous regulations and standards for environmental impact assessment, air and water pollution, solid and hazardous waste management and noise have been issued. Article 28 of the LGEEPA specifies that SEMARNAT must issue prior approval to companies intending to develop a mine and mineral processing plant.

SEMARNAT also regulates the use of "forest" resources and promotes sustainable development of "forest" ecosystems under the General Law of Forest Development (Ley General de Desarrollo Forestal or "LGDFS") which establishes the regulation for the Change of Use of Soils in Forested Lands (Cambio de Uso de Suelos en Terrenos Forestales or "CUSTF") authorization. This applies to removal of all types of vegetation in areas which have potential to be used for forest activities. An Economic-Technical Study (Estudio Economico-Tecnico or "ETE") is required to demonstrate that proposed activities will not compromise biodiversity, cause soil erosion, deterioration of water/air quality or reduction of water catchment, and that in the long term the proposed alternative use will be more productive.

The National Water Law ("Ley de Aguas Nacionales") provides authority to the National Water Commission (Comisión Nacional de Aguas" or Conagua ("CNA"), an agency within SEMARNAT), to issue water use/extraction concessions as well as permits to occupy and construct hydraulic infrastructure in federal watercourses, in addition to specifying requirements to be met by applicants.

Environmental regulations are promulgated through various "Official Mexican Standards ("Normas Oficiales Mexicanas"), knows as "NOMs" or "normas", which establish specifications, procedures, standards, ecological criteria, emission limits and general guidelines that apply to particular processes or activities.

Mining companies are required to hold or control surface rights over the area to be permitted. In recent years, SEMARNAT has changed the environmental permitting procedure to require that supporting information be included which demonstrates that there is a legal and binding agreement in place for the surface rights covering the area to be permitted.

Prior to Capstone's involvement in the Cozamin mine, several environmental studies had been carried out by previous owners. The San Roberto mine had been fully permitted to operate at 750 tpd. Capstone completed the following to support permitting and regulatory approvals with a view to re-open the mine and expand tonnage throughput to 1,000 tpd in 2006:

- an environmental impact assessment, known in Mexico as a Manifestación de Impacto Ambiental ("MIA"), which describes potential impacts to the environment that may occur in all stages of the operation as well as the measures to prevent, control, mitigate or compensate for these impacts;
- a detailed study of new lands needed for use as part of an expanded mining operation, known as the Estudio Justificativo de Cambio de Uso de Suelos ("ETJ" or "ETJ"), which applies to all affected lands associated with the mining and processing operation; and
- a risk assessment to include all aspects of the operation, known as an Estudio de Riesgo ("ER"), that evaluates and ranks risks associated with activities which can impact human health and environment, and describes risk control and mitigation measures.

The original MIA was approved by SEMARNAT on August 29, 2005, remaining valid for ten years, and with optional renewal for additional terms of ten years. Capstone received approval for an additional ten years of operation on June 1, 2015.

Following significant exploration and operational success in succeeding years, Capstone made a series of applications for modifications to the original operational MIA, followed by two additional MIA specifically to cover work, installations and activities complementary to those already approved, as well as the expansion of the tailings storage facility and associated infrastructure for the Stage 6/7 dam. In addition, there were various ETJ, to accommodate an expanded operation, changed operational conditions and optimized site usage. Additional environmental impact assessments for exploration were also completed and approved.

The approved MIA include authorizations for: enlargement of operations for the underground mine, plant and surface support facilities; installation and relocation of new surface and underground facilities; a self-serve diesel supply station; construction and relocation of surface access roads; a new design and expanded footprint for the tailings facility and its infrastructure; installation of sub-stations and power lines as well as water lines and pumping capacity for water sources; installation of playing fields and lunch rooms; and an expansion of the San Roberto shaft, mine deepening, underground pump installation, with improved underground ventilation and mine maintenance facilities.

The Cozamin Mine is operated as a zero discharge facility; it does not discharge process water and there are otherwise no direct discharges to surface waters. In 2020, the operation recycled over 70% of the water used through the existing tailings facility; this is about 5% less than usual because the operation was using recycled tailings for coarse beach development, and because the year was relatively dry which increased ambient evaporation; water recycling levels are expected to improve markedly with adoption of filtered tailings alternatives (R.Regino, pers. comm., December 9, 2020).

In 2016, SEMARNAT streamlined the regulatory process by introducing a new submission and approval process known as a Documento Técnico Unificado (“DTU”). This combines an environmental impact assessment and a study detailing changes to use of soils in “forested” lands (Cambio de Uso de Suelos en Terrenos Forestales or “CUSTF”) in project sites where additional lands are needed as part of an expanded operation and these had not been previously permitted.

With time six DTU were submitted and approved to cover ancillary and complementary mining and new exploration activities on forested lands. Permitted work included: increased waste rock storage; additional lifts for the stage 6/7 TSF; short term hazardous waste storage; infrastructure associated with the TSF including a new downstream waste dump; a second recreational facility as well as platforms and lay down areas for surface exploration drilling; an alternate access route into the mine property and storage facilities for drill core; internal access for surface drilling, temporary work areas for contractors; construction of new raises for underground ventilation; and development of new accessways and additional drill core storage areas. Terms for the DTU authorizations vary from 2 to 10 years and depend on the estimated time frame for the proposed activities.

SEMARNAT approved the most recent of the applications on January 25, 2019 which included additional parking, materials handling areas, offices, Robbins ventilation raises, an electrical line, a native plant nursery for re-forestation, areas for stockpiled topsoils, etc. Certain smaller scale, lower impact, activities and improvements/updates to operations infrastructure (e.g.

surface drilling in localized areas, self-serve vehicle wash) within areas otherwise already permitted have also been authorized through less formal but more focused notification procedures to SEMARNAT known as “Consultas”.The Cozamin mine is presently authorized to operate at up to 4,500 tpd of underground production and process plant operation, using two surface ramps and the principal San Roberto shaft, and to dispose tailings into the completed TSF. Additional ETJ authorizations have also been received for work which falls outside the standard threshold for disturbances of direct mineral exploration activities (NOM-120-SEMARNAT-2011).

The expanded operation required more workers and more sanitary facilities, necessitating improvement in downstream waste management. A new, separate MIA (with accompanying ETJ) for the construction and operation of a plant to treat residual water was granted on February 14, 2011. This authorization is good for ten years or until the site is abandoned.

Capstone submitted an application to SEMARNAT for a modification to the existing MIA to include the expansion of the present TSF beyond its currently permitted Stage 9, though Stages 10 and 11 on December 8th, 2020. This modification was approved on 6-January-2021.

SEMARNAT’s statements of approval for these documents (known as a “Dictámenes”) include detailed terms and conditions for compliance in protection of the environment, as well as an obligation to file operational reports every six months describing the Company’s progress in fulfilling the terms and conditions. The Dictámenes provide authorization for Capstone to complete the proposed activities within the approved mine footprint subject to the terms and conditions outlined. These represent normal environmental and regulatory requirements as described in the applications, and all costs are included in the operating costs summary. Development of the required monitoring and mitigation plans, closure strategy and operational procedures is dynamic, with periodic review and updating to make sure they continue to meet permit requirements. Detailed reporting includes filing of mitigation and closure plans with SEMARNAT, as well as the results of ongoing dust and water quality monitoring.

Following a final verification inspection by PROFEPA (Procuraduría Federal de Protección al Ambiente en el Estado de Zacatecas), the federal agency (“or attorney general”) with responsibility for enforcing SEMARNAT regulations, Capstone received its first integrated operating permit on October 20, 2006 (LAU-32/007-2006). This is known in Mexico as a Licencia Única Ambiental (LAU). The LAU is the main operational permit which provides Mexican federal environmental regulators with information on project environmental risk and impact, atmospheric emissions and hazardous waste, as well as details regarding wastewater effluent. It covers all procedures for environmental impact and risk assessment, emissions to the atmosphere and the generation, handling and reporting of hazardous wastes. The LAU also sets out the acceptable limits for air emissions, hazardous waste and water impacts, as well as the environmental impact and risk of the proposed operation based on the approved MIA or DTU, the environmental risk study, and the ETJ.

Overall PROFEPA's main activities are to deal with complaints, conduct inspections, and in general verify compliance with all federal environmental laws and regulations. It can impose penalties for violations of environmental laws and regulations, and monitors compliance with any preventative and mitigating measures it issues. PROFEPA also oversees the program of third party environmental audits.

LAU's were received for the tonnage expansions to 2,600 tpd (March 25, 2008), 3,000 tpd (May 19, 2009), 4,000 tpd (January 13, 2012) and 4,500 tpd (June 15, 2015). Under the administrative reporting procedure of the LAU, all environmental data relating to air and water emissions are consolidated and reported on a single Annual Operations document known as a COA (Cedula de Operación Anual) which is submitted to SEMARNAT annually on April 30. This information is recorded in a publicly available Emissions and Transfer of Contaminants Register (RETC), fulfilling the Mexican government's commitment to transparency in the area of environmental regulation.

Wastes generated by the mining operations include waste rock and tailings as well as regulated and hazardous wastes. Capstone received authorization as a generator of hazardous wastes under the General Law for the Prevention and Comprehensive Management of Waste (Ley General para la Prevención y Gestión Integral de los Residuos or "LGPGIR"- articles 68, 69, 70, and applicable regulations), first registering its plan for management of wastes in 2009 (No. 32-PMM-I-0015-2009). In 2017, following a site visit and review by the regulator*,* Dirección General de Gestión Integral de Materiales y Actividades Riesgosas (or "DGGIMAR"), Capstone filed a revised plan with more focus on mining and metallurgical wastes which was authorized on December 3, 2017 for a 15-year term. Capstone submits regular updates with respect to the types of wastes generated and how they are managed; its integrated waste management plan is revised on an annual basis.

Capstone is certified under PROFEPA's National Environmental Auditing Program (or NEAP), otherwise known as the Clean Industry (Industria Limpia) Program. This voluntary program serves to promote self-regulation and continuous environmental improvement; it is perhaps one of the most advanced programs of voluntary compliance in Latin America. Capstone was certified after participating in an audit program to verify compliance with existing laws and regulations and identify non-regulated potential issues which could result in environmental contingencies. As part of the audit, Capstone met a list of requirements including the implementation of international best practices, applicable engineering and preventative corrective measures.

In entering the program, Capstone contracted third-party, PROFEPA-accredited, private sector auditors, considered experts in fields such as risk management and water quality, to conduct an "Industrial Verification" audit. PROFEPA determines the terms of reference of the audit, defines audit protocols, supervises the work through certification of the independent auditors, and supervises compliance with the agreed-upon actions. The audit determines whether facilities are in compliance with applicable environmental laws and regulations. It results in an Action

Plan which defines a time frame and specific actions needed for the sites to be in compliance and solve existing or potential problems.

Capstone's Plan is included in an Environmental Compliance Agreement signed with PROFEPA which commits the company to conduct the work. The Clean Industry Certificate recognizes operations that have demonstrated a high level of environmental performance, based on their own environmental management system, as well as total compliance with regulations. Apart from public acknowledgement of its clean status, benefits to Capstone include the assurance of legal compliance through the use of the Action Plan, agreement with its regulators on a defined program of remediation and mitigation, and the ability to participate in no-cost training programs established by PROFEPA. The audit Certificate is valid for two years and can be re-authenticated after renewal by an additional audit.

The Cozamin Mine has been registered in the Clean Industry Program since late 2007. It successfully underwent the rigorous first audit to assess compliance with a broad spectrum of local, state and federal environmental, mine and operational safety, health and occupational safety laws, norms and regulations.

With each audit renewal Capstone has identified areas for improvement and implemented a detailed Action Plan (with estimated costing) to achieve compliance within an approximate two-year period through the cooperative process described above. Work completed in support of the Plan is verified by the independent auditor, and Capstone's participation in NEAP allows the company to continue current operations under its existing permits and authorizations during the remediation of any potential non-compliance matters. The audit for Capstone's most recent renewal of its Clean Industry Certification has been completed. No issues or concerns were identified which would prevent successful completion of what will be the fourth renewal of the Clean Industry Certificate, however a formal presentation of the Certificate remains delayed due to covid.

Overall, under Capstone's management, the Cozamin Mine has a good environmental record and a generally good relationship with the environmental regulatory authorities. The company has an active and continuous corporate responsibility program focused on health and safety, positive community relations and protection of the environment.

At the present time, all environmental permits required by the various Mexican federal, state and municipal agencies are in place for the current Cozamin mine operations. The health, safety and environmental management system and integrated health, safety, environmental and social management plans have been developed in accordance with the appropriate Mexican regulations. Annual land usage/disturbance and half yearly environmental compliance reports are filed as required.

With respect to the implementation of any of the operational recommendations resulting from this Technical Report, Capstone will need to review these with SEMARNAT and any other Mexican regulatory agencies as soon as sufficient engineering and other necessary design information is available. This review would identify and flag for discussion any new proposed activities and/or modifications to current activities already authorized as described above, as well as any new activities which could be considered as new work on lands not included in the existing MIA, DTU, CUSTF and ETJ, or which would involve new disturbances, which once fully designed might require new authorizations.

As engineering designs advance beyond the conceptual stage, Capstone may also want to confirm that the proposed footprint for any new activities and infrastructure includes sufficient allowance to offer appropriate zones of protection (i.e. buffer zones) in the event they encroach close to the boundaries of Capstone's mineral concessions and surface land holdings. Baseline studies required to support the original environmental impact assessment of the various MIA, DTU, ETJ, CUSTF and their modifications have been conducted at various times by independent consultants. Investigations included detailed analysis of: soil, water quality, vegetation, wildlife, hydrology, cultural resources and socio-economic impacts. These investigations identified locally elevated heavy metals concentrations in soils, acid rock drainage and metal leaching as possible concerns potentially manageable with appropriate mitigation measures.

Static acid-base accounting showed that flotation tailings and some types of waste rock have the potential to generate acidic drainage. However, the country rocks surrounding the deposit have significant neutralizing capacity and show relatively low permeability outside the immediate envelope of the structures hosting the mineralization. In addition, construction activities programmed as part of the expansions reduced the identified sources of acidic drainage associated with the historic tailings impoundment, as well as downstream contamination due to tailings spills by previous operators. Further, during ongoing operation apart from the recent deposition into the new waste dump below the existing TSF, both newly generated waste rock and waste rock from historic operations have in large part to date been used as underground back fill.

Capstone's operation of the Cozamin Mine had until recently assumed that over the life of the mine there would be no requirement for new waste dumps, and further that ongoing operational needs for underground fill and sterile waste material for surface construction would reduce the existing volumes of historic waste rocks on surface. The newly completed mine wide materials handling study covering current tailings and waste rock, as well as current and historic waste rock, maintains an overall objective (to the extent possible), to place material back into the underground mine or, assuming appropriate geochemistry, to put it to beneficial use for progressive reclamation/rehabilitation. The surface waste dump authorized downstream of the current TSF presently has a permitted capacity of 3.5 million tons (1.85 million m^3). Mine planning and engineering design are still ongoing, and additional mitigation measures are likely to include both engineering design and operational approaches.

A mine-wide environmental management and monitoring program (including accident and incident reporting) has been underway from the start of Capstone's renewed operation and will continue. Data collected are used to inform ongoing operational environmental management and monitoring program. This includes appropriate environmental management and mitigation plans based on the principle of continuous improvement. These are reviewed and revised annually as necessary, with results reported as required to Mexican regulators.

Guidance documents for addressing historical environmental liabilities issued by the Mexican government are based on the “polluter pays” principle embedded in LGEEPA and LGPGIR. The Mexican federal state coordinates with both state and municipal authorities to manage the environmental liabilities identified. In general terms, Mexican law lacks grandfathering provisions and it remains uncertain how much flexibility there will be in managing responsibility for restoration of areas with historic mining activities which are near or adjacent to operating mines.

Though some assessment and management planning remain to be completed (and planning to address environmental liabilities needs to be incorporated), work to date indicates that environmental impacts are manageable. It is expected that appropriate management and mitigation solutions to anticipated problems can be developed within the project schedule and time frames.

Apart from the issues identified above with respect to the locally elevated heavy metals concentrations, and the potential for acid rock drainage/metal leaching from tailings and waste rock and management of historic environmental liabilities, other issues of environmental concern relate to potential impacts as seen in comparable underground mines of similar size with flotation tailings impoundments. These include: dust, tailings handling/management, storm water diversion, combustibles and reagent management/handling, potential for aquifer contamination, waste management and disposal and noise.

In 2015, as part of a state-wide regional scale review of identified historic disturbances (known in Latin America as “pasivos”), PROFEPA conducted a site inspection at Capstone in an area of historic workings known as Chiripa (“Chiripa”). This is located in an entirely separate catchment located north and east of Capstone’s currently active mine and plant installations. Chiripa which also lies outside of any of Capstone’s permitted MIA or DTU authorizations, includes numerous and extensive old workings and waste dumps as well as the remnants of an historic process plant and several tailings dams/deposits. Significant tailings are dispersed into the arroyo downstream. Prior to this review on a voluntary basis following extended discussions with SEMARNAT, Capstone had undertaken agreed upon rehabilitation and reclamation activities to reduce or prevent further degradation of the ambient environment.

PROFEPA initiated an administrative procedure (known as an “emplazamiento) in December 2015. In such situations, companies owning the surface land over such areas of historical liability enter into a mine to government agreement with PROFEPA/SEMARNAT to implement and fund agreed upon sampling programs which first characterize the site and its elements of concern and then define suitable programs of remediation and rehabilitation to restore the disturbance. Preference is generally given to quick start programs of physical stabilization and phased action plans which build upon the success of the earlier phases.

The initial characterization study showed significant levels of arsenic and vanadium in soils and waste rock piles across a relatively wide area of Chiripa (with point highs for lead and cadmium) as well as historic tailings characterized as potentially acid generating., Capstone successfully completed initial phases of rehabilitation which included physical stabilization of the upper portion of the area in 2016 and 2017. Progressive reclamation activities included: closure and capping of open workings, construction of diversion channels around the old tailings dam, recovery of spilled tailings to the historic dams, berming/resloping of waste dumps and placement of gabions in the arroyo below. A second, more detailed site characterization study submitted in August 2017 which included an initial proposal for phased follow up remediation and rehabilitation using phyto-remediation was rejected by regulators in June 2018.

Following a Q4 2018 site visit and discussions with DGGIMAR, the lead regulator, Capstone engaged Ingeneria y Servicios en Control Ambiental Industrial S.A. de C.V. ("INSECAMI"), a consultant recommended for its experience in successfully remediating similar historic disturbances. After additional investigations to further characterize the area and identify feasible remediation alternatives, Capstone applied to the local municipality to re-classify the designated land use as "industrial for mining". Granted in November 2018 (Constancia de Compatibilidad Urbanística No C1101-12-2019), this allowed Capstone to design a remediation proposal which considered naturally elevated baseline metal levels in soils overlying mineralization and in areas of historic mining, as well as taking into account the designated end use as industrial for mining.

Following on site discussions in mid-2019, both parties agreed that a confinement cell would eventually be needed as part of the solution to rehabilitate the most intensely affected soils. Once approved, the agreed work program would be mandated by regulators to begin as soon as possible. For this reason, Capstone included an allowance for such a cell into the calculation of its 2019 year-end asset retiring obligation ("ARO ") closure cost estimate (see Section 20.2) and continued this into 2020.

In January 2020, Capstone submitted a more detailed remediation proposal to regulators. In March 2020 the regulators requested certain supplemental information, including an application for MIA-Particular ("MIA-P") specifically for the site preparation, construction and operation of the confinement cell (MIA-P: CDFIS for its acronym in Spanish). These types of environmental impact assessment are tailored for particular projects where impacts can be well identified, which are not considered particularly risky and do not involve new disturbance and/or seek to mitigate, remediate or rehabilitate pre-existing issues. Capstone submitted the required data in September 2020. and approval of the MIA-P was received on the 1st of December 2020. Final approval of the broader remediation proposal is expected in 2021: given the prior approval of the MIA-P significant changes are not expected to what had been initially proposed. Proposed work for the cell is expected to take place over a six month period with ongoing post-construction monitoring and maintenance for up to 20 years. The ultimate scale and scope of required remediation and rehabilitation and the post closure land use which will be acceptable to regulators for the longer term remains to be defined. Importantly, because these administrative procedures are relatively new in Mexico (very few agreements have been finalized), the level of effort which will ultimately be required of Capstone, as well as likely time frames for completion of an agreement are difficult to establish. As the regulatory procedure stands, the physical limit for proposed activities is the edge of the property border though identified effects may extend beyond this point. Neither the eventual outcome of these discussions nor the results of additional studies can be predicted.

The ongoing investigation of alternative tailings management solutions discussed in Section 18.3 includes an alternative which would potentially use the Chiripa area as a potential site for a filtered tailings storage facility. If selected as the preferred option, the facility would be constructed following regulatory approval of the remediation plan and its successful implementation.

Water supply considerations are discussed in Section 18.3.3 from the historical perspective as well as the expected changes which will come from a proposed transition to filtered tailings storage in 2023. Though an additional water storage pond would need to be permitted and constructed, it appears that the available water supply is adequate for future operations. Existing baseline data suggests current water sources from seasonal rainfall and catchment, the nearby municipal water treatment plant, the onsite treatment plant, and underground water (both at the mine and from permitted wells) and operational water management are sufficient to maintain operations as projected. However, studies to better define the site wide water balance (specifically to establish the contribution from rainfall which is presently mingled with process water in the tailings pond) and evaluate the potential for supply issues over the longer term have not been completed and it is recommended that these be appropriately scoped and carried out as soon as the necessary supporting information is available (Section 26).

The successful implementation of measures which have already been undertaken provides reasonable expectation that longer-term water supply needs can continue to be met. However, for the purposes of contingency planning and risk analysis, additional investigation is recommended. The supply situation should continue to be actively monitored and as a matter of routine best management operational practice, site water retention, and conservation measures should be adopted where practical.

Within the local water supply area, water demand remains high and the regional aquifer shows a deficit for resupply. Further, the pressure for housing and other municipal development in the areas directly surrounding Cozamin is evident and is increasing. There is also renewed activity at several of the historic operations adjacent to Cozamin (e.g. past producers San Acacio and Veta Grande Mines, as well as at Endeavour Silver’s leased El Compas mill and expansions at the Juan Reyes Cooperative Plant (toll processing predominantly by vat leach) which may impact both water supply availability within the basin, as well as potentially adding downstream effects to ground water.

20.2 Closure Plan

The Mexican government addresses reclamation and closure using broad standards set out under Article 27 of the Constitution from which the legal framework for environmental protection is derived under LGEEPA. Environmental regulations with respect to closure are promulgated through the various NOM's which establish specifications, technical standards, ecological criteria and general guidelines. At the present time, there are no formal reclamation and closure standards for mining, however mining companies' general obligation is to take mitigation measures which will protect natural and human resources and restore the ecological balance. Regulations require that a preliminary closure program be included in the MIA and DTU and that a definite program be developed and provided to the authorities during mine operations as a supplemental submission to the project reporting. Plans typically use risk-based approaches which involve characterizing the existing concentrations of metals in the soils, waters and groundwater, and designing a plan to ensure that post closure risks to human health and the environment are acceptable and with concentrations are no higher than the pre-mining baseline conditions.

Though the preparation of the closure plan and a commitment on the part of the mining company to implement the plan are needed, financial surety (i.e. bonding) has so far not generally been required. This may gradually be changing as some Canadian mining companies have recently been asked to prepare bonding estimates for SEMARNAT's review. Further, with implementation of the Federal Law of Environmental Responsibility (Ley Federal de Responsabilidad Ambiental - LFRA) in 2013, and new guidelines with respect to environmental liabilities, companies can anticipate that standards will evolve higher. The legislation as it stands firmly incorporates the principle that "those who contaminate will pay" ("el que contamina paga"), and it is clear that environmental damages, if not remediated by the owner/operator, can give rise to civil, administrative and criminal liability, depending on the action or omission involved. PROFEPA is responsible for the enforcement and recovery for those damages, and recent legal reforms have introduced the concept of class actions as a means to demand environmental responsibility for damage to natural resources.

Following from the terms and conditions of the particular authorizations, as well as various obligations outlined for example in the various NOM's regulating tailings facilities and associated infrastructure (NOM-141-SEMARNAT-2003), management of hazardous wastes (NOM-052-SEMARNAT-2005, NOM-157-SEMARNAT-2009), and exploration activities (NOM-120-SEMARNAT-1997), Capstone re-started the Cozamin mine in 2006 with a proactive approach to closure. A conceptual closure plan described current and projected conditions of facilities, operating areas and storage sites. Specific activities for successful closure were identified and costs estimated based on the proposed mine and project development. Capstone submitted its first revised reclamation and closure plan to SEMARNAT as part of its six-month reporting requirement in March 2009, applying the site-specific experience gained during progressive reclamation activities. The closure plan has been revised and updated on an annual to semi-annual basis since 2016, most recently with the support of independent consultant INSECAMI.

Key objectives of Capstone's reclamation and closure plan include:

- demonstrating compliance with relevant Mexican laws and regulations, as well as Capstone corporate standards;
- protecting public and employee health, safety and welfare;
- limiting or mitigating any residual adverse environmental effects of the project;
- minimizing erosional damage and protecting surface and ground water resources through control of natural runoff;
- establishing physical and chemical stability of the site and its facilities;
- ensuring that all process chemicals and hydrocarbon products are safely removed from the site at closure and equipment is properly decontaminated and decommissioned;
- properly cleaning and detoxifying all facilities and equipment used in the storage, conveyance, use and handling of process chemicals;
- establishing surface soil conditions conducive to the regeneration of a stable vegetation community through stripping, stockpiling and reapplication of soil material and/or application of waste rock suitable as growth medium;
- repopulating disturbed areas with a diverse self-perpetuating mix of plant species to establish long-term productive communities compatible with existing land uses;
- mitigating socio-economic impacts of the project following decommissioning and subsequent closure as far as reasonably possible; and
- maintaining public safety by stabilizing or limiting access to landforms that could constitute a public hazard.

Capstone's most recent update to the closure cost in November 2020 assumed progressive reclamation during operations, operational closure in early 2030, and 10 years of post-closure monitoring, inspection and maintenance. It included consideration of certain new initiatives by the Mexican government which will develop a national program for site rehabilitation in areas of historic mining, as well as the potential for increased requirements for operating mines to consider more options for sustainable restoration of the visual landscape after final closure. As the Mexican government moves to advance these regulatory aspects, there may be increased requirements for reclamation and rehabilitation of the Cozamin site and bonding may be required. The closure plan will be reviewed and updated accordingly.

To date, a number of ongoing closure activities have been completed as part of the annual site program of progressive reclamation. These include: closure of historic workings; reclamation and re-vegetation of exploration drill pads and access ways disturbed historically and by Capstone; reclamation and re-vegetation of areas of historic waste rock dumps and mining activities; clean-up of historic tailings spilled downstream from the tailings impoundment; removal of historic waste rock for use as underground fill and current construction activities; and definition of diversion channels around the historic Chiripa impoundment, re-sloping, armouring and stabilizing the historic dam faces and installation new gabions as well as replacement of damaged gabions downstream.

Much of the site area has been previously disturbed from historic operations. Surface soils removed for site construction have been stockpiled for reuse in closure. Though detailed studies of the suitability of stockpiled soils for reclamation have not been completed, the undisturbed parts of the mine area which are not actively grazed support patchy plant cover and areas reclaimed during progressive closure already show good evidence of successful re-vegetation with local species.

Continued implementation of “best practices” operational management and a site wide initiative focused on continuous improvement, along with sequential progressive reclamation and closure planning, will over time significantly reduce new sources of contamination. Reclamation, post-closure monitoring and follow-up will require more detailed planning but have the overall objective of leaving the land in a useful, stable and safe condition capable of supporting native plant life, providing appropriate wildlife habitat, maintaining watershed function and supporting limited livestock grazing; potential future industrial uses remain to be considered. General objectives include the removal of any environmental liabilities, minimization of potential acid rock drainage/metals leaching and the return of the site to a condition that resembles pre-mining conditions or restores productivity. Final land use after closure will need to be determined in consultation with neighbouring communities and Mexican authorities.

Once mining stops, surface equipment as well as surface and underground infrastructure will be removed and the mine will be allowed to flood. Mine entryways will be closed to restrict entrance. Surface accesses to the mine such as ramps will be closed and filled; apertures such as shafts and raises will be plugged. Access to mine areas, stopes, and raises will be stabilized and eliminated. Though additional ground water studies (included long term water and water quality modelling) are needed, based on observations of historic mining, following cessation of operations ground waters are expected to return to their original phreatic levels in a short time, with no direct point source discharges to surface anticipated. All salvageable items will be removed from the site. Leftover quantities of chemicals, reagents, lubricants, combustibles, etc., will be returned to suppliers, vendors or sold to third parties. Any remaining non-hazardous waste will be removed to the municipal landfill. Hazardous waste will be removed and disposed of at an appropriately licensed waste management facility. Buildings, other structures and surface infrastructure will be dismantled, removed and sold (or donated) where practical.

Remaining disturbed areas will be re-sloped to re-establish natural landscape contours and (where applicable) pre-existing drainage patterns. In selected areas as-necessary erosion prevention measures will be implemented. The disturbed areas will be re-vegetated with natural species approved by SEMARNAT. Roads that will not be required after mine closure will be re-graded and re-vegetated to approximate pre-mining conditions.

The flotation tailings and certain waste rock piles located on surface are potentially acid generating and require careful management during operations and into closure and post closure to minimize potential impacts to the environment. Successful management will require combinations of mine waste handling, placement planning and evaluation of the need for treatment of existing acid generating surfaces to reduce infiltration by precipitation and therefore the volume of any contaminated water emanating from the site. Investigation of options and alternatives for the future management of tailings and waste rock continue and these will need to be operationalized through more detailed planning. As required, these considerations will be incorporated into ongoing closure planning.

The closure plan identifies a number of final closure activities to maintain physical and geochemical stability including: diversion channels above the present impoundment to limit fresh water flowing into the tailings from the upper watershed; re-contouring the surface of the tailings impoundment to prevent ponding and improve flow; and a final cover with downstream passive treatment system for seepage and infiltration yet to be designed. Before these can be fully evaluated and costed, Capstone will need to complete the ongoing feasibility level investigations of tailings options and alternatives described, as well as geochemical characterization and modelling for tailings and available waste rock before alternatives for longer term tailings and waste rock disposal can be fully defined. Depending on the results of ongoing water quality monitoring as well as the results of these studies planning for closure design may include installation of an engineered low permeability cover to limit oxygen entry into the present tailings, restrict infiltration and minimize seepage with or without materials blending. Alternatively closure planning may involve use of an engineered store and release cover. With careful engineering design, modelling of water, waste and tailings geochemistry, as well as good quality control on construction these would appear to be reasonable concepts.

Reclamation obligations will be funded during mining operations and are not anticipated to involve measures significantly different than would be expected for an underground base metal mining operation of this size and type processing by flotation and located near centres of population.

An original preliminary closure cost estimate developed internally by the Cozamin projects and environmental groups was revised and updated most recently to December 31, 2020 year end with support from INSECAMI. The figures supporting the cost estimate were developed using the Open Pit / Underground Mine - Cost Estimator Tool updated to the most recent version CAL.V.Ago/2020. This Estimator was originally developed for arid climates in Australia by the New South Wales Government Industry & Investment (www.industry.nsw.gov.au). It is used in many mining regions internationally and has been well validated for underground metal mines.

The overall cost figure considers and incorporates the environmental conditions and those disturbances present at the Cozamin Mine to December 31, 2020 year end. Assumptions included continued operation at the current average operating rate of 3,300 tpd to April 2030, following by an estimated ten-year period of post-closure monitoring to define an initial undiscounted estimate of US$15.3 million. This amount is refined by the application of appropriate risk adjusted discount and exchange rates to present value of the final figure used in the corporate Asset Retiring Obligation (“ARO”) for the Cozamin mine.

The updated ARO to December 31, 2020 reflects necessary expenditures to achieve successful closure based on the existing disturbances and operational conditions, and includes descriptions of the closure and reclamation approaches, volumes, areas and unit costs. It does not contemplate or project those additional activities, facilities or disturbances which are, might be, or are likely to be required for the remainder of the life of the operating mine as outlined in this document but which are not yet authorized or constructed at the time of calculation of the ARO. The figure includes progressive reclamation during operations, clean up, rehabilitation and reclamation on closure as well as the projected 10 years of post-closure inspection and monitoring, and uses estimated site unit costs to Q3 2020.

Funding of the progressive reclamation costs comes from operational cash flow. Post-closure monitoring and maintenance costs are accounted in the final year of operation. Reclamation and closure costs are capitalized and amortized over the LOM. Site closure costs are appropriately funded by allocating a percentage of sales revenue.

As Capstone continues with exploration and development, mine life and resource potential are anticipated to change. For this reason, the closure plan for the Cozamin Mine remains a dynamic document. The costing is revised and updated as required to reflect the changes in disturbances present in the current year end, the evolving knowledge of specific site conditions and their reclamation requirements, revisions to design requirements as engineering and environmental studies are completed, changes in Mexican regulatory requirements and social obligations, and an understanding of the success of ongoing progressive rehabilitation, reclamation and closure activities, as well as prevailing costs and approaches for physical and other work related to closure.

20.3 Community Relations

The Zacatecas region has a strong mining tradition, positioning the Cozamin Mine within a community both knowledgeable and skilled in mining. Cozamin is relatively close to its neighbouring communities in Hacienda Nueva and La Pimienta Ejidos. There are no habitations within several kilometres of the footprint of the mine or its associated infrastructure, and the mine will not (and has not to date) require the resettlement of any individuals or communities. Successful engagement with the local communities proximate to the mine has been a cornerstone of Cozamin's operation to date and continues going forward.

Capstone has implemented a systematic approach to community relations with protocols in place to receive feedback from local communities. This includes a site-specific Social Responsibility Policy, which covers procedures for identifying and mapping stakeholders, planning formal engagement activities and collecting and responding to stakeholder feedback. The Company is committed to a variety of programs to give back to the local communities in Zacatecas, focusing on local hiring, training opportunities and contributions to the development of local infrastructure, as well as for the last four years annually hosting local tree-planting events using native species such as drought tolerant mesquite and huizache. The Cozamin mine provides financial support to the Hacienda Nueva community for assistance with education, sporting and recreation facilities as well as for community engagement. Donations have been used to help fund upgrades and improvements to local schools, deliver scholarships for local students and provide aid to elderly ejido members.

Capstone was awarded the Empresa Socialmente Responsable (ESR) designation by CEMEFI, the Mexican Centre for Philanthropy in recognition of its success in meeting commitment to sustainable, social and environmental operations (2012-2018). ESR is a voluntary program that accredits and recognizes companies for their commitments. The award acknowledges Capstone's efforts to assume voluntary and public commitments to implement socially responsible management and continuous improvement as part of its culture and business strategy. Capstone participates in periodic environmental leadership (Liderazgo Ambiental) programs organized by regulators in Mexico and received the Family-Responsible Company Accolade (2014 - 2018) which was developed by the Secretariat of Labour and Social Welfare (Secretaría del Trabajo y Previsión Social) to recognize a company bringing benefits to its partners, suppliers, the families of its workers, and to the environment.

Regular, proactive engagement with stakeholders is a component of daily activities at the mine creating respectful and productive two-way engagement.

20.4 Recommendations

The QP recommends the following work be completed:

- Design an effective sampling and monitoring plan to further characterize current conditions of waste and tailings. This will support design of waste and tailings management plans and assist in the evaluation of alternatives for tailings and waste rock disposal during operations and into closure. Design of the plan is part of Cozamin's environmental department's on-going responsibilities.
- Continue to actively engage in community assistance and development programs with surrounding communities to ensure Capstone retains its social licence. This continued practice is included in Cozamin's current operating cost model.
- With completion of feasibility level design for the selected filtered or dry stack tailings option, evaluate proposed ancillary infrastructure needs to assess whether buffer zones at the edges of the existing mine property are appropriately sized to ensure design and operational flexibility. Evaluation of proposed infrastructure is part of Cozamin's environmental department's on-going responsibilities.

21 Cost Estimation

21.1 Operating Cost Estimate

Cozamin staff developed the mine operating costs from first principles. Annual mine equipment utilization hours were derived from the forecast. Total operating costs were estimated using current unit operating costs revised to account for expected changes related to the implementation of the tailings dewatering and paste backfill system. Contractor costs were derived from forecasted requirements and contract unit costs. Mine support functions were estimated based on recent operating unit costs against budget activities to produce the mine operating costs. The processing operating costs were derived using forecasted production and current unit operating costs, revised to account for expected changes related to the implementation of the tailings dewatering and paste backfill system. General Management and Administration costs were assumed to be fixed based on budget. Table 21-1 summarizes the expected mine operating costs for the LOMP. Site operating costs were derived using budgeted operating costs based on actual operating costs, revised to account for expected changes related to the implementation of the tailings dewatering and paste backfill system.

Table 21-1: Summary of Estimated Operating Costs

Cost Center	US$/tonne milled											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mining	26.4	22.9	24.7	29.01	28.25	28.42	28.11	27.26	28.15	27.23	26.3	22.9
Processing (Milling)	9.82	10.14	9.24	11.73	11.73	11.73	11.73	11.73	11.73	12.66	12.64	12.64
General and Administrative	7.1	6.54	6.84	6.86	6.86	6.88	6.88	6.88	6.86	6.87	7.63	6.54
Total Unit Cost	**43.32**	**39.58**	**40.78**	**47.6**	**46.84**	**47.03**	**46.72**	**45.87**	**46.74**	**46.76**	**46.57**	**42.08**

Note: Operating and capital costs assume an exchange rate of MXN$20 per US$1. 2020 figures are for 12 months and are a combination of actual results and estimates, as reported in the October 23, 2020 Technical Report, and may not accurately represent actual 2020 figures. Figures may not sum due to rounding.

21.2 Capital Cost Estimation

Capital expenditures were developed in support of the LOMP and include the following sustaining capital components:

- Purchase of new equipment;
- Overhauls of existing equipment;
- Capital underground development and projects;
- Capital infrastructure;

- Ongoing reclamation; and
- Sustaining capital requirements.
- Expansionary capital components include:
- New tailings storage facility including ancillary facilities and infrastructure;
- Tailings dewatering plant; and Paste backfill plant.
- Capital costs do not include exploration activities.

Table 21-2 summarizes expected full year capital costs over the Cozamin LOMP. The first five years are outlined in the Cozamin capital budget plan. Capital expenditures include mine equipment, plant upgrades, underground capital development, tailings management and surface infrastructure. The remaining years are based on ongoing capital infrastructure projects, progressive reclamation and a sustaining capital allowance for the mine and mill. The sustaining capital allowance is estimated to be 2% of operating budget that is carried forward to the life of mine plan.

Table 21-2: Summary of Estimated Capital Costs

Year	Sustaining Capital (US$ million)	Expansionary Capital (US$ million)
2020	21.9	-
2021	24.5	13.0
2022	22.3	32.1
2023	17.1	1.0
2024	15.9	-
2025	18.2	-
2026	9.9	-
2027	9.3	-
2028	9.5	-
2029	1.7	-
2030	1.4	-
2031	0.3	-
Total	**152.0**	**46.1**

Note: Operating and capital costs assume an exchange rate of MXN$20 per US$1. 2020 figures are for 12 months and are a combination of actual results and estimates, as reported in the October 23, 2020 Technical Report, and may not accurately represent actual 2020 figures. Figures may not sum due to rounding.

21.3 Alternative Performance Measures

Cash costs per payable pound of copper produced (“C1”) is provided in Table 21-3.

This alternative performance measure was used to assess overall effectiveness and efficiency of the LOMP presented in this Report. Alternative performance measures are non-generally accepted accounting principles, and do not have a standard meaning within International Financial Reporting Standings ("IFRS"). Therefore, amounts presented may not be comparable to similar data presented by other mining companies. These performance measures are furnished as additional information in Capstone's financial disclosures and should not be considered in isolation as a substitute for measures of performance in accordance with IFRS.

"C1" is a key performance measure that Capstone uses to assess overall efficiency and effectiveness of mining operations.

Table 21-3: Estimated C1 Costs

Performance Measure	US$/lb of Payable Copper											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
C1 Costs	0.96	0.96	0.95	1.03	0.96	0.88	0.95	0.98	1.20	1.27	1.50	0.57

NOTES: Operating and Capital costs assume an exchange rate of MXN$20 per US$1. 2020 figures are for 12 months and are a combination of actual results and estimates, as reported in the October 23, 2020 Technical Report, and may not accurately represent actual 2020 figures. C1 Costs assume by-product pricing of Ag = $25.00/oz from 2021 to 2025 and $22.00/oz thereafter, Pb = $0.90/lb and Zn = $1.10/lb from 2021 to 2025 and $1.00/lb thereafter. C1 Costs are net of by-products and includes the 50% silver stream, which provides 10% of silver price to Capstone for 50% of silver produced, and is an alternative performance measure. Please see "Alternative Performance Measures" at the end of this release.

22 Economic Analysis

As Cozamin is a producing mine and no material expansion of current production is proposed, an economic analysis is not required for this Technical Report.

23 Adjacent Properties

The Mala Noche Vein is one of several main veins that have been exploited since pre-colonial times in the Zacatecas area. The Bote vein has recently been in production until 2003, but production on the Veta Grande, Panuco, Mala Noche, Cantera and San Rafael veins has varied with silver and base metal prices. The average ore grades for the Zacatecas district are reported to be 1.5 g/t Au, 120 g/t Ag, 3% Pb, 5.1% Zn and 0.16% Cu with total silver production to the end of 1987 estimated to be about 750,000,000 ounces (Ponce and Clark, 1988). The QP has been unable to verify this information and the reported grades are not necessarily indicative of the mineralization on Cozamin Mine that is the subject of this Technical Report.

24 Other Relevant Data and Information

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

25 Interpretations and Conclusions

The Cozamin Mine has been successfully developed into a viable mining operation with 14 years of continuous operation by Capstone. Based on the findings of this Technical Report, the QPs believe Cozamin is capable of sustaining production through the depletion of the Mineral Reserve. Relevant geological, geotechnical, mining, metallurgical and environmental data from the Cozamin Mine has been reviewed by the QPs to obtain an acceptable level of understanding in assessing the current state of the operation. The Mineral Resource and Reserve estimates have been performed to industry best practices (CIM, 2019) and conform to the requirements of CIM Definition Standards (CIM, 2014).

25.1 Conclusions

Capstone holds all required mining concessions, surface rights and rights of way to support mining operations for the life-of-mine plan developed using the October 31, 2020 Mineral Reserves estimates. Permits held by Capstone are sufficient to ensure that mining activities within the Cozamin mine are carried out within the regulatory framework required by the Mexican Government. No unusual risk to permit applications and/or extensions is anticipated beyond the potential for delays in regulatory review and approval following government disruption related to COVID-19. Annual and periodic land use and compliance reports have been filed as required.

The understanding of the regional geology, lithological, structural and alternation controls of the mineralization at Cozamin are sufficient to support estimation of Mineral Resources and Mineral Reserves. The Mineral Resources and Mineral Reserve estimates, NSR cut-off strategy and operating and capital cost estimates have been generated using industry-accepted methodologies and actual Cozamin performance standards and operating costs. Metallurgical expectations are reasonable, based on stable metallurgical performance from actual production and data from recently completed studies. Reviews of the environmental, permitting, legal, title, taxation, socio-economic, marketing and political factors for the Cozamin mine support the declaration of Mineral Reserves.

Cozamin water sources include purchase of additional water rights from the municipal authority in 2014, authorization to use treated water, water from underground mines held by various other parties, and water supply wells constructed downstream from the mine and processing facilities in 2011 and 2012. Cozamin Mine is projected to have access to sufficient water resources to support a 4,000 tpd operation.

At present, there is sufficient capacity within the existing TSF to store tailings from mining of the Mineral Reserves through at least late-2024, assuming proper tailings management continues and allows for construction of competent coarse tailings beaches for subsequent upstream raises. To accommodate processing of Mineral Reserves after 2024, Cozamin expects to convert from the current slurry tailings facility to a filtered tailings system. Feasibility-level engineering and studies to support permitting of two filtered tailings storage facility options are in progress. These data will support a decision regarding a preferred alternative and be used to support the necessary permit applications. This Technical Report considers the timing and cost of the permitting, engineering, and construction of a new filtered TSF.

Based on current regulations and laws, Capstone has addressed the environmental impact of the operation, in addition to certain impacts from historical mining. Closure provisions are appropriately considered in the mine plan. There are no known significant environmental, social or permitting issues that are expected to prevent the continued mining of the deposits at Cozamin mine.

25.2 Risks and Opportunities

The QPs, as authors of this Technical Report, have noted the following risks:

- Exchange rates, off-site costs and, in particular, base metal prices all have the potential to affect the economic results of the mine. Negative variances to assumptions made in the budget forecasts would reduce the profitability of the mine, thereby impacting the mine plan. (Tucker Jensen, P.Eng.)
- The Mineral Resource estimate could be materially impacted by changes in continuity of grade and in interpretation of mineralized zones after further exploration and mining, uncertainty of assumptions underlying the consideration of reasonable prospects of economic extraction, such as commodity price, exchange rate, geotechnical and hydrogeological aspects, operating and capital costs, metal recoveries, concentrate grade and smelting/refining terms, and by significant changes to land tenure or the permitting requirements. (Garth Kirkham, P.Geo., FGC)
- The upstream tailings dam raise construction method is highly dependent on tailings management to keep the reclaim pond as small and as far as possible from the dam crest for proper tailings beach construction. This dependency has the potential to jeopardize the feasibility of subsequent upstream raises and limit the total tailings storage capacity. These risks are currently mitigated with continuous tailings management, monitoring of the tailings storage facility performance, frequent site characterizations to monitor the progression of tailings beach strength, and audits from independent consultants. Alternative tailings management approaches using filtered tailings have been developed and are currently being advanced to a feasibility level to mitigate the risk of long-term use of the current TSF and to provide the additional storage capacity required for the LOMP. (Humberto Preciado, PhD, PE)
- Mexican regulatory expectations for environmental and social responsibility continue to evolve. Since the first environmental impact assessment, Capstone's property ownership has increased beyond the area of active mining and processing operations to encompass additional areas of historic mining and processing operations; particularly in the area of Chiripa arroyo. The path forward for remediating the environmental liabilities is not yet certain and may result in increased expectations and regulatory requirements. This has potential to increase costs for final closure and/or post closure monitoring, but these cannot be quantified at this time. (Jenna Hardy, P.Geo, FGC)

The authors of this Technical Report have noted the following opportunities:

- A new exploration target, MNFWZ west, will be tested as part of the 2021 drilling program covering 40,000 m, in addition to infill drilling in Vein 20 along with and east of the current MNFWZ Mineral Resource along with initial testing on adjacent vein systems. Exploration drifts are planned for 2021 and proposed for 2022. Additional exploration drilling can contribute to the geological understanding of the mine and assist in identifying future exploration targets. (Garth Kirkham, P.Geo., FGC)
- In addition to the above program, future drill programs are anticipated to upgrade the classification of a substantial portion of the current Inferred Resource to Indicated class by decreasing the drill hole spacing. (Garth Kirkham, P.Geo., FGC)
- Continue regional exploration and property evaluations within reasonable trucking distance of the plant. (Garth Kirkham, P.Geo., FGC)
- More testing of the Pb/Zn zones should be conducted as more resources are identified and as the time approaches for them to be milled. (Chris Martin, C.Eng MIMMM)
- Assess opportunities related to mining methods, including:
    - Reduction of dilution site-wide through improved engineering, planning, long-hole drill control and optimized explosives design. (Tucker Jensen, P.Eng.)
    - Investigation of alternative mining techniques with the objective of lowering costs and dilution to convert resources to reserves. Possible alternatives that will be studied include Cut-and-Fill, Drift-and-Fill and Long-hole Open Stoping with ore sorting technology. (Tucker Jensen, P.Eng.)
    - Rapid implementation of a Cemented Rock Fill (CRF) system to allow the safe and economic recovery of additional pillars. This includes areas mined prior to the planned start of paste backfilling in Q1 2023, and/or where it is not economic to deliver paste. Preliminary results indicate that CRF could be implemented with low capital cost well in advance of Q1 2023, and additional study is underway. (Tucker Jensen, P.Eng.)
    - Identification of areas where strictly overhand mining with gob backfill may allow the option to leave no sill pillars. (Tucker Jensen, P.Eng.)
    - Evaluation of the possibility of initiating paste backfilling significantly earlier than Q1 2023. Cozamin is assessing a package of used tailings filters that could potentially allow more rapid filter plant construction, along with other options. (Tucker Jensen, P.Eng.)
    - A trade-off study between the current method and alternative mining methods should be completed by the Cozamin technical staff as part of their regular duties. in order to optimize the value of the ore within domain 3a. The trade-off study should be completed before 2022 to allow for potential changes before mining is planned in the domain. (Tucker Jensen, P.Eng.)
    - Recovery of pillars in areas mined in the past is being investigated using paste fill and other salvage techniques. Cozamin has left unmined pillars needed for geotechnical stability throughout its mine life and will continue to do so until paste

backfill is available. Typically, conventional backfilled areas have been designed to leave approximately 26% of the total mineralization behind in pillars. (Tucker Jensen, P.Eng.)

- The paste backfill FS underway could lead to optimization of the mine plan and refinement of conservative estimates for equipment, materials costs, geotechnical stability and other factors. This has potential to increase pillar recovery and yield capital and operating cost savings, relative to the PFS results presented in this Technical Report. (Tucker Jensen, P.Eng.)
- Since a considerable amount of the Mineral Reserve volume is planned to be mined using fan drilling in the stoping procedure, further optimizations of reserve shapes may be possible by adding additional plane points where applicable. This opportunity should be completed by the Cozamin technical staff as part of their regular duties. (Tucker Jensen, P.Eng.)
- Current paste and filtered tailings management options being developed are expected to result in less tailings requiring storage at surface, and risks associated with the physical stability and closure of the TSF. (Humberto Preciado, PhD, PE)

26 Recommendations

The following recommendations have been identified by the authors of the Technical Report.

26.1 Recommendation Related to Drilling (Section 10)

- Incorporate exploration drifts into planned mining access for more precise infill drilling from underground, particularly in areas of deep mineralization drilled only from surface. The estimated cost for 2021 is US$1.8 million to complete an exploration drift west of the current Mineral Resource, and US$2.0 million for 2022 to complete an exploration drift east of the current Mineral Resource.
- Exploration expansion potential at MNFWZ remains open both west and east of the current Mineral Resource. The 2021 exploration budget of US$5 million for 40,000 m of surface drilling will primarily target expansion drilling in the newly recognized west target area, with additional infill drilling in the down-dip southeast portion of Vein 20, and initial testing of new brownfield targets on adjacent vein systems.

26.2 Recommendation Related to Mineral Processing and Metallurgical Testing (Section 13)

- More testing should be conducted in due course on the Pb/Zn ores assuming the resource grows and closer to the time when they will be milled. The testing could be conducted at Cozamin or in a commercial laboratory for a cost in the order of US$80,000.

26.3 Recommendations Related to Mineral Reserves Estimates (Section 15.6)

- As further exploration and infill-drilling continues, and empirical understanding of the physical characteristics of the orebody develops, continued revision of mining methods to optimize safety and economics is necessary. This recommendation should be undertaken by Cozamin and Capstone corporate technical staff as part of their regular duties, however mining and geotechnical engineering consultants may be required at an anticipated cost of approximately US$80,000 to $120,000.
- Alternatives to haulage in upper levels of the MNFWZ Vein 20 should be assessed. Cozamin staff should continue to develop plans to reduce truck haulage in upper levels by implementing a system of ore passes and finger raises. Implementing this design and procedural change could create improvements in haulage safety, ventilation quality, and operating costs. This should be completed by the Cozamin technical staff as part of their regular duties.

26.4 Recommendations Related to Geotechnical Considerations (Section 16.2)

The following studies, anticipated to cost approximately US$250,000, and work be completed (included as part of Cozamin Mine's operation costs):

- Geotechnical assessment of variable mining methods for upper MNFWZ geotechnical domain 3a and provision of mine design guidelines.
- Continue to map rock mass conditions underground and combined with geotechnical core logging, develop a 3D geomechanical domain model.
- Record stope, pillar, and ground support performance underground in a manner that assist with validation of design approaches.
- Continue development of a formal ground control management plan (GCMP) that summarises different mine design (stope and pillar) and ground control requirements in different geotechnical domains.
- Continue training of personnel in geotechnical mapping and to identify poor rock conditions and execute remediation ground control work where needed.
- Use stope and development opening performance, including ground support performance, to verify the geotechnical domain model and the design of stope and pillar sizes and ground control. Update the GCMP accordingly.
- Continue to conduct systematic bolting in new headings and adjust ground support in areas of weaker rock mass conditions or in higher ground stress zones.
- Upgrade ground support to current standards in permanent active areas such as ramps, main drifts and shops. This recommendation is being implemented on site and is included in the current operating cost model.
- Define local regional stress field characteristics to develop a reliable geotechnical numerical stress model and provide supporting data to verify geotechnical assumptions used for design are correct.
- Optimization of the paste fill mix specifically for vertical exposure will be an opportunity to reduce costs once the paste plant is operational and effectively producing a quality product. The required strength provided above is for the "worst case" scenario, where the stope width is the controlling factor and set to a width of 24 m. As paste performance data is collected and the paste plant operation becomes well understood, creating a mix design for varying stope widths can be an opportunity to reduce costs of paste fill.
- Mining underneath paste fill is often a difficult transition for the operation teams. Golder suggests that the Cozamin team set up a test mining area, where crews can gain experience mining underneath paste fill away from other mining zones or other critical sections of the mine.
- In addition to a 30-m maximum strike length for stopes being mined underneath previously paste-filled stopes, Golder recommends that 5-m long (strike length) and minimum half the stope height rib pillars be left in place between stopes. This will help

prevent any instability issues that may arise during the stoping underneath the paste fill and provide a stable work area if recover is required. Golder notes that the necessity of this practice may be reviewed once significant operational experience is achieved and geotechnical data is collected and a strong case is put forth to eliminate, or reduce, this requirement.

- High level mine plans for stopes to be mined underneath indicate vertical offset at ramp accesses to due grade preference. The impacts of this offset was not part of this study and should be reviewed relative to paste fill stability prior to execution.

26.5 Recommendations Related to Recovery Methods (Section 17)

- Construct mill upgrades as described in Section 17, including a grizzly at the primary crusher and fines bypass to final product, and increased tailings pumping capacity before production rates increase in 2021. In addition, purchase spare sets of mantles and bowls for the secondary and tertiary crushing circuits to reduce maintenance downtime. The costs of these recommendations have been added to the capital estimate and sum to a rounded US$250,000 to be spent in 2021.
- Install modified mill discharge head Ball Mills 1 to increase mill power utilization. The head is on site and installation is scheduled for the first quarter of 2021.
- Evaluate the installation of an additional concentrate filter to reduce the risk of unplanned outages caused by filtration upsets and to improve filtered concentrate moisture contents, with the aim of ensuring maximum mill availability.

26.6 Recommendations Related to Project Infrastructure - Electrical (Section 18.3.1)

- Assess future regional power demands and advance the permitting process to further increase line power supply based on final tailings dewatering and paste plant designs. Continue to monitor peak power draw and assess means for smoothing demand peaks. This work should be completed by Cozamin technical staff in the course of their normal duties.

26.7 Recommendations Related to Project Infrastructure - Water (Section 18.3.3)

- Develop a stochastic site water balance model that will enable the site to predict and plan for potential periods of water scarcity and periods of potential excess water on site following the transition to filtered tailings storage.
- Cost to complete the recommendations is estimated at US$100,000.

26.8 Recommendations Related to Tailings Storage Facility (Section 18.3.4)

- The qualified person of this section recommends that, once the Feasibility level engineering for the two alternative filtered tailings facilities is completed, permitting is advanced in parallel for both facilities and that, at least, one of the storage options is advanced to detailed engineering.
- A spillway has been designed and recommended for construction from Stage 10 and onwards, which will prevent a large storm event from undermining the specified minimum beach width as the TSF raises progressively move closer to the reclaim pond.
- It is estimated the engineering and permitting studies will cost approximately US$300,000.

26.9 Recommendations Related to Environmental Studies, Permitting and Social or Community Impacts (Section 20)

- Design an effective sampling and monitoring plan to further characterize current conditions of waste and tailings. This will support design of waste and tailings management plans and assist in the evaluation of alternatives for tailings and waste rock disposal during operations and into closure. Design of the plan is part of Cozamin's environmental department's on-going responsibilities.
- Continue to actively engage in community assistance and development programs with surrounding communities to ensure Capstone retains its social licence. This continued practice is included in Cozamin's current operating cost model.
- With completion of feasibility level design for the selected filtered or dry stack tailings option, evaluate proposed ancillary infrastructure needs to assess whether buffer zones at the edges of the existing mine property are appropriately sized to ensure design and operational flexibility. This evaluation is included in Capstone's current operating cost model.

27 References

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