

Copper Mountain Mining Announces a 57% Increase in Copper Mineral Reserves at the Copper Mountain Mine and Updated Life of Mine Plan

Vancouver, British Columbia – September 28, 2022 – Copper Mountain Mining Corporation (TSX:CMMC | ASX:C6C) (the “Company” or “Copper Mountain”) is pleased to announce an updated Mineral Reserves and Mineral Resources estimate and revised life of mine plan for its 75% owned Copper Mountain Mine, located in southern British Columbia. The new life of mine plan, based only on Mineral Reserves, supports an updated mill expansion scenario to 65,000 tpd (“65ktpd Expansion”), producing a total of 4.1 billion pounds of copper equivalent⁽¹⁾ over a mine life of 32 years with robust economics including an after-tax net present value (“NPV”) at an 8% discount rate of \$1.24 billion⁽¹⁾.

All metrics are on a 100% basis and all amounts are in U.S. dollars unless otherwise indicated.

Highlights:

- Measured and Indicated Mineral Resources (inclusive of Mineral Reserves) estimate of 1.1 billion tonnes increased by⁽²⁾:
 - 70% to 5.5 billion pounds of copper at average grades of 0.22% Cu.
 - 68% to 3.4 million ounces of gold at average grades of 0.09 g/t Au.
 - 62% to 23.4 million ounces of silver at average grades of 0.64 g/t Ag.
- Proven and probable Mineral Reserves estimate of 702 million tonnes increased by⁽²⁾:
 - 57% to 3.7 billion pounds of copper at average grades of 0.24% Cu.
 - 54% to 2.3 million ounces of gold at average grades of 0.10 g/t Au.
 - 49% to 16.0 million ounces of silver at average grades of 0.71 g/t Ag.
- Total mine life has been extended to 32 years with the 65ktpd Expansion commencing in 2028.
- Annual average production⁽³⁾ of 138 million pounds of copper equivalent (114 million pounds of copper, 54,000 ounces of gold and 367,000 ounces of silver).
- After-tax NPV (8%)⁽¹⁾ of \$1.24 billion.
- All-in cost (“AIC”)⁽³⁾ of \$1.76 per pound of copper, net of by-product credits.

1. Based on a C\$1.30 to US\$1.00 exchange rate and consensus metal prices for years 1, 2, 3 and long-term, respectively, of: \$3.73, \$3.86, \$3.94 and \$3.60 per pound copper; \$1,796, \$1,762, \$1,749 and \$1,650 per ounce of gold; and \$21.86, \$22.30, \$22.24 and \$21.35 per ounce of silver.

2. Compared to the prior technical report titled “Copper Mountain Mine 65 kt/d Expansion Study and Life-of-Mine Plan NI 43-101 Technical Report” with an effective date of September 1, 2020 and dated November 30, 2020.

3. For the first 20 years, starting in 2023. The Company reports the non-GAAP financial measure of AIC per pound of copper produced to manage and evaluate its operating performance. See “Cautionary Note Regarding Non-GAAP Performance Measures” in this press release.

“These results illustrate the size and scale of the Copper Mountain Mine,” stated Gil Clausen, Copper Mountain’s President and CEO. “Our large Mineral Reserves base underpins our updated 65ktpd Expansion study, which estimates total production of over 4.1 billion pounds of copper equivalent over a mine life that will extend beyond 30 years. Increasing plant capacity to 65ktpd requires only modest initial development capital, which is self funded with mine cash flow. In fact, not only is the Copper Mountain Mine able to fund capital required over the life of mine,

but it is also expected to generate significant free cash flow beyond these requirements. In addition, higher-grade exploration upside remains, particularly at depth, providing further reserve expansion potential. With Mineral Reserves at the Copper Mountain Mine continuing to grow, the Company's total Mineral Reserves estimate, including at the Eva Copper Project, is now at 5.4 billion pounds of copper and over 2.6 million ounces of gold. We have two large, scalable assets in two of the best mining jurisdictions in the world."

The Executive Summary of the NI 43-101 technical report (the "2022 Technical Report") for the new life of mine plan for the Copper Mountain Mine is available on the Copper Mountain website at www.CuMtn.com. The Company will file the full 2022 Technical Report on SEDAR (www.sedar.com) within the next seven days and such report will be available at that time on the Company's website.

Mining & Processing

The 65ktpd Expansion includes a new primary crusher feed hopper, modifications to the primary gyratory crusher, the installation of a High-Pressure Grinding Roll (HPGR) circuit, the addition of a fourth ball mill, a regrind verti-mill, additional rougher and cleaner flotation circuit capacity, and electrical system upgrades. The existing SAG mill will be retired. The fourth ball mill, a 22 ft by 38 ft mill, will be installed adjacent to the third ball mill within the existing building. With the addition of the fourth ball mill, the ball milling line will comprise four mills operating in parallel: two identical 24 ft x 30 ft mills, and two identical 22 ft x 38 ft mills (see Appendix 2 for the proposed 65ktpd process flowsheet). This work will allow for increased throughput with a slightly coarser grind size P_{80} of 165 μm as compared to the current grind size of 150 μm .

The 65ktpd Expansion is a planned plant-wide improvement that increases throughput in addition to:

- Reducing operating costs using newer but proven technologies and equipment;
- Reducing energy consumption through more efficient grinding unit operations; and
- Improving flotation performance with substantially more capacity at the rougher and cleaner stages.

The mine plan is based only on Proven and Probable Mineral Reserves at the Copper Mountain Mine, and indicates a 32-year life of mine, which comprises 30 years of mining and milling followed by 2 years of processing the low-grade stockpiles. The plan indicates average copper equivalent production of 138 million pounds per annum for the first 20 years starting in 2023. The increased milling rate to 65,000 tonnes per day is planned to commence in 2028. The additional mining equipment required includes one additional shovel, 21 haul trucks and one additional drill for a total of five shovels, 49 220-t haul trucks and six blasthole drills. The 65ktpd Expansion also includes Trolley Assist on the East haul road.

Significant exploration potential remains at the Copper Mountain Mine with mineralization open both laterally and at depth. Multiple historical drillholes end in copper mineralization and geophysical data suggests the copper deposit extends below the current known resource.

Total ore mined is expected to be 652 million tonnes and total waste mined is expected to be 1,356 million tonnes, with a strip ratio of 2.08:1. Using average recoveries of 87.9% for copper, 66.8% for gold and 68.2% for silver, total production is expected to be 4.1 billion pounds of copper equivalent composed of 3.4 billion pounds of copper, 1.6

million ounces of gold and 11.6 million ounces of silver. A summary of mining, processing and production metrics is provided below. A more detailed life of mine production schedule will be available in the 2022 Technical Report on SEDAR.

Parameter ⁽¹⁾	Unit	Value
Total Ore Mined	kt	652,015
Total Waste	kt	1,356,381
Strip Ratio	w:o	2.08
Processing Rate (after year 2028)	t/d	65,000
Total Copper Equivalent Produced	MLb	4,116
Total Copper Produced	MLb	3,402
Total Gold Produced	koz	1,557
Total Silver Produced	koz	11,629
Average Annual Copper Equivalent ⁽²⁾	MLb	138.4
Average Annual Copper Produced ⁽²⁾	MLb	113.6
Average Annual Gold Produced ⁽²⁾	koz	54.0
Average Annual Silver Produced ⁽²⁾	koz	367.0
Average Cu Head Grade	%	0.25%
Average Au Head Grade	g/t	0.10
Average Ag Head Grade	g/t	0.8
Cu Recoveries	%	87.9
Au Recoveries	%	66.8
Ag Recoveries	%	68.2
Mine Life (including stockpile years)	years	32

(1) All parameters do not include 2022.

(2) For years 1-20, starting in 2023.

Capital Costs

The initial capital cost required to increase throughput to 65,000 tonnes per day is estimated to be approximately \$237 million. This includes the installation of the HPGR circuit, buildings, fourth ball mill, regrind circuit, verti-mill, additional rougher and cleaner flotation circuits, and electrical system upgrades. Other development capital requirements estimated at \$223 million subsequently required over the remaining mine life, include additional mobile mining equipment, the East haul road Trolley Assist and water management related expenditures.

Total sustaining capital for the life of mine is estimated to be \$828 million. With the 65ktpd Expansion's significant increase in Mineral Reserves and mine life, an additional replacement cycle for the mining fleet has been factored into the sustaining capital estimate which contributes to most of the total estimate.

Initial 65ktpd Expansion CAPEX Breakdown	\$M
Direct Costs	
Site Water Management	\$4.3
Process Plant Ancillaries	\$1.9
Crushing, HPGR, Ore Storage and Conveying	\$67.6
Grinding	\$20.1
Flotation and Regrind	\$24.7
Reagents	\$0.1
Buildings	\$14.7
Site Development & Plant Roads	\$2.4
New Ingerbelle Bridge	\$12.9
Transformers and Substations	\$8.6
Freight & Logistics	\$3.5
Direct Costs Subtotal	\$160.7
Indirect Costs	
EPCM	\$14.5
Project Indirects	\$16.6
Engineering Support for Permitting	\$1.2
Contingency	\$43.9
Indirect Costs Total	\$76.2
Total Initial 65ktpd Expansion CAPEX	\$236.9

LOM Capital Costs	\$M
Sustaining Capital	
Mine (Includes Capital Leases on Fleet Replacement)	\$715.5
Mill & Site	\$112.0
Total Sustaining Capital	\$827.5
Other Development Capital	\$222.8

Operating Costs

AIC per pound of copper produced is a non-GAAP financial measure. See “Cautionary Note Regarding Non-GAAP Performance Measures” in this press release.

Total LOM operating unit costs are estimated to be \$10.14 per tonne milled, which includes mining cost per tonne milled of \$5.75, milling cost per tonne milled of \$3.87 and G&A cost per tonne milled of \$0.51. Mining cost per tonne mined is estimated to be \$1.70. A unit cost breakdown is provided below.

Unit Operating Costs	\$ per tonne milled
Mine Cost per Tonne Milled	\$5.75
Mill Cost per Tonne Milled	\$3.87
G&A Cost per Tonne Milled	\$0.51
Total Operating Cost per Tonne Milled	\$10.14

Notes: Mining costs are inclusive of costs to rehandle the existing ore stockpiles.

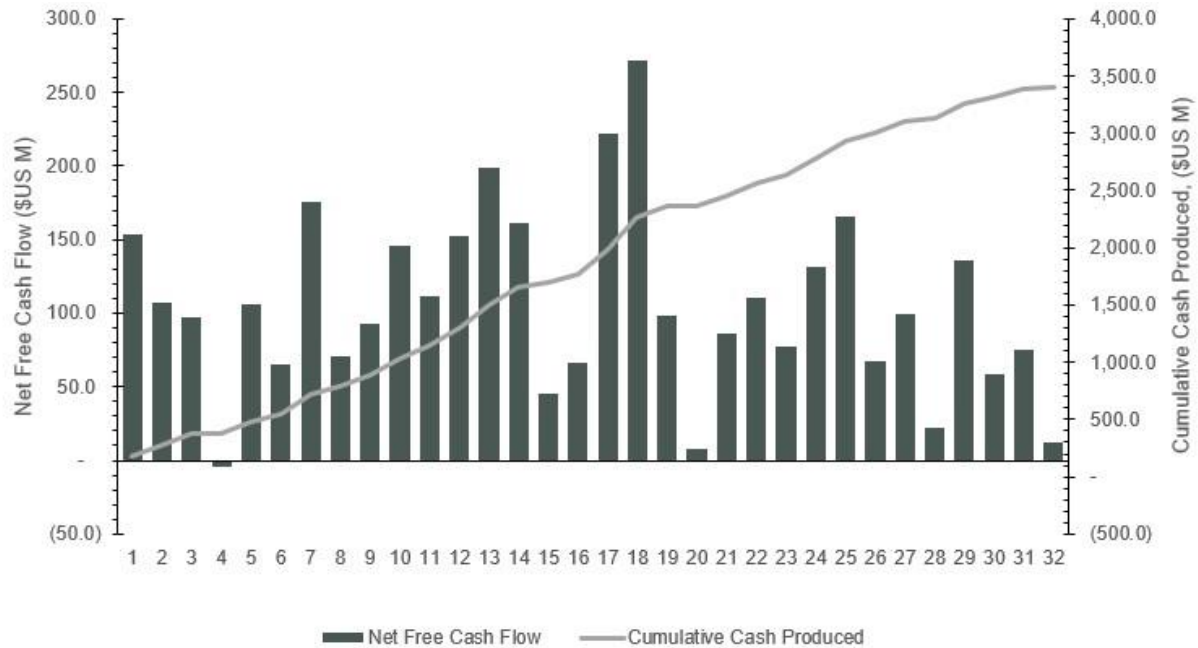
The above costs result in an average AIC per pound of copper of \$1.76 for the first 20 years of mine life.

Economics

The after-tax NPV for the 65ktpd Expansion at the Copper Mountain Mine assuming an 8% discount rate is estimated to be \$1.24 billion. The economics are calculated assuming a Canadian Dollar to U.S. Dollar exchange rate of 1.30 to 1 and long-term metal prices of \$3.60 per pound copper, \$1,650 per ounce of gold and \$21.35 per ounce of silver. Metal price assumptions are based on consensus forecasts. A sensitivity analysis on varying copper prices was completed on the after-tax NPV (8%) and the results are summarized below.

Copper prices	After-tax NPV (8%)
-10%	\$956 million
\$3.60	\$1,245 million
+10%	\$1,532 million

Figure 1: Projected Net Free Cash Flow



Mineral Reserve and Mineral Resource

A summary of the Mineral Reserves and Mineral Resources estimates is provided below as of August 1, 2022. The Mineral Resources are inclusive of Mineral Reserves.

Copper Mountain Mine Mineral Reserves Estimate (as of August 1, 2022)							
Category	Tonnes (kt)	Cu Grade (% Cu)	Au Grade (g/t)	Ag Grade (g/t)	Cu Pounds (Mlb)	Au Ounces (koz)	Ag Ounces (koz)
Proven							
CM M&N Total Pit	232,512	0.28	0.09	1.10	1,454	665	8,208
New Ingerbelle Pit	183,003	0.23	0.14	0.41	928	824	2,412
<i>Subtotal Pit Only</i>	<i>415,515</i>	<i>0.26</i>	<i>0.11</i>	<i>0.79</i>	<i>2,382</i>	<i>1,488</i>	<i>10,620</i>
Stockpile	51,765	0.15	0.04	0.45	176	67	749
Total Proven	467,280	0.25	0.10	0.76	2,557	1,555	11,369
Probable							
CM M&N Total Pit	155,011	0.23	0.09	0.74	786	449	3,688
New Ingerbelle Pit	80,154	0.22	0.12	0.37	389	309	953
Total Probable	235,165	0.23	0.10	0.61	1,175	758	4,641

Copper Mountain Mine Mineral Reserves Estimate (as of August 1, 2022)							
Proven + Probable							
CM M&N Total Pit	387,522	0.26	0.09	0.95	2,240	1,113	11,895
New Ingerbelle Pit	263,157	0.23	0.13	0.40	1,317	1,133	3,366
<i>Subtotal Pit Only</i>	<i>650,679</i>	<i>0.25</i>	<i>0.11</i>	<i>0.73</i>	<i>3,556</i>	<i>2,246</i>	<i>15,261</i>
Stockpile	51,765	0.15	0.04	0.45	176	67	749
Total	702,444	0.24	0.10	0.71	3,732	2,313	16,010

1. Mineral Reserves estimate was prepared in accordance with the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, as amended (the "JORC Code") and Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards on Mineral Reserves and Mineral Resources (the "CIM Standards") adopted by the CIM Council on May 10, 2014.
2. Mineral Reserves estimate was generated using the August 1, 2022 mining surface.
3. Mineral Reserves estimate is reported at 0.10% and 0.13% Cu cut-off grade for New Ingerbelle and Copper Mountain Mine ("CMM") respectively.
4. Mineral Reserves estimate is reported using long-term copper, gold, and silver prices of \$2.75/lb, \$1,500/oz, and \$18.50/oz, respectively.
5. An average CMM copper process recovery of 80%, gold process recovery of 65%, and silver process recovery of 70% is based on geo-metallurgical domains and actual plant values.
6. An average New Ingerbelle copper process recovery of 88.5%, gold process recovery of 71%, and silver process recovery of 65% is based on geo-metallurgical domains, historical recoveries, and recent testwork.
7. Average bulk density is 2.78 t/m³.
8. Stockpile tonnes and grade are based on production grade control process.
9. Totals may not add due to rounding.

Copper Mountain Mine Mineral Resources Estimate (as of August 1, 2022)							
Category	Tonnes (kt)	Cu Grade (% Cu)	Au Grade (g/t)	Ag Grade (g/t)	Cu Pounds (Mlb)	Au Ounces (koz)	Ag Ounces (koz)
Measured							
CM M&N Total Pit	346,989	0.24	0.08	0.92	1,862	877	10,294
New Ingerbelle Pit	198,241	0.24	0.14	0.41	1,027	905	2,588
<i>Subtotal Pit Only</i>	<i>545,230</i>	<i>0.24</i>	<i>0.10</i>	<i>0.73</i>	<i>2,889</i>	<i>1.78</i>	<i>12.88</i>
Stockpile	51,765	0.15	0.04	0.45	176	67	749
Total Measured	596,995	0.23	0.10	0.71	3,064	1,848	13,631
Indicated							
CM M&N Total Pit	369,786	0.19	0.07	0.65	1,558	838	7,759
New Ingerbelle Pit	165,210	0.23	0.13	0.37	845	680	1,987
Total Indicated	534,995	0.20	0.09	0.57	2,402	1,518	9,745
Measured and Indicated							
CM M&N Total Pit	716,775	0.22	0.07	0.78	3,420	1,714	18,053
New Ingerbelle Pit	363,451	0.23	0.14	0.39	1,872	1,585	4,574
<i>Subtotal Pit Only</i>	<i>1,080,226</i>	<i>0.22</i>	<i>0.09</i>	<i>0.65</i>	<i>5,291</i>	<i>3,299</i>	<i>22,627</i>
Stockpile	51,765	0.15	0.04	0.45	176	67	749
Total Measured and Indicated	1,131,991	0.22	0.09	0.64	5,467	3,366	23,376
Inferred							
CM M&N Total Pit	290,841	0.19	0.08	0.65	1,216	710	6,072

Copper Mountain Mine Mineral Resources Estimate (as of August 1, 2022)							
New Ingerbelle Pit	154,800	0.20	0.11	0.32	696	567	1,603
Total Inferred	445,641	0.19	0.09	0.54	1,912	1,278	7,674

1. Mineral Resources estimate was prepared in accordance with the JORC Code and the CIM Standards.
2. Mineral Resources were estimated using the August 1, 2022 mining surface for the Copper Mountain Mine.
3. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of the Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration.
4. Mineral Resources estimate is constrained by a \$3.50/lb Cu pit shell.
5. Cut-off grade is based on copper grade only.
6. Mineral Resources are inclusive of Mineral Reserves.
7. Cut-off grades applied at 0.10% Cu.
8. Totals may not add due to rounding.

Competent Persons Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Patrick Redmond, Ph.D., P.Geol. Dr. Redmond is a full-time employee of the Company and has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code. Dr. Redmond does consent to the inclusion in this news release of the matters based on their information in the form and context in which it appears.

Qualified Persons

The Mineral Resources estimate for the Copper Mountain Mine was prepared by Patrick Redmond, Ph.D., P.Geol. who is the Senior Vice President, Exploration and Geoscience at Copper Mountain. Dr. Redmond serves as the qualified person as defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) for the Mineral Resources estimate at the Copper Mountain Mine. Dr. Redmond consents to the inclusion of the Mineral Resources estimate in this news release and has approved the Mineral Resources information included in this news release.

Mr. Alberto Chang, P.Eng., serves as the qualified person as defined by NI 43-101 for information regarding the Copper Mountain Mine’s technical information and Mineral Reserves estimate. Mr. Chang is the Vice President, Mining of Copper Mountain and has reviewed and approved the contents of this news release.

The qualified persons have verified the information disclosed herein, including the sampling, preparation, security and analytical procedures underlying such information, and are not aware of any significant risks and uncertainties that could be expected to affect the reliability or confidence in the information discussed herein.

About Copper Mountain Mining Corporation

Copper Mountain’s flagship asset is the 75% owned Copper Mountain Mine located in southern British Columbia near the town of Princeton. The Copper Mountain Mine currently produces approximately 90 million pounds of copper equivalent. Copper Mountain also has the development-stage Eva Copper Project in Queensland, Australia and an extensive 2,100 km² highly prospective land package in the Mount Isa area. Copper Mountain trades on the Toronto Stock Exchange under the symbol “CMMC” and Australian Stock Exchange under the symbol “C6C”.

Additional information is available on the Company’s web page at www.CuMtn.com.

On behalf of the Board of

COPPER MOUNTAIN MINING CORPORATION

“Gil Clausen”

Gil Clausen, P.Eng.

President and Chief Executive Officer

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Cautionary Note Regarding Forward-Looking Statements

This news release may contain “forward looking information” within the meaning of Canadian securities legislation and “forward-looking statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995 (collectively, “forward-looking statements”). These forward-looking statements are made as of the date of this news release and Copper Mountain does not intend, and does not assume any obligation, to update these forward-looking statements, whether as a result of new information, future events or otherwise, except as required under applicable securities legislation. All statements, other than statements of historical facts, are forward-looking statements. Generally, forward-looking statements relate to future events or future performance and reflect the Company’s expectations or beliefs regarding future events.

In certain circumstances, forward-looking statements can be identified, but are not limited to, statements which use terminology such as “plans”, “expects”, “estimates”, “intends”, “anticipates”, “believes”, “forecasts”, “guidance”, “scheduled”, “target” or variations of such words, or statements that certain actions, events or results “may”, “could”, “would”, “might”, “occur” or “be achieved” or the negative of these terms or comparable terminology. In this news release, certain forward-looking statements are identified, including but not limited to: information with respect to the Company’s strategy, plan or future financial or operating performance with respect to the 65ktpd Expansion life of mine plan; forecast or estimated copper production, including annual copper production, and the increase or timing thereof; projected or estimated costs, including AIC; projected, estimated or assumed prices, including the price of copper, gold and silver; exploration potential; Mineral Resources and Mineral Reserves; Mineral Resources and exploration existing beyond the currently defined Mineral Reserves; projected or estimated capital expenditures; mine life; the duration of mining operations; estimated or projected mine operating figures, including mining and processing rates, the amount of ore mined and waste removed, strip ratios, copper, gold and silver grades and copper, gold and silver recovery rates; and certain financial measures, including estimated cash flows. Forward-looking statements involve known and unknown risks, uncertainties and other factors that could cause actual results, performance and opportunities to differ materially from those implied by such forward-looking statements. Factors that could cause actual results to differ materially from these forward-looking statements include the successful exploration of the Company’s properties in Canada and Australia, market price, continued availability of capital and financing and general economic, market or business conditions, extreme weather events, material and labour shortages, the reliability of the historical data referenced in this press release and risks set out in Copper Mountain’s public documents, including in each management discussion and analysis, filed on SEDAR at www.sedar.com. Although Copper Mountain has attempted to identify important factors that could cause the Company’s actual results, performance, achievements and opportunities to differ materially from those described in its forward-looking statements, there may be other factors that cause the Company’s results, performance, achievements and opportunities not to be as anticipated, estimated or intended. While the Company believes that the information and assumptions used in preparing the forward-looking statements are reasonable, undue reliance should not be placed on these statements, which only apply as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. Accordingly, readers should not place undue reliance on the Company’s forward-looking statements.

Cautionary Note Regarding Non-GAAP Performance Measures

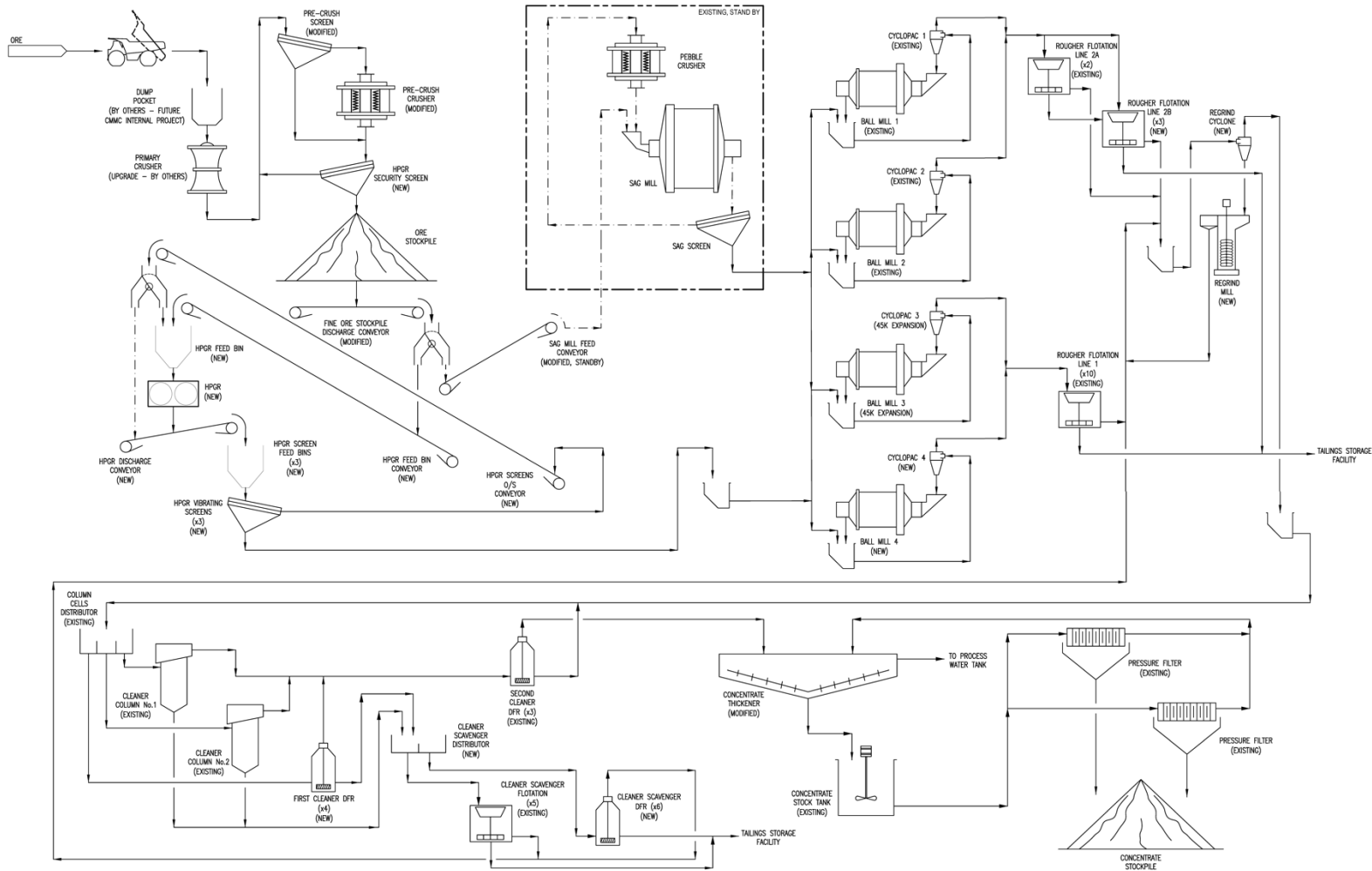
This news release includes certain non-GAAP performance measures that do not have a standardized meaning prescribed by International Financial Reporting Standards (“IFRS”). These measures may differ from those used and may not be comparable to such measures as reported by other issuers. The Company believes that these measures are commonly used by certain investors, in conjunction with conventional IFRS measures, to enhance their understanding of the Company’s performance. These performance measures are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. These measures have been derived from the Company’s financial statements and applied on a consistent basis. The calculation and an explanation of these measures is provided in the Company’s management’s discussion and analysis and such measures should be read in conjunction with the Company’s financial statements.

APPENDIX 1: LIFE OF MINE PRODUCTION PLAN (Excluding Stockpile Years)

	Units	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Ore mined	kt	14,286	13,822	12,620	14,589	15,090	21,289	27,073	25,978	24,167	29,194	25,624	33,053	40,844	33,798	8,908	14,723
Waste Mined	kt	51,688	52,796	42,512	44,506	40,616	58,505	46,496	53,993	55,827	50,743	54,371	43,337	35,784	39,872	53,842	52,959
Total material mined (excl. rehandle)	kt	65,974	66,618	55,131	59,095	55,706	79,793	73,569	79,970	79,994	79,937	79,995	76,390	76,628	73,670	62,750	67,682
Stripping ratio	w:o	3.62	3.82	3.37	3.05	2.69	2.75	1.72	2.08	2.31	1.74	2.12	1.31	0.88	1.18	6.04	3.60
Tonnes milled per day	TPD	44,997	44,997	44,997	44,997	44,997	49,863	65,001	65,000	65,000	64,824	65,009	64,997	65,009	64,822	65,000	65,000
Head Grades Milled:																	
Copper	%	0.35%	0.28%	0.28%	0.35%	0.44%	0.24%	0.27%	0.22%	0.23%	0.27%	0.24%	0.27%	0.30%	0.26%	0.17%	0.20%
Gold	g/t	0.07	0.08	0.06	0.07	0.10	0.15	0.18	0.12	0.13	0.16	0.14	0.15	0.18	0.15	0.09	0.07
Silver	g/t	1.53	1.22	1.07	1.47	1.91	0.43	0.51	0.39	0.41	0.46	0.43	0.45	0.48	0.45	0.34	0.70
Recoveries:																	
Copper	%	88%	89%	87%	88%	89%	89%	89%	88%	88%	89%	88%	89%	89%	89%	82%	86%
Gold	%	65%	65%	65%	65%	65%	70%	70%	70%	70%	70%	70%	70%	70%	70%	69%	65%
Silver	%	70%	70%	70%	70%	70%	65%	65%	65%	65%	65%	65%	65%	65%	65%	66%	70%
Recovered Metal:																	
Copper	Mlb	112	92	88	111	141	87	128	100	107	124	109	124	140	122	75	91
Gold	Koz	25	27	20	25	33	62	94	62	69	83	74	82	98	79	50	33
Silver	Koz	566	451	397	542	708	165	252	194	201	230	213	222	240	222	171	371

	Units	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Ore mined	kt	26,372	25,733	21,986	765	16,375	27,146	28,057	26,980	20,780	23,239	24,954	26,031	28,038	507
Waste Mined	kt	47,003	47,362	37,887	28,897	31,244	41,322	44,712	47,821	53,640	52,799	43,493	31,952	41,883	28,521
Total material mined (excl. rehandle)	kt	73,374	73,094	59,873	29,662	47,618	68,468	72,769	74,802	74,420	76,038	68,447	57,983	69,920	29,027
Stripping ratio	w:o	1.78	1.84	1.72	37.79	1.91	1.52	1.59	1.77	2.58	2.27	1.74	1.23	1.49	56.28
Tonnes milled per day	TPD	64,993	64,832	65,008	65,000	65,000	64,824	65,002	65,007	65,000	64,822	65,000	65,000	65,012	64,822
Head Grades Milled:															
Copper	%	0.34%	0.40%	0.23%	0.15%	0.22%	0.25%	0.22%	0.28%	0.33%	0.20%	0.24%	0.18%	0.24%	0.15%
Gold	g/t	0.11	0.10	0.08	0.04	0.08	0.10	0.10	0.11	0.08	0.10	0.11	0.06	0.10	0.05
Silver	g/t	1.22	1.77	0.66	0.45	0.64	0.70	0.65	0.96	1.39	0.68	0.81	0.57	0.77	0.51
Recoveries:															
Copper	%	89%	89%	89%	90%	89%	89%	89%	89%	87%	89%	90%	89%	90%	82%
Gold	%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
Silver	%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Recovered Metal:															
Copper	Mlb	157	185	107	73	102	117	102	130	151	95	112	84	111	67
Gold	Koz	54	48	42	20	42	49	49	53	40	49	55	32	50	26
Silver	Koz	654	945	354	242	343	372	347	513	740	365	432	303	412	271

APPENDIX 2: FLOWSHEET FOR 65KTPD MILL EXPANSION



APPENDIX A: SUMMARY OF MINERAL RESOURCES, MINERAL RESERVES AND THE LIFE OF MINE PRODUCTION PLAN FOR THE COPPER MOUNTAIN MINE

1 Summary

This Technical Report is completed to document the Copper Mountain Mine (the CMM) Mineral Resources and Mineral Reserves and includes a life-of-mine (LOM) plan and expansion study update to increase the CMM concentrator throughput from 45 kilotonnes per day (kt/d) to 65 kt/d.

1.1 Key Facts

Compared to CMMC's last technical report completed in November 2020 (Klue et al., 2020), the Mineral Reserves has increased by more than 50% and the Mineral Resources by more than 70%. Refer to Section 1.14 and 1.15 for detail.

Other key facts about the CMM expansion study update are summarized in Table 1-1. All values in this NI 43-101 Technical Report are in United States dollars (\$) unless otherwise stated.

Table 1-1: Copper Mountain Mine Summary

Area	Measure	Unit	Nov 2020	Sep 2022
Production	Ore Milled/Throughput (after expansion)	Mt/a	23,725	23,725
	Life-of-Mine Pit	years	18	30
	Life-of-Mine Pit and Stockpile ¹ (LOM/SP)	years	21	32
	Ore Milled (Years 1–20)	Mt	452	433
	Proven and Probable Mineral Reserves	Mt	462.3	702.4
	Measured and Indicated Mineral Resources	Mt	654.3	1,131.9
	Average Annual Copper Production (Years 1–20)	Mlb	98.9	113.6
	Average Annual Gold Production (Years 1–20)	koz	48.8	54.0
	Average Annual Silver Production (Years 1–20)	koz	335.6	367.0
	Average Annual Copper equivalent Production (Years 1–20)	Mlb	125.2	138.4
	Average Copper Grade (LOM)	%	0.24	0.25
	Average Copper Grade with Stockpile (LOM/SP)	%	0.23	0.24
	Average Gold Grade (LOM/SP)	g/t	0.10	0.10
	Average Silver Grade (LOM/SP)	g/t	0.7	0.8
	Copper Recoveries (LOM/SP)	%	85.4	87.9
	Gold Recoveries (LOM/SP)	%	66.1	66.8
	Silver Recoveries (LOM/SP)	%	66.2	68.2
Capital Costs	65 kt/d Initial Expansion Capital	\$ million	148.3	236.9
	Other Development Capital	\$ million	55.7	222.8
	Sustaining Capital (Includes Capital Leases)	\$ million	254.7	827.5
	Total Capital	\$ million	458.7	1,287.2
Economics	All-In Cost (AIC)—Years 1–20	\$/lb	1.35	1.76

Area	Measure	Unit	Nov 2020	Sep 2022
	Undiscounted Free Cash Flow (LOM)	\$ million	2,142	3,383
	After-tax Net Present Value (NPV) at 8% discount	\$ million	1,010 ²	1,245 ³

Notes: Mineral Reserves have been assessed in Canadian dollars (C\$) and the outcomes herein converted to United States dollars (\$) at a long-term exchange rate of C\$1.30:US\$1.

g/t = grams per tonne; lb = Imperial pound; koz = thousand (troy) ounces; Mt/a = million tonnes per annum; SP = stockpile.

All values represent the production plan and the cash flow starting in January 2023.

¹ Inferred blocks within the LOM pit shell have been designated as waste material.

² Based on consensus metal prices of \$3.15/lb Cu, \$1,700/oz Au, \$22/oz Ag.

³ Based on consensus metal prices for years 1, 2, 3, and long-term of: \$3.73, \$3.86, 3.94 and \$3.60 per pound copper: \$1,796, \$1,762, \$1,749 and \$1,650 per ounce of gold; \$21.86, \$22.30, \$22.24 and \$21.35 per ounce of silver.

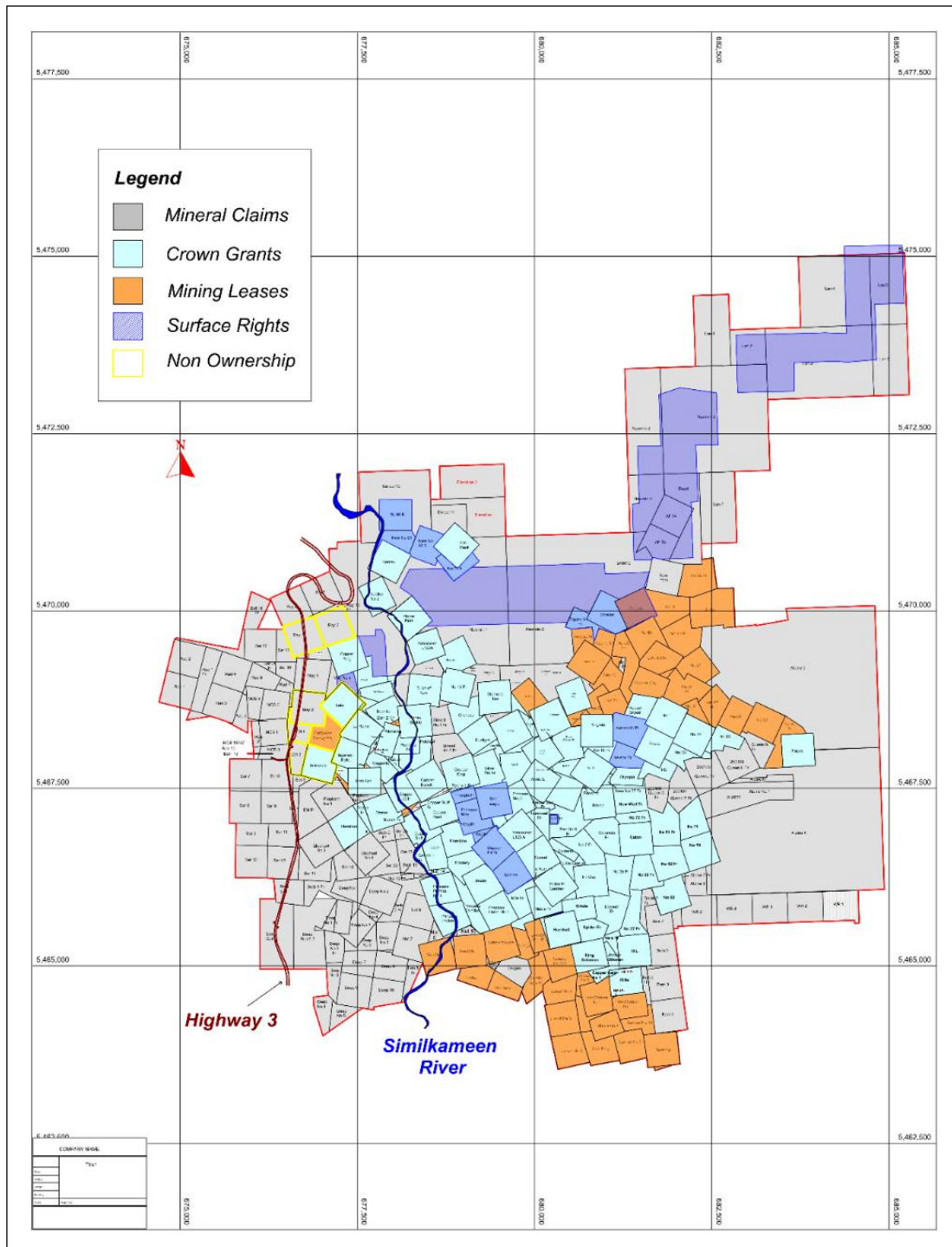
1.2 Project Overview

The CMM is located just south of Princeton, British Columbia (B.C.) (Figure 1-1). Copper Mountain Mining Corporation (CMMC) owns 75% and Mitsubishi Materials Corp. owns 25%. The CMM has been mined for 65 of the last 95 years. Mining activity can be divided into three major eras. From 1927 to 1957, Granby Consolidated Mining, Smelting and Power Company (Granby) operated an underground mine at the site (the underground era). From 1972 to 1996 Newmont Mining (Newmont) and later, Princeton Mining Corporation, produced copper (with gold and silver) from the Ingerbelle deposit and three closely spaced open pits on Copper Mountain (CM) (the open pit era). Mining ceased in 1996 due to low copper prices. CMMC acquired the property in 2006, and following extensive exploration and engineering studies, partnered with Mitsubishi Materials Corp., and built a new 35 kt/d mill, purchased a new mining fleet, and placed the mine into production in mid-2011 (the current era). From start-up to August 1, 2022, the CMM has processed approximately 139 million tonnes (Mt) of ore with an average copper grade of 0.32% and stockpiled 51.7 Mt of material with a grade of 0.15% Cu. Gold and silver production historically ranged from 10% to 20% of mine revenues and going forward with the inclusion of New Ingerbelle (NI) gold and silver is forecast to be approximately 30% of mine revenues.

The mine plan is based only on Proven and Probable Mineral Reserves at the CMM, and indicates a 32-year LOM, which consist of 30 years of mining and milling followed by 2 years of processing the low-grade stockpiles. The plan indicates average annual production of 113.6 Mlb of copper, 54,000 oz of gold and 367,00 oz of silver for years 2023 to 2042.

Significant exploration potential remains at the CMM with mineralization open both laterally and at depth. Multiple historical drill holes end in copper mineralization, and geophysical data suggest that the mineralizing systems extends below the current known resource.

Figure 1-1: Copper Mountain Mine Location, Tenure, Plant, and Regional Infrastructure



Source: CMMC (2022).

1.3 Reliance on Other Experts

All information pertaining to Mineral Resources, Mineral Reserves, ore composition, and operating expenditures (OPEX) were provided to the Qualified Persons (QP) through a combination of inputs from CMMC and its consultants. This Technical Report relies entirely on the sources of data given in Section 3 as input for its analysis, site and process plant design, and material take-offs (MTO). The Mineral Resource estimates documented in this Technical Report were prepared by CMMC's exploration team under the supervision of Patrick Redmond, Ph.D., P.Geo., a QP as defined by National Instrument 43-101 (NI 43-101) *Standards of Disclosure for Mineral Projects*. SLR International Corporation (SLR) completed an independent review and geostatistical analysis of grade estimation and classification criteria for the Mineral Resource estimate. The Mineral Reserve and mine plans documented herein were prepared by the Mining Engineering Department of the CMMC and verified by Alberto Chang, P.E., a QP as defined by NI 43-101 *Standards of Disclosure for Mineral Projects*. The environmental studies, permitting, social and community impact documented in Section 20, were prepared by Hemmera Envirochem Inc., under the supervision of Scott Weston, M.Sc., P.Geo., as QP, with reliance on the consultants; reports and documents provided therein. CMMC prepared the processing plant design and capital expenditures (CAPEX) with the assistance of Ausenco and Merit. Richard Klue, FSAIMM, managed the overall Technical Report compilation.

1.4 Property Description and Location

The CMM is 21 km by road south of Princeton and 180 km east of Vancouver. The property consists of 135 Crown-granted mineral claims, 145 located mineral claims, 14 mining leases, 12 fee simple properties, and 7 cell claims, which together cover 6,354 ha (63.5 km²). All claims are controlled by Copper Mountain Mine (BC) Ltd. (CMMML). The claims straddle the Similkameen River, with New Ingerbelle (NI) on the west side of the river and the Copper Mountain Main (CM Main) and Copper Mountain North (CM North) pits on the east side of the river. The Hope–Princeton Highway (Highway 3) passes immediately west of the property.

1.5 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

Almost all the CMM property area is accessible by highway, with the site served by a paved access road, local gravel roads (remaining either from previous mining or logging), and those used for current mining. Electrical power from the provincial grid is connected to the property. Supplemental water for operations, in addition to water recycled from the tailings management facility (TMF), is pumped from the Similkameen River. Property elevations range from approximately 770 metres above sea level (masl) to 1,300 masl. The CM area has a relatively dry climate, typical of B.C.'s southern interior. Summers are warm and dry, and the winters are cool, with minor precipitation.

The town of Princeton connects to the mine by way of a paved road 18.4 km long and a gravel road approximately 2.6 km long. The town has a population of approximately 3,000 and a diversified economy driven by mining, ranching, forestry, and tourism. The CMM operation is the predominant employer in the area. Princeton has services typical of its size; however, the mine's proximity to Vancouver, Kamloops, and other larger centres ensures that almost all the services required by mine operations are easily obtainable.

1.6 History

Initial exploration at CM dates to around 1884. Underground mining began in 1923, when Granby acquired the property and built a milling facility in Allenby (adjacent to Princeton). Between 1927 and 1957, Granby extracted around 31.5 Mt of ore with an estimated head grade of 1.08% Cu, as well as significant amounts of gold and silver, mostly from its underground operations. In 1972, Newmont began open pit mining operations at NI, with an initial reserve of 69 Mt grading 0.53% Cu. In 1979, development of mineable reserves on the CM side of the project (east of the Similkameen River) commenced with the installation of a new primary crusher and conveyor system across the Similkameen River. This helped feed the NI mill, which was expanded from 13 kt/d to over 20 kt/d. Production from the CM side of the project was from historical Pits 1, 2, and 3. In 1988, Newmont sold the entire property to Cassiar Mining Corporation, which later became Princeton Mining Corporation. Mining operations ceased in 1996.

In 2006, CMMC acquired the CM Project and following extensive exploration and engineering studies between 2007 and 2009, determined that the CMM should be placed into production. Upon completion of permitting, construction was initiated in early 2010, and the current phase of open pit mining began in 2011. The mill was designed to process 35 kt/d; however, it was initially unable to consistently achieve that level of production, primarily due to hard ore feed. A secondary crushing circuit, between the primary crusher and the semi-autogenous grinding (SAG) mill, was installed in 2014 and this change resulted in higher mill throughput.

The original feasibility study, prior to the start of a production decision was based on a 14-year mine plan based on ten years of mine production during which low-grade material would be stockpiled, plus an additional four years of milling stockpiled material. Mill throughput over the 14 years of mine life would average 12.7 Mt/a. CMMC published an updated mine plan in 2015, which included an expanded annual mill throughput of 14.6 Mt/a starting in 2016. This plan also foresaw ten years of mining and an additional four years of milling of stockpiled materials. Since that time, continued exploration and mill upgrades have increased the Mineral Resource and Mineral Reserve base and milling capacity at the mine. The addition of a third ball mill in 2021 increased metal recoveries and throughput to 45 kt/d.

The mine plan presented in this Technical Report includes a mill capacity increase to 65 kt/d with the installation of a high-pressure grinding roll (HPGR) system, a regrind mill replacement with a vertical regrind mill, rougher flotation cells, Ball Mill 4, and the inclusion of the NI Pit in the production plan commencing in 2028, extending the LOM plan to 2054.

1.7 Geological Setting and Mineralization

The CM porphyry copper deposit lies near the southern end of the Quesnel Terrane—an allochthonous composite crustal fragment consisting of Paleozoic and Mesozoic volcanic, sedimentary, and plutonic rocks. The southern Quesnel Terrane is dominated by the late Triassic Nicola Group, a subaqueous island arc assemblage composed of volcanic and sedimentary rocks that make up the Nicola Volcanic Arc. At CM, the Nicola Group is cut by a suite of

intrusive rocks including the composite Copper Mountain Stock (CMS), the Voigt Stock, and the slightly younger, polyphase, Lost Horse Intrusive Complex (LHIC).

The bulk of the known copper–gold mineralization at CM occurs in a northwesterly trending belt of Nicola Group rocks, approximately 5 km long and 2 km wide, that is bounded in the south by the CMS and in the west by the northerly–trending Boundary Fault system. Copper–gold mineralization post-dates the CMS and is temporally and spatially associated with the LHIC. Host rocks and mineralization in the mine area are cut by numerous late, north–south-trending felsite dykes, which are related to emplacement of the Cretaceous Verde Creek quartz monzonite, located approximately 3.5 km northeast of the mine area. Sedimentary and volcanic rocks of the Eocene Princeton Group have been unconformably deposited on Nicola Group rocks and LHIC along the northern margin of the CMM and dip at about 30° to the north.

Alteration types in the CM deposit are typical of porphyry copper deposits. Three major alteration types are observed at CM: potassic, sodic, and propylitic. Other volumetrically minor alteration types include kaolinitic and sericite–chlorite clay. All mineralization-related hydrothermal alteration types postdate the hornfelsing of Nicola Group volcanic rocks adjacent to the CMS. Mineralization had been subdivided into four types, as follows:

- Disseminated and stockwork chalcopyrite, bornite, chalcocite, and pyrite in altered Nicola Group volcanic rocks and LHIC rocks
- Bornite-chalcopyrite associated with pegmatite-like veins (coarse masses of orthoclase, calcite, and biotite)
- Magnetite-(±hematite)-chalcopyrite replacements and/or veins)
- Chalcopyrite-bearing magnetite breccias.

Due to Pleistocene glacial erosion most of the CM deposit is characterized by a relatively fresh erosion surface, with limited surficial oxidation and no significant secondary enrichment of copper.

1.8 Deposit Types

The CM deposit is an example of an alkalic porphyry deposit, in which copper–gold mineralization is spatially and genetically associated with multiple pulses of volumetrically restricted, and compositionally varied, alkaline porphyry intrusions. Although less common globally than calc-alkalic porphyry deposits, alkalic porphyry deposits are common in B.C., where they have been extensively studied. Well known examples of alkalic porphyry deposits in B.C. include CM, Afton/Ajax, Mountain Milligan, Mount Polley, Lorraine, Red Chris, and Galore Creek. Alkalic porphyry deposits in B.C. have been further subdivided into two types; silica undersaturated (e.g., Galore Creek) and silica saturated (e.g., CM).

Mineralization in alkalic porphyry deposits is typically hosted by potassic and/or calc-potassic alteration zones, and potassic alteration is typically more extensive spatially than copper–gold mineralization. Alkalic porphyry deposits in general are characterized by a relative scarcity of phyllic (sericitic) alteration, and an almost total lack of clay

alteration. Sulphides in alkalic porphyry deposits are typically zoned from a bornite-rich core to bornite + chalcopyrite and then pyrite + chalcopyrite zones, with an outer barren zone where pyrite is the dominant sulphide. Overall, the sulphide content, especially pyrite content, is low compared to calc-alkalic porphyry deposits.

1.9 Exploration

CMML uses a UTM NAD 83 Zone 10 datum. A number of geological mapping programs have been completed on the CM Project. Mapping scales ranged from 1:20,000 district geological maps to more detailed 1:2,500 geological maps of the mine. Data from this mapping has been used to support geological interpretation and resource estimation.

The CMM has a long history of exploration and mining. Historical soil sampling and rock chip sampling were carried out. There is limited information available on these historical geochemical surveys and these surficial data are not relevant to the current Mineral Resource estimate.

Airborne geophysical surveys were flown within the project area in 1993 and 2014. A Titan IP/resistivity/MT survey, covering the CM Main and CM North zones, was carried out in 2007; it consisted of seven lines totalling 22.8 line km. Another IP/resistivity survey was carried out in 2017 and consisted of seven geophysical survey lines totalling 9.9 line km. Data from these geophysical surveys has been used to support geological mapping, exploration, and interpretation of the CM deposit.

The CM deposit remains open laterally and at depth. Exploration targets remain undrilled; targets were generated using a combination of geophysical, geochemical, and structural geology data.

1.10 Drilling

The majority of historical drilling (1912–2007) at the CM Project was diamond drilling, with some percussion holes drilled in the 1950s and reverse-circulation (RC) holes drilled in 1994. Since 2007, the majority of the drilling has been diamond drilling, with some RC drilling carried out in 2021–2022. Since the previous NI 43-101 technical report in November 2020, 203 additional drill holes, comprising 60,953 m of drilling have been added to the database.

Drilling completed to March 1, 2022, on the CMM includes 6,187 core drill holes (606,847 m) and 1,358 RC and percussion drill holes (110,294 m) for a total of 7,545 drill holes (717,141 m). The Mineral Resource estimate in Section 14 is supported by 6,110 core drill holes (596,317 m) and 1,349 RC and percussion drill holes (109,448 m) for a total of 7,459 drill holes (705,765 m). The excluded drill holes are outside of the CM Main, CM North, and NI Mineral Resource estimation domains.

Since the close-out date of the database for the Mineral Resource estimate, a total of 31 RC drill holes (5,318 m) have been completed in the CM Main zone but were not used in the Mineral Resource estimate. Other drill holes that are not used in the estimate were drilled for purposes other than exploration and resource expansion, such as geotechnical or hydrogeological drill holes. Blasthole drilling was conducted in support of short-term grade control

and mining operations. Blasthole data are also not used in the Mineral Resource estimate but have been used for reconciliation.

A number of different drill core diameters have been employed over the history of the CMM, including BX (36.6 mm core diameter for historical underground), NQ (47.6 mm core diameter), and HQ (63.5 mm core diameter). From 2007 onwards, the standard method of drilling was to start all holes with HQ core, then reduce to NQ core at depth.

Diamond core drill holes have been geologically logged for lithology, structure, alteration, vein type, and mineralization. The geological logging of RC chips is recorded using a modified logging template to capture the same major characteristics of the core logging.

Core recoveries are typically between 90% and 100% with local zones of lower recovery associated with fault zones.

Historical collar surveys used industry-standard theodolite instrumentation to establish local grid control. From 2007, drill-hole collars were surveyed using either a total station instrument or differential Global Positioning System.

Down-hole survey data were absent in pre-1960 drill holes. Down-hole dip data, presumably by acid tests, were included in drill data from 1960 to 1987. From 1988 to 1998, down-hole surveys were obtained using a Pajari instrument, which provided both azimuth and dip data. From 2007, down-hole surveys were obtained using digital REFLEX instruments (or similar systems) which were compass based.

1.11 Sample Preparation, Analyses, and Security

Core sampling was generally performed at 3 m intervals for NQ core and 2 m intervals for HQ core. Core was halved using a diamond-bladed core saw. RC samples were typically taken at 3 m intervals. Blasthole samples were collected using a 60 mm-diameter stainless-steel tube, with a total of three subsamples typically collected from each blasthole cone to form one complete sample.

A total of 1,673 specific gravity (SG) measurements have been made on drill core samples, representing a range of lithology, alteration, and mineralization types, using the weigh-in-air/weigh-in-water technique.

Sample preparation and analytical laboratories used included the following independent laboratories: Pioneer, Richmond (accreditations unknown); Ecotech, Kamloops (accreditations unknown); ALS Chemex, Vancouver (ISO9001 and ISO17025:2017); Actlabs, Kamloops (ISO9001 and ISO17025:2017); and MSALABS, Langley (ISO9001 and ISO17025:2017). From 2010 to early 2022, sample preparation and primary copper and silver analysis of exploration samples (both core and RC) was carried out at the on-site the CMM laboratory. This laboratory is not accredited and is not independent of CMMC. During this time, check assay procedures were in place at independent accredited laboratories to verify analytical results from the CMM laboratory. Sample pulps that returned >0.1% Cu at the CMM laboratory were routinely sent to these independent laboratories for gold analysis, and approximately

10% these sample pulps were also analyzed for copper and silver. This equates to approximately 1,800 check assays. These check assay results indicate that sample analysis at the CMM laboratory was acceptable.

Sample preparation methods have included crushing and pulverizing; however, the crush and pulverization sizing has changed slightly over time. Currently, the protocol is to crush to 70% passing (P_{70}) a –10 mesh (<2 mm) sieve, and pulverize to 85% passing (P_{85}) a –200 mesh (<75 μm) sieve. Aqua regia digestion has been the standard digestion method since 2007. Analytical methods have been primarily by atomic absorption spectroscopy (AAS) for copper and silver, and fire assay/inductively coupled plasma (ICP) finish for gold. The CMM Laboratory also carried out initial copper analysis of samples using X-ray fluorescence with all samples returning >0.1% Cu subsequently analyzed using AAS. Multi-element suites were determined for selected samples from 2007 to early 2022, and for all exploration samples submitted to MSALABS (starting in March 2022), these multi-element analyses are reported using ICP methods.

CMML does not have any information on quality assurance and quality control (QA/QC) procedures for historical (pre-2007) analytical data. However, these historical data were obtained and compiled by major mining companies for mine design and production, and it is assumed that these data were acquired in an industry-standard manner for their time. QA/QC measures adopted for the drilling from 2007–2016 included the submission of coarse blanks and certified reference material (CRM, standard). The QA/QC insertion rates consisted of 2.2% coarse blanks and 2.2% CRMs. From 2017–2020, QA/QC measures included the submission of CRMs at an insertion rate of 1.4%, with no coarse blanks included. From 2021 to early 2022, QA/QC measures did not include the submission of CRMs or coarse blanks; however, during this time, the CMM laboratory continued to insert CRMs into the analytical sample stream, at an insertion rate of 5% for both X-ray fluorescence and AAS analyses—a QA/QC measure that had been in place at the CMM Laboratory from 2010 to 2022. From March 2022, sample preparation and primary analysis for exploration samples was carried out at MSALABS, and QA/QC measures included the submission of coarse blanks, CRMs, and half-core duplicates, with an insertion rate of 5% for coarse blanks, 5% for CRMs, and 3.9% for half-core duplicates. Coarse crush duplicate analyses were also carried out by MSALABS, at a rate of 3.2%. Review of the QA/QC data indicates that although there were batches that indicated QA/QC failures, after resubmitting the outlier samples to the laboratory, the resulting re-assay data were acceptable.

A number of check assay and re-assay programs have been carried out at CM. Since 2007, an independent check assay procedure for copper and silver has been in place. Approximately 10% of exploration samples with >0.1% Cu have been subjected to check assay at independent laboratories. In 2022, 360 samples of archived half-core from the 2021–2022 drilling program were sent for re-assay at MSALABS. These samples were of NQ and HQ core, were 1.5 m to 3.0 m long, and represented a range of copper grades. Sample preparation and primary analysis of the original half-core samples for 310 of these samples had been carried out at the CMM laboratory and for the remaining 50 at MSALABS. This re-assay program represented a 5% check of primary analyses of >0.1% Cu from the CMM laboratory on samples from the 2021–2022 program and showed that the original assay results from the CMM laboratory were acceptable.

Based on a review of QA/QC data and the results of check and re-assay programs, the copper, gold and silver data from drill core and RC samples are considered acceptable for use in Mineral Resource estimation.

Drill core and RC drill data, including assay data, were stored in Excel spreadsheets and subsequently uploaded to an Access database in Surpac software for Mineral Resource estimation. Geological logging data were recorded either directly into Excel or onto paper logs that were subsequently entered into Excel.

CMMC has no information on sample security measures prior to 2007. From 2007, samples have been stored in secure areas at the mine site. No significant security issues have been identified.

1.12 Data Verification

CM exploration staff continually verified data starting with the drilling programs in 2007–2008, which supported the mine restart in 2011, and continuing through the most recent 2022 drill program. Drill-hole data are also supported by more than 11 years of reconciled copper production and operational data. No significant issues have been noted during reconciliation with the exploration data that were collected.

There is no direct method for verifying historical (pre-2007) drill data. However, these historical data were obtained and compiled by major mining companies for mine design and production, and the data were presumably collected in an industry-standard manner for that time.

The drill hole data used to generate the Mineral Resource estimate were manually checked for errors and gaps prior to data upload to Surpac software. Exploration personnel conducted regular reviews of data quality prior to Mineral Resource estimation.

CMMC prepares an annual information form (AIF) that includes an updated Mineral Resource and Mineral Reserve statement. No issues with the exploration data collected each year that would materially affect the Mineral Resource and Mineral Reserve estimates were noted in these AIFs from 2011 to 2021. Twelve technical reports (not including amended versions of individual reports) have been filed on the System for Electronic Document Analysis and Retrieval (SEDAR) on the CM deposit since 2007, the year in which pre-restart exploration and other work began at the CMM. These NI 43-101 technical reports are explicitly required to present evidence that sufficient data verification is performed to support the Mineral Resource and Mineral Reserve estimate current at the time they were prepared. A combination of CMMC staff and the QPs for the reports provided information on the verification programs performed. No issues that would materially affect the estimates were noted in any of these 12 reports.

In 2019, SRK completed an independent Mineral Resource estimate at NI and reviewed CMMC's estimation methodology and concluded that it is reasonable and based on industry standards. In 2022, SLR completed an independent review and geostatistical analysis of grade estimation and classification criteria for the CM Main, CM North, and NI zones at the CMM. SLR concluded that the 2021 and 2022 Mineral Resources estimates for the CMM were reported in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) (2014) guidelines.

1.13 Mineral Processing and Metallurgical Testwork

Ore sourced from the CM and NI pits have been studied. Laboratory testwork and plant operation demonstrate that all ore on the property can be generalized as competent and hard, requiring relatively large energy investment in the comminution process. Flotation recovery varies across the areas of the active CM pits, with sulphide grain sizes spanning a very-fine to coarse classification, requiring additional liberation and metallurgical domain-specific recovery targets. The majority of the flotation samples analyzed on NI ore have shown that this area will see the highest recovery of the known ore types on the property due to coarse mineralization.

In the cases of both comminution and flotation, laboratory testwork is validated against actual production at the CMM concentrator using production models. In the case of comminution, it is using Morell power-based equations and Ausenco's proprietary models. In the case of flotation, each recovery domain is adjusted based on the degree of liberation, by using the grind size estimated by the comminution model as an input.

1.13.1 Comminution

CM ore can be characterized as both very competent and hard. Samples processed in 2011 were observed to be within the top 4.3% of the JKTech Drop Weight (JKDW) database. With a design JK drop weight parameter (Axb) and Bond Work index (BWi) of 28 and 24, respectively. The secondary crusher installed in 2014 allows for reducing SAG feed size from 150 millimetres (mm) to 24 mm, thus allowing for a significant shift in the milling circuit unit energy demand. With the feed size reduction, the circuit was able to process 1,850 t/h, with a lower sensitivity to hardness variations throughout the ore body. Exploration samples sent to external labs have shown that NI ore has characteristics comparable to current ore types.

In 2019, the existing circuit was analyzed using Morrell power-based modelling to assess the validity of assumed hardness parameters and actual plant performance. With good agreement, this parameter set was applied to determine the throughput capacity with the addition of a third ball-mill expansion currently in operation. The third ball-mill installation was completed in 2021 increasing the mill throughput capacity of the plant to 2,016 t/h.

The expansion phase being studied is the addition of an HPGR and fourth ball mill, to expand throughput to 65 kt/d. Due to high competency, the HPGR flowsheet presents an opportunity to reduce specific energy when compared to a SAG mill, while generating an overall reduction in site OPEX.

1.13.2 Flotation

The geometallurgical database characterizes the ore body into five domains, designated A, B, C, D, and I, of sulphide grain sizes ranging from coarse to very fine. Samples from 513 individual ore packets have been collected and processed, producing a recovery-based block model that is used for recovery forecasting. As further definition has been gained with the mine-to-mill database, the data have been used to create generalized recovery domains overlain on the LOM ore body. The volumes and recovery from these domains are used for recovery forecasting. Auditing this

model against production since July 2017 shows that it has a high degree of accuracy when predicting actual plant recovery.

In 2020, testwork of NI ore (Domain I) has shown that it will perform better than Domain A-class material. At a fine grind of 165 μm , the testwork has yielded an overall plant copper recovery of 88.0% at nominal mass pulls and head grades.

The NI flotation testwork has indicated strong gold recovery performance at an expected overall recovery of 70%. The data indicates an association with copper, with Au recovery improving with higher copper performance. The results indicate a silver overall recovery of 65%, also with an association with copper recovery.

The Ball Mill 3 addition increased throughput to 45 kt/d at a grind size of 150 μm . The rougher and first cleaner expansions in 2022 yielded recovery benefits across the domain range. A future 65 kt/d flowsheet would achieve a grind size of 165 μm due to the available installed power within the grinding circuit. This will result in a 0.30 percentage point reduction in recovery compared to the recoveries expected from the expansions to date. However, the small reduction in recovery is more than balanced by the economic value of the additional tonnage.

1.13.3 Concentrate Characterization

There are currently no penalties associated with concentrates produced by the CM concentrator. Moreover, there is no indication of any potential future concerns.

1.14 Mineral Resources Estimate

1.14.1 Estimation Methodology

Both geological wireframes and estimation domains were updated for the Mineral Resource estimate using data from drill core and RC drilling programs. Three-dimensional (3-D) modelling was carried out in Geovia Surpac software using drill hole data and control sections and points to guide wireframing of geological surfaces and solids. Sufficient drill hole data exists for the creation of hard boundaries for the CMS and post-mineral felsite mine dykes. The underground limit of caved stope material is based on 3-D wireframes created by Newmont, which had access at the time to all of Granby's underground survey data. The area below the southern end of the CM Main Pit (historically Pit 3) is the only location on the property where historical stopes exist. Estimation of all other domains used soft boundaries and was guided by semivariogram analysis, search ellipse ranges, and ordinary kriging (OK).

Exploratory data analysis was undertaken on the drilling data and included analysis of histograms, log probability plots, and box-and-whisker plots. A total of 987 SG measurements were used for the Mineral Resource estimate in the NI zone and were assigned by way of a nearest-neighbour (NN) interpolation based on a 50 m spherical search, with a uniform SG of 2.78 applied to the surrounding blocks. In the CM Main and CM North zones, an SG of 2.78 was used, consistent with available data and previous estimates.

Log-normal cumulative frequency plots were produced for each estimation domain which demonstrated multiple overlapping populations. The upper population of very high-grade copper samples, consisting of less than 0.08% of the total number of samples, was erratic. The next population of assays, consisting of high-grade samples, which formed 0.2% to 4% of the total population, was not erratic. As a result, grade capping was set at two standard deviations above the mean value for copper. The same approach was taken for gold and silver.

Currently, precious metals represent approximately 18% of the revenue generated at the mine. Historically, precious metals were not routinely analyzed for. Based on the strong correlation between copper and gold grades and copper and silver grades, regression equations for each regression domain were used to estimate gold and silver values for pre-2007 drilling. A composite interval of 7.5 m was created downhole from the base of overburden, with breaks occurring at hard boundary surfaces (e.g., mine dykes and CMS contacts). Composite intervals that were less than 50% of the total length (3.75 m) were length weighted into the proceeding composite.

Pairwise experimental semivariograms were modelled for copper using Vulcan software. Variogram maps and experimental variograms were created for each estimation domain. A semivariogram model was fitted to each experimental semivariogram in the three main directions of anisotropy. The nugget was obtained using a downhole semivariogram. A review of the variograms indicated that directions of continuity for copper derived from the fitted variogram models were consistent with the geological understanding of the deposit. Gold and silver were estimated using the same semivariogram parameters as copper.

The CMM has two separate block models, one for the CM Main and CM North zones, and one for the NI zone. Both use a UTM coordinate system. The size of the CM Main–North block model is 5,220 m by 3,120 m by 1,140 m; individual blocks are coded by geological wireframes, such as the mine dykes, CMS, cave zones (historical underground stope areas), and the August 1, 2022 topographic surface, which incorporates areas of the original pre-mining topography. The size of the NI block model is 2,160 m by 2,805 m by 1,395 m. Both block models use a 15 m by 15 m by 15 m parent block sizes and a 3.25 m by 3.25 m by 3.25 m sub-block size.

Copper, gold, and silver were estimated into the model using OK. A three-pass interpolation approach was used for copper, gold, and silver in the estimation process. This ensured strong local support for estimates in well-informed parts of the model while also allowing an appropriate search to find enough samples for estimation in less-well-informed model areas.

The search ellipse ranges for each pass were based on a ratio of the sill values for each estimation domain semivariogram. As an example, grade interpolation from the first pass was based on 80% of the maximum sill value from the semivariogram model (Y axis). The second-pass ranges were based on 100% of the sill value and the third and final pass was based on 200% of the sill value for each semivariogram.

Validation checks included visual examination of the block model and composites in plan and section views, statistical comparisons of the OK model with a NN estimate, including swath plot analysis for each estimated domain.

The Mineral Resource was classified using a distance-based methodology. A single-pass NN interpolation using a 250 m (radii) octant-based search was used to calculate 1) the average distance from the centroid of each block to the nearest four drill holes, and 2) the distance to the nearest single drill hole. The octant-based search required a minimum of one composite within three of the octants, with a minimum and maximum of four composites. These two distance-based metrics were then used to classify each block. For example, for a block to be classified as Measured, the average distance to the nearest four composites (drill holes) was 45 m or less, and the closest composite (drill hole) was within 40 m of the block centroid. These distances for Measured blocks equate to a nominal 50 m by 50 m drill hole grid spacing. Indicated blocks were classified using a similar approach based on an 80 m by 80 m drill hole grid spacing, and Inferred blocks were classified based on a 150 m by 150 m drill hole grid spacing. A final smoothing process was applied to reduce the “mixed blocks classification” to appropriate levels. This smoothing process helps to eliminate any isolated clusters of blocks and provides a final class model with improved local and global class continuity.

The evaluation of reasonable prospects of eventual economic extraction assumes a conventional open pit mining method, and an assumed mining rate of 16.4 Mt/a. Commercially available Geovia Whittle software was used to define the resource pit shell. Mineral Resources were constrained by a \$3.50/lb Cu pit shell which was created using the same parameters (costs, metallurgical recoveries, and pit slope angles) that were used for defining Mineral Reserves. The Mineral Resource estimate assumes that the process method will continue to be conventional sulphide flotation producing a copper concentrate (with gold and silver), and that there will be no penalties imposed on the concentrate.

1.14.2 Mineral Resource Statement

Mineral Resources are reported with an effective date of August 1, 2022, and are reported inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Mineral Resources for the CMM are tabulated in Table 1-2 Mineral Resources were estimated as of August 1, 2022.

The QP for the Mineral Resource estimate is CMMC’s Patrick Redmond, Ph.D., P.Geo., Senior Vice President, Exploration and Geoscience.

Table 1-2: Copper Mountain Mine Mineral Resources, August 1, 2022

Category	Tonnes (kt)	Cu Grade (% Cu)	Au Grade (g/t)	Ag Grade (g/t)	Cu Pounds (Mlb)	Au Ounces (koz)	Ag Ounces (koz)
Measured							
CM M&N Pits Total	346,989	0.24	0.08	0.92	1,862	877	10,294
NI Pit	198,241	0.24	0.14	0.41	1,027	905	2,588
Subtotal Measured	545,230	0.24	0.10	0.73	2,889	1,782	12,882
Stockpile	51,765	0.15	0.04	0.45	176	67	749

Category	Tonnes (kt)	Cu Grade (% Cu)	Au Grade (g/t)	Ag Grade (g/t)	Cu Pounds (Mlb)	Au Ounces (koz)	Ag Ounces (koz)
Total Measured	596,995	0.23	0.10	0.71	3,064	1,848	13,631
Indicated							
CM M&N Pits Total	369,786	0.19	0.07	0.65	1,558	838	7,759
NI Pit	165,210	0.23	0.13	0.37	845	680	1,987
Subtotal Indicated	534,995	0.20	0.09	0.57	2,402	1,518	9,745
Stockpile							
Total Indicated	534,995	0.20	0.09	0.57	2,402	1,518	9,745
Measured + Indicated							
CM M&N Pits Total	716,775	0.22	0.07	0.78	3,420	1,714	18,053
NI Pit	363,451	0.23	0.14	0.39	1,872	1,585	4,574
Subtotal Measured + Indicated	1,080,226	0.22	0.09	0.65	5,291	3,299	22,627
Stockpile	51,765	0.15	0.04	0.45	176	67	749
Total Measured + Indicated	1,131,991	0.22	0.09	0.64	5,467	3,366	23,376
Inferred							
CM M&N Pits Total	290,841	0.19	0.08	0.65	1,216	710	6,072
NI Pit	154,800	0.20	0.11	0.32	696	567	1,603
Subtotal Inferred	445,641	0.19	0.09	0.54	1,912	1,278	7,674
Stockpile							
Total Inferred	445,641	0.19	0.09	0.54	1,912	1,278	7,674

Notes: Mineral Resources were estimated using the August 1, 2022, mining surface for the CMM.
Mineral Resources are constrained by a \$3.50/lb Cu pit shell.
Cut-off grade is based on copper grade only.
Mineral Resources are inclusive of Mineral Reserves.
Cut-off grades applied at 0.10% Cu.
Totals may not add due to rounding.

1.15 Mineral Reserve Estimate

Mineral Reserves are prepared in accordance with CIM (2019) definitions and practices. The total the CMM Mineral Reserve (at cut-off grades of 0.10% Cu for NI and 0.13% Cu for CM Main and CM North zones as of August 1, 2022 is 702 Mt grading 0.24% Cu, 0.10 g/t Au, and 0.71 g/t Ag, and is shown in Table 1-3. Proven and Probable Mineral Reserves are derived from the Measured and Indicated Mineral Resources, respectively, in the resource block model, which can be economically extracted from fully designed pits with a sufficiently detailed LOM plan. The process of estimating reserves begins with generating a series of pit shells using Whittle 4D software, which incorporates the Lerchs–Grossmann optimization algorithm. All economic parameters are considered during pit optimization, which is based on net smelter return (NSR) value. The block NSR is based on estimated grade and metal recoveries, metal prices, and all costs related to transportation, smelting, and refining of the concentrate.

The processing costs consist of milling costs, administrative costs, and the cost of tailings management. the CMM Mineral Reserves are summarized in Table 1-3.

Table 1-3: Copper Mountain Mine Mineral Reserves, August 1, 2022

Category	Tonnes kt	Cu Grade (% Cu)	Au Grade (g/t)	Ag Grade (g/t)	Cu Pounds (Mlb)	Au Ounces (koz)	Ag Ounces (koz)
<i>Proven</i>							
CM M&N Pits Total	232,512	0.28	0.09	1.10	1,454	665	8,208
NI Pit	183,003	0.23	0.14	0.41	928	824	2,412
Subtotal Pit Only	415,515	0.26	0.11	0.79	2,382	1,488	10,620
Stockpile	51,765	0.15	0.04	0.45	176	67	749
Total Proven	467,280	0.25	0.10	0.76	2,557	1,555	11,369
<i>Probable</i>							
CM M&N Pits Total	155,011	0.23	0.09	0.74	786	449	3,688
NI Pit	80,154	0.22	0.12	0.37	389	309	953
<i>Stockpile</i>							
Total Probable	235,165	0.23	0.10	0.61	1,175	758	4,641
<i>Proven + Probable</i>							
CM M&N Pits Total	387,522	0.26	0.09	0.95	2,240	1,113	11,895
NI Pit	263,157	0.23	0.13	0.40	1,317	1,133	3,366
Subtotal Pit Only	650,679	0.25	0.11	0.73	3,556	2,246	15,261
Stockpile	51,765	0.15	0.04	0.45	176	67	749
Total Proven	702,444	0.24	0.10	0.71	3,732	2,313	16,010

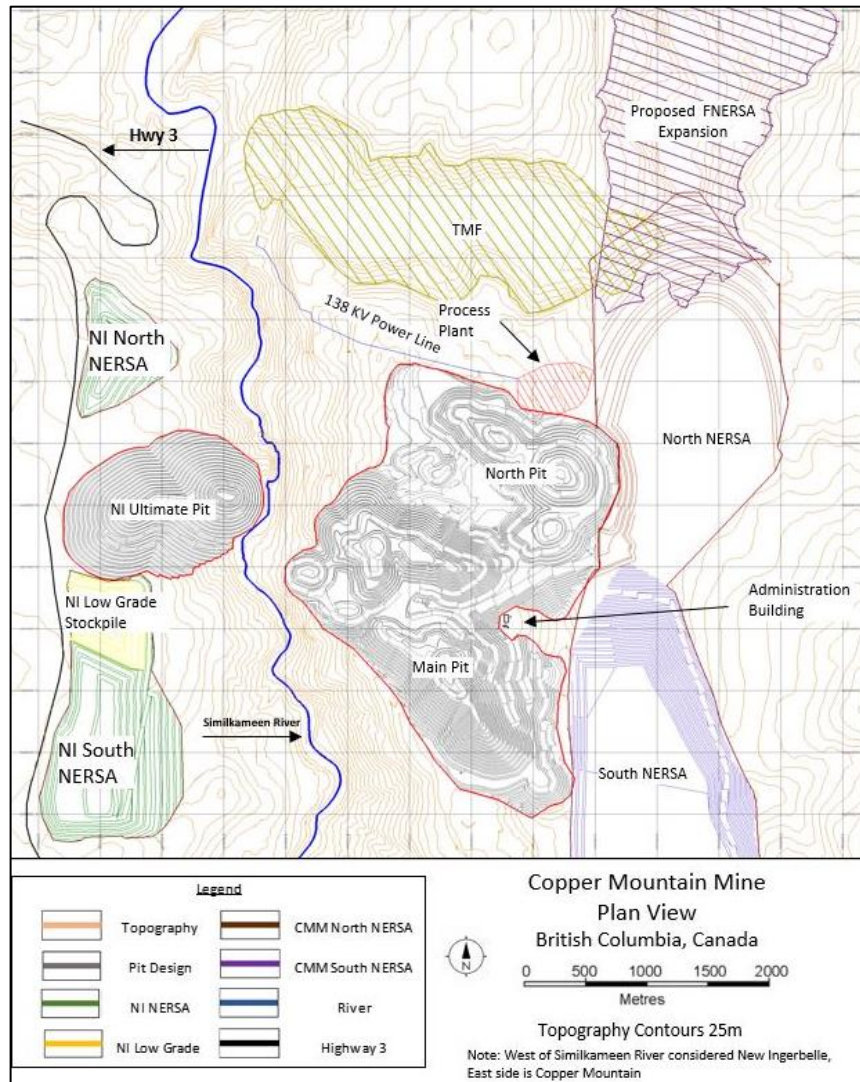
Notes: Joint Ore Reserves Committee (JORC) and CIM (2019) Definition Standards were followed for Mineral Reserves.
Mineral Reserves have an effective date of Aug 1, 2022, and were generated using the August 1, 2022 mining surface.
Mineral Reserves are reported at 0.10% and 0.13% Cu cut-off grade for NI and the CMM, respectively.
Mineral Reserves are reported using long-term copper, gold, and silver prices of \$2.75/lb, \$1,500/oz, and \$18.50/oz, respectively.
An average CM M&N copper process recovery of 80%, gold process recovery of 65%, and silver process recovery of 70% is based on geo-metallurgical domains and actual plant values.
An average NI copper process recovery of 88.5%, gold process recovery of 71%, and silver process recovery of 65% is based on geo-metallurgical domains, historical recoveries, and recent testwork.
Average bulk density is 2.78 t/m³.
Stockpile tonnes and grade based on production grade control process.
Totals may not add due to rounding
The QP for the Mineral Reserve estimate is Mr. L. Alberto Chang, P.Eng., Vice President, Mining at CMM and has reviewed and approved the Mineral Reserve estimate for the CMM.

1.15.1 Mine Optimization and Cut-off Grades

CMML uses standard steps of open pit optimization, pit design, production scheduling, and financial modelling for estimating the CMM's Mineral Reserves. Assumptions are based on operating experience and both mine and mill performance. The production model considers all OPEX, CAPEX, and sustaining expenditures. CAPEX includes new or used mine equipment required to achieve the production profile. Operating costs includes all costs, such as power, diesel fuel, parts, maintenance, grinding media and other consumables, and general and administrative (G&A) costs. Datamine NPVS software was used to assist in scheduling production and phasing the mine design. Production schedules are based on achieving a tonnage of mill feed, which is constrained by the specified mining fleet, ore, and waste haul profiles, and calculated productivities. Known mining disruptions are inserted into the schedule, such as anticipated climatic conditions that can cause delays. The CMM with the NI Pit and non-economic rock storage area (NERSA) arrangement is shown in Figure 1-2.

The mine uses a cut-off grade of 0.13% Cu for CM Main Pit material and will use a cut-off grade of 0.10% Cu for NI. Material above cut-off grade is generally sent to the crusher, but can be stockpiled, depending upon production rates of the various materials over a given time. The fine ore stockpile (FOS) that feeds the mill has enough capacity for approximately five days of milling. The projected mining fleet can move an average of approximately 219 kt/d over the LOM, depending on material classification and haulage profiles. The estimated fleet can sustain mine production for the 65 kt/d milling case.

Figure 1-2: Copper Mountain Mine with New Ingerbelle Ultimate Pit and NERSA



Source: CMMC (2022).

1.16 Mining Methods and Production Schedules

CMML employs conventional open pit mining methods composed of blasthole drilling, blasting, shovel loading, and rigid-frame, rear-dump truck haulage. Blastholes (270 mm or 311 mm diameter) are drilled on a grid pattern, with blasthole spacing between 7 m and 9 m depending on hole diameter, rock hardness, and whether material is anticipated to be ore or non-economic rock (NER). The blasthole cuttings are mapped and sampled, with samples transported to the on-site analytical laboratory. Samples are pulverized and analyzed for copper. Assays are uploaded to the ore control department and combined with the exploration drill database, which is then

interpolated onto bench plans together with blasthole grades and geological information. Grade boundaries are selected manually, and depending on the material, the blasting details are determined. Following blasting, the dig plans are uploaded to the shovels and dispatch system to direct mining and haulage.

Table 1-4 shows a summary of the LOM for the CMM.

Table 1-4: Copper Mountain Mine LOM Production Summary

	Unit	Years 1–5	Years 6–10	Years 11–15	Years 16–20	Years 21–25	Years 26–30	Years 31–32	Total
Ore Mined from Pit	kt	70,406	127,699	142,227	89,578	119,337	102,768	-	652,015
Waste Mined from Pit	kt	232,117	265,564	227,206	214,108	218,740	198,647	-	1,356,381
Mined Stripping Ratio	w:o	3.30	2.08	1.60	2.39	1.83	1.93	-	2.08
Ore Moved	kt	70,406	127,731	143,941	122,222	129,951	102,768	-	697,019
Waste Moved	kt	232,117	272,275	256,058	277,775	270,051	259,185	-	1,567,461
Material Moved Stripping Ratio	w:o	3.30	2.13	1.78	2.27	2.08	2.52	-	2.25
Ore Processed	kt	82,165	113,151	118,630	118,629	118,629	118,629	27,187	697,019
Average Copper Feed Grade	%	0.34	0.25	0.25	0.27	0.26	0.20	0.13	0.25
Average Gold Feed Grade	g/t	0.08	0.15	0.14	0.08	0.09	0.09	0.06	0.10
Average Silver Feed Grade	g/t	1.44	0.44	0.43	0.96	0.87	0.67	0.32	0.75
Recovered Copper	Mlb	544	545	570	613	602	468	60	3,402
Recovered Gold	koz	130	370	383	196	233	211	33	1,557
Recovered Silver	koz	2,664	1,042	1,068	2,566	2,314	1,783	191	11,629

Note: Ore and Waste Mined include ex-pit tonnes only
Ore Moved includes existing low grade stockpile.

The mine plan is based on an annual mill throughput of 16.4 Mt/a, beginning in 2022, rising to a full-production year of 23.7 Mt/a in 2029 after mill expansion.

Mine plans are updated on an annual basis, or as required due to changing circumstances. The mine plan presented herein is based on updated Mineral Reserve estimates, and current metal prices and updated OPEX. Inferred Resource blocks that are within the design pit have been treated as NER; however, experience suggests that a significant part of the Inferred Resource material will be upgraded to Mineral Reserves, either with future exploration drilling or during production drilling. Similarly, within the later years of the mine plan there will be times when in-pit ore is not available due to NER removal requirements, and stockpile material will be used as mill feed. This situation may be alleviated with continued exploration, resulting in higher mill feed grades and metal production. The LOM mining and processing plan is summarized in Table 1-5.

Table 1-5: Copper Mountain LOM Mine Schedule—2023–2054 (page 1 of 2)

Category	Unit	LOM Total/Avg.	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Ore Mined from Pit	kt	652,015	14,286	13,822	12,620	14,589	15,090	21,288	27,073	25,978	24,167	29,194	25,624	33,053	40,844	33,798	8,908	14,723
Waste Mined from Pit	kt	1,356,381	51,688	52,796	42,512	44,506	40,616	58,505	46,496	53,993	55,827	50,743	54,371	43,337	35,784	39,872	53,842	52,959
Total Mined from Pit	kt	2,008,397	65,974	66,618	55,131	59,095	55,706	79,793	73,569	79,970	79,994	79,937	79,995	76,390	76,628	73,670	62,750	67,682
Mined Stripping Ratio	w:o	2.08	3.62	3.82	3.37	3.05	2.69	2.75	1.72	2.08	2.31	1.74	2.12	1.31	0.88	1.18	6.04	3.60
Ore Moved	kt	697,019	14,286	13,822	12,620	14,589	15,090	21,289	27,073	26,009	24,167	29,194	25,624	33,053	40,950	33,798	10,517	16,543
Waste Moved	kt	1,567,461	51,688	52,796	42,512	44,506	40,616	58,715	52,923	53,998	55,829	50,810	54,371	46,953	39,052	46,195	69,487	63,458
Total Material Moved	kt	2,264,480	65,974	66,618	55,131	59,095	55,706	80,004	79,996	80,007	79,995	80,004	79,995	80,006	80,002	79,993	80,004	80,001
Material Moved Stripping Ratio	w:o	2.25	3.62	3.82	3.37	3.05	2.69	2.76	1.95	2.08	2.31	1.74	2.12	1.42	0.95	1.37	6.61	3.84
Tonnes per Day	kt/d	207	181	183	151	162	153	219	219	219	219	219	219	219	219	219	219	219
Stockpile Movement																		
Stockpile Tonnes Reclaimed to Mill	kt	93,971	2,138	2,647	3,804	1,835	1,334	-	-	1,682	1,266	-	1,060	-	-	151	18,213	7,378
Mill Feed																		
Mill Feed Tonnes	kt	697,019	16,424	16,469	16,424	16,424	16,424	18,250	23,725	23,725	23,725	23,726	23,728	23,724	23,728	23,725	23,725	23,725
Copper Grade	% Cu	0.25	0.35	0.28	0.28	0.35	0.44	0.24	0.27	0.22	0.23	0.27	0.24	0.27	0.30	0.26	0.17	0.20
Gold Grade	g/t	0.10	0.07	0.08	0.06	0.07	0.10	0.15	0.18	0.12	0.13	0.16	0.14	0.15	0.18	0.15	0.09	0.07
Silver Grade	g/t	0.75	1.53	1.22	1.07	1.47	1.91	0.43	0.51	0.39	0.41	0.46	0.43	0.45	0.48	0.45	0.34	0.70
Copper Recovery	%	88	88	89	87	88	89	89	89	88	88	89	88	89	89	89	82	86
Gold Recovery	%	67	65	65	65	65	65	70	70	70	70	70	70	70	70	70	69	65
Silver Recovery	%	68	70	70	70	70	70	65	65	65	65	65	65	65	65	65	66	70
Recovered Metal																		
Copper	Mlb	3,402	112	92	88	111	141	87	128	100	107	124	109	124	140	122	75	91
Gold	koz	1,557	25	27	20	25	33	62	94	62	69	83	74	82	98	79	50	33
Silver	koz	11,629	566	451	397	542	708	165	252	194	201	230	213	222	240	222	171	371

Category	Unit	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
Ore Mined from Pit	kt	26,372	25,733	21,986	765	16,375	27,146	28,057	26,980	20,780	23,239	24,954	26,031	28,038	507	-	-
Waste Mined from Pit	kt	47,003	47,362	37,887	28,897	31,244	41,322	44,712	47,821	53,640	52,799	43,493	31,952	41,883	28,521	-	-
Total Mined from Pit	kt	73,374	73,094	59,873	29,662	47,618	68,468	72,769	74,802	74,420	76,038	68,447	57,983	69,920	29,027	-	-
Mined Stripping Ratio	w:o	1.78	1.84	1.72	37.79	1.91	1.52	1.59	1.77	2.58	2.27	1.74	1.23	1.49	56.28	-	-
Ore Moved	kt	26,372	25,733	26,625	26,950	26,988	27,146	28,057	26,980	20,780	23,239	24,954	26,031	28,038	507	-	-
Waste Moved	kt	53,631	54,261	53,375	53,050	53,016	52,860	51,935	53,020	59,220	56,762	55,062	53,950	51,969	41,442	-	-
Total Material Moved	kt	80,002	79,994	80,000	80,000	80,003	80,006	79,992	80,000	80,000	80,001	80,016	79,980	80,007	41,949	-	-
Material Moved Stripping Ratio	w:o	2.03	2.11	2.00	1.97	1.96	1.95	1.85	1.97	2.85	2.44	2.21	2.07	1.85	81.78		
Moved Tonnes per Day	kt/d	219	219	219	219	219	219	219	219	219	219	219	219	219	115	-	-
Stockpile Movement																	
Stockpile Tonnes Reclaimed to Mill	kt	-	48	-	-	-	-	-	-	3,873	1,926	410	2,571	-	16,448	23,725	3,462
Mill Feed																	
Mill Feed Tonnes	kt	23,722	23,728	23,728	23,725	23,725	23,726	23,726	23,727	23,725	23,725	23,725	23,725	23,729	23,725	23,725	3,462
Copper Grade	% Cu	0.34	0.40	0.23	0.15	0.22	0.25	0.22	0.28	0.33	0.20	0.24	0.18	0.24	0.15	0.13	0.11
Gold Grade	g/t	0.11	0.10	0.08	0.04	0.08	0.10	0.10	0.11	0.08	0.10	0.11	0.06	0.10	0.05	0.05	0.06
Silver Grade	g/t	1.22	1.77	0.66	0.45	0.64	0.70	0.65	0.96	1.39	0.68	0.81	0.57	0.77	0.51	0.34	0.21
Copper Recovery	%	89	89	89	90	89	89	89	89	87	89	90	89	90	82	79	79
Gold Recovery	%	65	65	65	65	65	65	65	65	65	65	65	65	65	65	67	70
Silver Recovery	%	70	70	70	70	70	70	70	70	70	70	70	70	70	70	68	65
Recovered Metal																	
Copper	Mlb	157	185	107	73	102	117	102	130	151	95	112	84	111	67	53	7
Gold	koz	54	48	42	20	42	49	49	53	40	49	55	32	50	26	28	5
Silver	koz	654	945	354	242	343	372	347	513	740	365	432	303	412	271	176	15

Notes: LOM plan contains only Proven and Probable Mineral Reserves.
Inferred Mineral Resources are treated as waste.
LOM plan is for the years 2023 to 2054
Numbers may vary due to rounding.
Ore and Waste Mined include ex-pit tonnes only
Ore Moved includes low grade stockpile movement

1.17 Recovery Methods

1.17.1 Introduction

The CMM concentrator flowsheet is currently a relatively simple two-stage crushing, SAG, pebble crusher, ball milling, and sulphide flotation circuit design. The current capacity supports 45 kt/d of ore processing.

The Ball Mill 3, or 45 kt/d expansion, which is currently in operation, added a third ball mill in parallel with two pre-existing ball mills and reduced the grind size to 150 µm.

This Technical Report presents the studies conducted for the installation of an HPGR, a fourth ball mill and additional equipment, which will allow for production at 65 kt/d at P₈₀ 165 µm.

Table 1-6 details the 65 kt/d process flowsheet featured in this Technical Report.

Table 1-6: 65 kt/d Plant Design Inputs

Parameter	Unit	Value
Daily Throughput	kt/d	65
Crushing Plant Operating Time	%	80
HPGR, Milling and Flotation Availability	%	93
Crushing Plant Nominal Throughput During Operation	t/oph	3,385
HPGR, Milling and Flotation Nominal Throughput During Operation	t/oph	2,912
Head Grade	% Cu	0.35
Rougher Recovery	% Cu	89.8
Cleaner Recovery	% Cu	98.0
Overall Recovery	% Cu	88.0
Concentrate Grade	% Cu	28.0
Concentrate Production During Operation	t/oph	26.7
Concentrate Moisture	% w/w	8.5

1.17.2 65 kt/d Comminution Circuit Design

A 60–89 primary crusher receives run-of-mine (ROM) ore and reduces material to less than 143 mm. Product is sent to a 14 ft by 24 ft, double-deck screen, with oversize material feeding an XL2000 cone crusher, operating in an open circuit. Due to the maximum top size allowed at the new downstream HPGR, the open screening format will be

closed with a security screen, which scalps material >90 mm. This oversized material returned to the secondary crusher feed stockpile. A P₈₀ 38 mm final crusher product is then sent to a 164 kt capacity ore stockpile.

The FOS will use existing apron feeders to transfer to a modified SAG feed conveyor. This will be the transition point to the new HPGR circuit. A chute will allow material to be sent directly to the HPGR, or to the existing SAG, which will remain on standby. The HPGR, installed in a new building serviced by a 160-tonne crane, will operate in a closed loop with a screening plant. Three parallel 14 ft by 24 ft double-deck screens will wet-screen the HPGR product to P₈₀ 4 mm. Fine-ore bins above the screens will allow for 30 minutes of operating time if the HPGR should be down for inspections for maintenance. Screen undersize material will be pumped to each of the two lines of ball mills described below.

Ball Mill 4, a 22 ft by 38 ft mill with 12.6 MW of installed power, will be installed adjacent to Ball Mill 3 within the existing building, in the spot where the existing regrind mill is currently located. The regrind mill will be demolished in this plan. With the addition of Ball Mill 4, the ball milling line will comprise four mills operating in parallel. Two identical 24 ft x 40 ft mills, and two identical 22 ft x 38 ft mills, will be designated Lines 1 and 2, respectively. Each line of mills will supply flow to independent rougher flotation lines. The total installed power will allow for an average target grind size of 165 µm.

1.17.3 Flotation Circuit Design

The existing ten 160 m³ rougher flotation cells will treat half of the total concentrator throughput, while the remaining half will be treated by the two 300 m³ cells being commissioned in 2022 as well as three 300 m³ cells being installed as part of the expansion study update. These will be designated as rougher flotation Lines 1 and 2, respectively. The additional flotation capacity will allow for 26 minutes of residence time.

The demolished existing regrind mill will be replaced by a more efficient vertical stirred mill. This will also be in the new building along with the new three 300 m³ tank cells. Rougher concentrate from all rougher flotation lines will report by gravity to this circuit, targeting P₈₀ 25 µm.

The existing cleaner circuit will be expanded at the cleaner scavenger stage. A 6.0 m by 14.0 m flotation column was installed and commissioned in June 2022, operating in parallel with the two existing 3.7 m by 12.0 m flotation columns. Concentrate from the first cleaner stage will report to the existing direct flotation reactor (DFR) second cleaner bank of three cells. The target final concentrate grade will be 28%.

Tailings from the first cleaner stage will report to the existing bank of five 70 m³ mechanical tank cells, and a new bank of six DFR cells operating in parallel. Concentrate from all cells at the cleaner-scavenger stage will report by gravity to the regrind circuit.

1.17.4 Concentrate Handling Design

A 16 m high-rate thickener dewateres final concentrate, and pumps high-density slurry to a storage concentrate stock tank with a 500 tonnes capacity. The existing plate and frame filter press, containing 62 plates, 1.5 m by 1.5 m, has been complemented by a second 58-plate filter press with membrane squeeze operating in parallel. CMML installed this filter press in 2022 prior to the overall expansion study update as a scheduled de-bottlenecking upgrade. Together, they will dewater the concentrate to a 9% moisture. Dried cake is dropped into a 4,000 dry metric tonne (dmt) storage shed. The concentrate is loaded by a trucking contractor and hauled to Port of Vancouver for shipment overseas.

1.17.5 Tailings and Water Circuits Design

The existing TMF will be used for tailings as part of this expansion study update. In April 2020, a feasibility study on expanding the facility within the existing footprint was completed (KCB, 2019). The existing TMF has remaining FNER storage capacity of 374 Mt but would require a permit amendment to allow it to be built to 1,060 masl from the current permit limit of 997 masl. Based on the mine plan described in Section 15 of this Technical Report, approximately 323 Mt of additional FNER storage capacity is required to accommodate the LOM tonnage requirements.

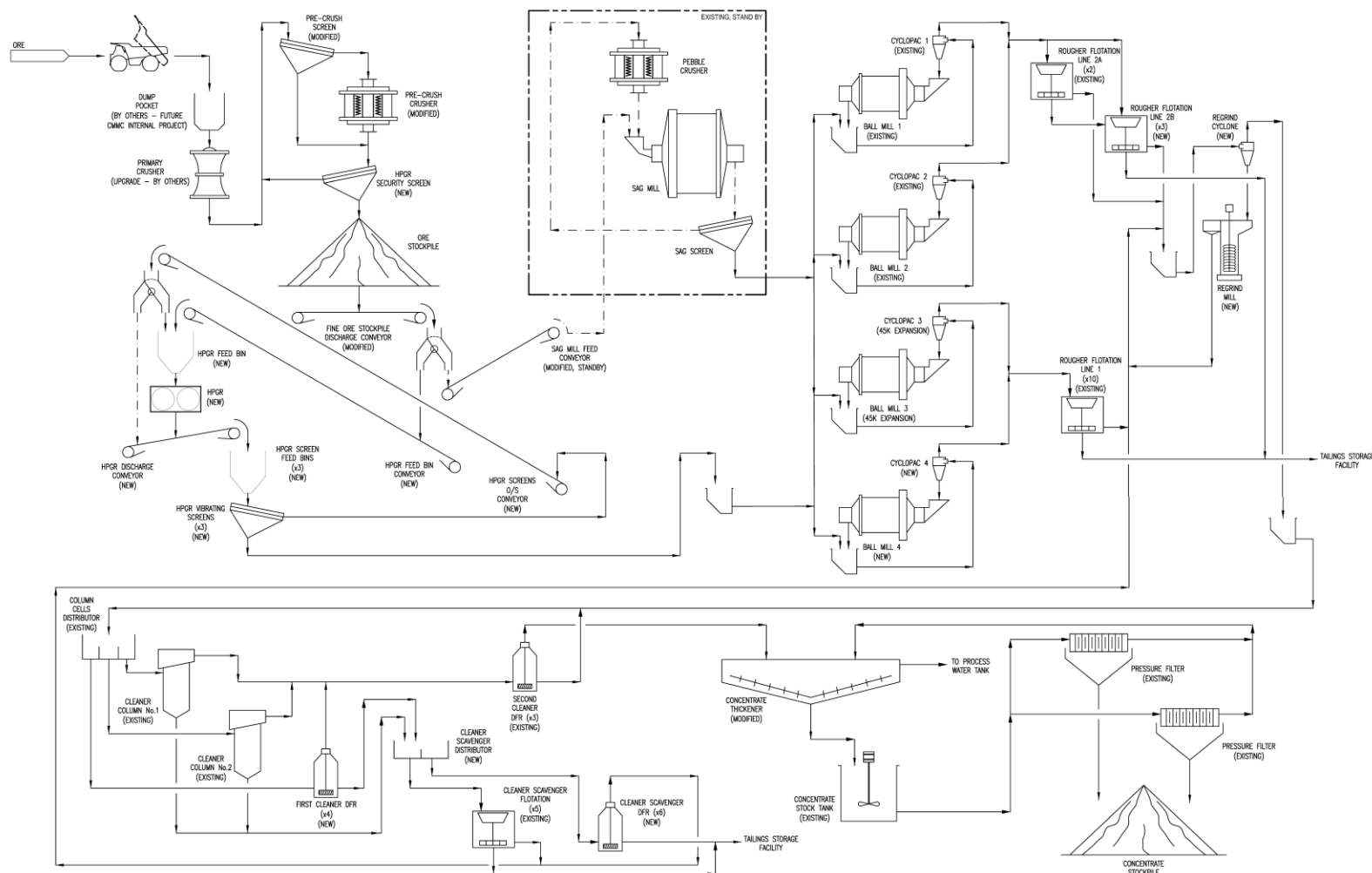
One of the options reviewed as part of a NERSA options study (KCB, 2022) was the North dam, which was initially designed to a PFS level (AMEC, 2016). The FNERSA North option provides approximately 705 Mt of total FNER storage capacity, which accommodates the remaining FNER storage requirements. The North dam, built to a crest elevation of 1,000 masl, was chosen as the additional FNERSA for the purposes of this expansion study update.

Tailings from the existing rougher line and cleaner–scavenger banks will join tailings from the new rougher line at a splitter box at the north end of the concentrator facility. From this point, flow will be split into West and East lines, with each reporting to the West and East dams, respectively. Drop tanks along the pipeline will dissipate energy as this flow travels down to the dam crests. A bypass on each line will allow flow to be dumped to the centre of the pond if the header is not operable, or during winter freezing conditions when cycloning is not taking place. Cyclones on the crest of each dam will produce classified sands for dam construction. Each cyclone is located on a skid-mounted tower, which equipment operators move daily.

A reclaim barge on the tailings pond pumps to the reclaim-water booster pump station and up to the reclaim-water storage tank. Seepage water is collected from the East dam and returned to the tailings pond. Freshwater is pumped from the Similkameen River pumphouse to a booster station, and up to the fresh-water storage tank. Several other sources of water enter the tailings water balance from new surface-water collection points, such as the NERSA conduit and NI areas.

The simplified process flowsheet is shown in Figure 1-3.

Figure 1-3: Copper Mountain Mine 65 kt/d Simplified Process Flowsheet



1.18 Project Infrastructure

The CMM was constructed between 2010 and mid-2011. As it was constructed on a site of previous mining activity, significant parts of the infrastructure were already in place, including a power line to the NI mill, roads, water source, mine office building, and TMF. The key components required for the new mine in 2010 were: a 35 kt/d concentrator processing facility; a power-line extension; new transformers and power distribution; a new fresh-water booster station and piping to the new concentrator; new mine maintenance truck shop; and a fleet of open pit mining equipment. In 2014, a secondary crushing circuit was added, which allowed the concentrator to significantly exceed the original design capacity of 35 kt/d, increasing capacity to 40 kt/d.

The CMM concentrator is approximately 21 km from Princeton, B.C. The CMM site can be accessed by way of an 18.4 km-long paved road, and an existing site-access gravel road approximately 2.6 km long. The site is easily serviced and accessible by a strong presence of key support vendors within the greater Vancouver, Okanagan/Kelowna, and Kamloops areas. With the proximity to the town of Princeton, employees live locally within the town and surrounding area, negating the need for camp services.

Electricity is supplied from the BC Hydro Nicola (NIC) substation near Merritt, along a 138 kV transmission line owned and maintained by BC Hydro, to the Similco Mines substation (SCO). The BC Hydro line can also supply power to the Princeton substation (PRI) operated by FortisBC. The SCO, owned by CMML, supplies equipment operating on the west side of the Similkameen River, such as the fresh-water pumps. A 3.3 km long 138 kV line crossing the Similkameen River then runs from the SCO substation to the Copper Mountain Mine substation at the CMM concentrator. This substation provides the required voltage step-downs to service all other equipment operating east of the Similkameen River.

Concentrator process water is recycled from the TMF pond, with additional make-up water pumped from the Similkameen River. Existing infrastructure installed to support the CMM operation includes:

- A complete 45 kt/d Cu-Au-Ag flotation plant and concentrate load-out facility
- Active the CMM pit and NERSA
- Historical Ingerbelle pit and its north NERSA
- Cyclone sand dam TMF (approximately 267 ha), complete with seepage return pumping systems installed at the toe of the East and West dams
- Access and haul roads, plant site, TMF, explosives bulk storage depot and magazine, pumping station at the Similkameen River
- Truck shop (five bays), tire pad, wash pad, and warehouse facilities
- Power supply to the SCO and CUM substations and electrical reticulation
- Process water, contact water, and fresh-water pumping infrastructure

- Potable and wastewater treatment facilities servicing the full allotment of operating and administration staff.
- Fully equipped metallurgical and assay determination laboratory
- Administration facilities
- Explosives bulk storage depot and magazines.
- Training, plant tool storage, security gatehouse and first aid facilities.
- Mining infrastructure, including a 1 km Trolley Assist waste-hauling system from CM pits.

Figure 1-2 shows the broader site infrastructure layout.

The 65 kt/d expansion will require modifications to existing concentrator and infrastructure to support the increased milling rate.

- Primary and Secondary crushing, conveying and screening plant upgrade
- HPGR, conveying, wet screening and buildings
- No 4 Ball Mill and Classification
- Demolishing Regrind mill and install a new Verti-Mill
- Three additional Rougher 300 m³ flotation cells
- Rougher and Regrind building
- East Haul Road Trolley Assist
- NI and Seepage management system
- Tailings Line Expansion to new North TMF
- Wolfe Creek Realignment (14 km).

1.18.1 Power Supply

The current site electricity supply agreement (ESA) with BC Hydro is set at a contract demand of 100,000 kVA, which is sufficient to support the CM Mill at 45 kt/d. As per the electrical load list, the operating load required to support the 65 kt/d milling rate and increased mining rate is determined to be 156 MW. Discussions with BC Hydro have highlighted that there is sufficient power available within their network to support the expansion to 156 MW.

CMML and BC Hydro are currently conducting a system impact study (SIS) that is scheduled to be completed during Q4 2022. The SIS will identify any further system enhancements required to support the 131 MW operating load. BC Hydro has provided an initial positive assessment, and verbal assurance that the power will be available subject to completion of the system upgrades identified through the SIS. The maximum power transfer capability of BC Hydro's existing transmission infrastructure would be 131 MW. To acquire access to remaining required 25 MW of

power, CMMML has already requested BC Hydro to build a parallel 138 kV transmission line from Princeton Tap to the CMM SCO substation to get the additional 25 MW power from FortisBC.

CMMML has actively conveyed its plans to BC Hydro to ensure that there is a timely and reliable power supply solution available for 65 kt/d operation. BC Hydro's Transmission Voltage Customer Interconnection Data Form has been completed and submitted for another SIS, to assess system reinforcements required to increase load to 156 MW power to the CMM.

A site power transmission and distribution system would supply electrical power to the following new equipment on the CMM side.

- East haul road 2.3 km trolley assist facilities
- HPGR in closed circuit with wet vibrating screens
- New Ball Mill 4 with pumps and cyclone reticulation system
- New regrind mill
- Three additional rougher flotation cells.

Interconnection information, load information, motor information, electrical one-line diagrams, size, configuration, impedance of transmission transformers, and supporting documents required for the SIS to supply additional power required for the 65 kt/d operation have been provided to BC Hydro.

1.18.2 Water

The additional concentrator throughput will require additional water for production. The existing fresh-water infrastructure system was designed for 850 m³/h with a peak flow of 1,200 m³/h. From 2021 through 2024, several surface-water collection and return pumping systems are scheduled to be installed, which will add further volume to the site-water balance and satisfy the volume needed for future plant expansions. The permitted fresh-water draw rate from the Similkameen River allows for 1,515 m³/h of flow, allowing for additional flexibility during dry periods with minimal precipitation.

The reclaim water system remains sufficiently sized to satisfy the process water requirement. As the TMF pond has been raised annually, the head requirement on these pumps has been decreasing, allowing for additional flow. With additional surface-collection water routed to the tailings pond, these reclaim pumps will supply additional water to the process water-tank to satisfy production.

The total water demand for the proposed increased mill throughput of 65 kt/d is 11.3 Mm³/a for conventional cycloned tailings deposition—an increase from the current water demand, approximately 7.8 Mm³/a for 45 kt/d. An additional 1 Mm³/a is assumed to be required for other uses, such as, potable water, dust suppression, and the like. The withdrawal of water from the Similkameen River can be reduced to less than 2 Mm³/a (under average conditions) if collection and use of water from the mine site and Wolfe Creek catchment is maximized.

The primary non-contact water management is the realignment of Wolfe Creek around the proposed CNERSA and North FNERSA. Contact water from the proposed CNERSA, North FNERSA, and surrounding mine-impacted areas will be directed to the North FNERSA pond, where it will be reclaimed for process water. A water balance and water quality model to estimate flow rates, required pumping capacities, and operational controls to manage the water level in the North FNERSA pond will be assessed in subsequent studies and stages of design.

1.18.3 Mining Infrastructure

New Ingerbelle Pit Activation

The mining fleet discussed in Section 16 will be used to mine the NI Pit. Several key additions will be required to support operations on the west side of the Similkameen River: a bridge across the river, an NI Pit power line and reticulation, pit dewatering pumps, and water-management pumps. Trolley assist infrastructure will also be added on the east side of the Similkameen River to reduce diesel consumption and cycle times of trucks hauling NI ore.

Site Access

The NI Pit is 14 km west of Princeton on Highway 3. A series of gated entry points allow for control access to the NI operations area from the west side of the Similkameen. A new haul road will be constructed to connect the CMM Main Pit on the east side of the river to the NI Pit, starting at the west side at 1,050 m, and descending through a series of switchbacks to the river bridge elevation at 791 m. A 75-m-long, single-span, steel girder bridge with 100 mm concrete overlay will be constructed, with more than 771 tonnes of capacity (Komatsu PC8000-6 backhoe shovel and Komatsu 830e operating weight), allowing active hauling between the NI Pit and the CMM primary crusher, providing access between the west and east side of the Similkameen River. The bridge is designed so that it clears the river at high water, thus having minimal hydraulic or environmental impact on the site and surroundings.

Power Distribution

BC Hydro transmits power to the CMM from the NIC substation, along a 138 kV transmission line (identified as 1L251) owned and operated by BC Hydro. The power is then tapped from 1L251 at the NI site to feed the two 138 kV substations owned and operated by CMML at the CMM, and SCO at NI. The site power distribution systems are discussed in Section 18.3.3.

The NI water pumping systems have been designed to operate on electrical power rather than diesel. A site power transmission and distribution system supplies electrical power to the following locations associated with the water management system, which is fed from the mine power supply as necessary:

- In-pit dewatering pumps for the NI Pit
- In-pit mining equipment

- East haul road sump and pump station
- North pond sump drainage pumps
- South pond sump drainage pumps.

The NI power distribution system is based on the following key lines and voltage ratings:

- 25 kV pit perimeter line—2,825 m long
- 7.2 kV pit feed lines—1,140 m long
- 4.16 kV North water management line—1,040 m long
- 4.16 kV East haul road water management line—230 m long
- 4.16 kV Envirogreen line—1,812 m long
- 4.16 kV Arrow Enviro Services line (Fortis line extension)—2,406 m long
- 4.16 kV South water management line—589 m long.

The NI pit perimeter line will be routed around the circumference of the pit via 44 wooden poles to a pit portable substation that will then distribute power as required by the pit operation via a pit feed line approximately 1,140 m long.

The Arrow Enviro Services Line (FortisBC Extension) will be rerouted in accordance with utility standards. The line will also be extended to service the south water management line.

For the 65 kt/d power distribution a large influx of power to the south side of NI is required to take care of the new and increased loads, a second phase of a new SCO substation facility will be created by installing a second 37.5/50/62.5 MVA transformer and incoming circuit breakers to receive the power from the BC Hydro transmission network, and outgoing circuit breakers to redistribute the power to the individual loads to the south side of NI mine area, including pit operation, in-pit crushing, conveyors, pit dewatering, and water pumping system.

Several options were considered to feed power to different segments of the material handling infrastructure. The most favourable option to distribute power from the north side SCO substation is the existing distribution network connected to the river crossing (Structure 65 to Structure 64). Structure 64 then feeds power to the distribution system running alongside the Similkameen River from Pole 62 to Pole 34 to the south side. (See Appendix 18-B: 25 kV overall SLD for details.) The plan is to take taps from the 25 kV network and install a step-down transformer, incoming and outgoing circuit breakers, and an E-house to feed power to the different segments of material-handling infrastructure.

At present the 138 kV overhead line is feeding power to the CUM substation. The existing 37.5/50/62.5 MVA transformers (1 and 2) installed at CUM are fairly loaded. To handle the large influx of power to the CM side and take care of the new and increased processing and crushing loads, a third 37.5/50/62.5 MVA transformer and incoming circuit breakers will be required to receive the power from the BC Hydro transmission network, and

outgoing circuit breakers to redistribute the power to the individual 65 kt/d processing loads, for increased production and new loads to the Upper Wolf Creek NERSA. Loads of Wolf Creek NERSA may also be connected to the 25 kV circuit feeding power to the Rogers Tower site from the Orica bulk facility. The CM side has several loads of a critical nature, which require power even though production may be suspended because of a power outage.

The summary scope of work for the power distribution and reticulation is as follows:

- Install second 37.5/50/62.5 MVA transformer and switchgear in SCO substation.
- Install distribution circuit for NI Pit operation.
- Install transformers alongside Pole 62 to Pole 34 to feed power to the different segments of material-handling infrastructure.
- Install a new CM substation to provide power to the equipment required for 65 kt/d (third 37.5/50/62.5 MVA transformer and switchgear, etc.)
- Design installation and commissioning of a distribution system to feed power to the individual loads on the south side (CM side and NI side).
- Extend 25 kV line feeding power to the Rogers Tower site from the Orica bulk facility. This 25 kV line will provide power to the different segments of material-handling infrastructure.

1.19 Market Studies and Contracts

CMML sells all produced copper concentrate to Mitsubishi Materials Corp. at market prices and treatment terms. Following are the consensus prices and terms used as the basis of this expansion study update.

The copper, gold, and silver prices used by CMMC for this expansion study update cash flow analysis are based on consensus metal prices, and are summarized in Table 1-7.

Table 1-7: Copper Mountain Mine Metal Prices (\$/lb)

Metal	Year 1	Year 2	Year 3	Long Term
Copper (\$/lb)	3.73	3.86	3.94	3.60
Gold (\$/oz)	1,796	1,762	1,749	1,650
Silver (\$/oz)	21.86	22.30	22.24	21.35

Table 1-8 presents an estimate of the anticipated smelter charges for CMML copper concentrates.

Table 1-8: Copper Mountain Mine Estimated Smelter Charges

	Long-Term Forecast
Treatment Charges (\$/dmt)	62.00
Refining Charges (¢/lb)	6.20
Total TC/RC (¢/lb)	16.62

Notes: TC/RC= Treatment Charge/Refining Charge; \$/dmt = dollars per dry metric ton; ¢/lb = cents per pound

1.20 Environmental Studies, Permitting, and Social or Community Impacts

1.20.1 Permitting

The mining and processing at the CMM are authorized and regulated by three major permits as shown in Table 1-9. Additionally, discharges from the mine site are governed by the federal Metal and Diamond Mining Effluent Regulations under the federal *Fisheries Act*. All permits have specific monitoring requirements, and general or specific discharge limits and characteristics.

Table 1-9: Major Permits at Copper Mountain Mine

Permit	Issued By	Original Date of Issue	Last Permit Amendment
B.C. <i>Mines Act</i> Permit M-29	B.C. Ministry of Energy, Mines and Petroleum Resources	August 3, 1970	March 3, 2021
Effluent Permit PE-261	B.C. Ministry of Environment and Climate Change Strategy (ENV)	February 3, 1969	March 17, 2022
Air Emissions Permit PA-105340	B.C. Ministry of Environment (ENV)	October 3, 2011	January 18, 2016

The current *Mines Act* M-29 permit, issued, and enforced by the B.C. Ministry of Energy, Mines, and Low Carbon Innovation (EMLI) authorizes the mine and reclamation plans, tailings and NERSA, site roads, and water management. It also contains requirements for reclamation liabilities, closure cost estimates, and associated reclamation bonding. The current reclamation security requirement is \$20.98 million, with \$21.0 million of security held under *Mines Act* Permit M-29 at end of year 2020.

The CMM expansion project will require amendments to the existing operational permits, MA-29, PE-261 and PA-105340. Although these permits fall under the jurisdiction of the EMLI and ENV, complex applications allow for an integrated permitting process that will enable a coordinated authorization review process. Additionally, other potential and anticipated permit authorizations have been reviewed for the CMM expansion project. The time required for these permit developments has been factored into the overall schedule.

1.20.2 Environmental, Social Setting, and Community Engagement

The CMM biophysical setting includes relevant baseline studies, monitoring, and management plans for vegetation, wildlife and wildlife habitat, fish and aquatic resources, hydrology, hydrogeology, water quality, sediment, periphyton and benthic invertebrates, air quality, as well as greenhouse gas and climate change. Data from historical and existing monitoring will be supplemented with additional baseline assessments to characterize the environmental impact of the CMM expansion project.

CMML has strong support from local communities and the Town of Princeton. Transparent engagement and strong cooperative working relationships with all local communities are priorities for CMML. The CMM is within the Traditional Territory of the Smilq'mixw People as represented by the Upper Similkameen Indian Band (USIB), in Hedley, and the Lower Similkameen Indian Band (LSIB), in Cawston. CMML maintains a cooperative and respectful relationship with USIB and LSIB that is in keeping with the principles of economic sustainability, environmental stewardship, and self-determination in respect of Smilq'mixw Territory. CMML has actively engaged USIB and LSIB on the NI development plan and will continue engagement activities for the CMM expansion project, specifically with involvement in environmental baseline studies, input of Indigenous Knowledge into design considerations, and review of basic engineering concepts.

1.20.3 Conceptual Mine Closure and Reclamation

CMML has developed a conceptual end land-use plan (ELUP) in collaboration with LSIB and USIB for the CMM. The conceptual ELUP serves as a guide for reclamation planning, progressive reclamation efforts, and research on site-throughout operations, and as a tool for input from LSIB and USIB in the development of a detailed ELUP. The detailed ELUP, once developed, will continue to be used to achieve the end land-use objectives and to identify challenges and solutions that can be addressed through recontouring, reclamation research, and reclamation implementation.

As required under *Mines Act* Permit M-29, CMML will develop and submit a detailed Closure Plan to EMLI for approval at least twelve months prior to final closure. CMML will continue to engage First Nations, local communities, and regulatory agencies in focused consultation about closure and development of an appropriate and detailed mine closure plan that is responsive to First Nations and stakeholder concerns.

1.21 Capital and Operating Costs

1.21.1 Capital Costs

The current mine plan anticipates active mining until 2052. The last two years will complete the processing of low-grade stockpiles. Total site expansion and sustaining CAPEX are estimated to be \$1,287.2 million over the LOM.

Table 1-10 shows the LOM sustaining CAPEX by area.

Table 1-10: Copper Mountain Mine—Summary of LOM CAPEX

Area	Value (US\$ millions)
<i>Sustaining Capital</i>	
Mine (Includes Capital Leases)	715.5
Mill and Site	112.0
Total Sustaining Capital	827.5
<i>Development Capital</i>	
65 kt/d Initial Development Capital	236.9
Other Development Capital	222.8
Total Development Capital	459.7
Grand Total	1,287.2

1.21.2 Operating Costs

The average cost per tonne milled is shown in Table 1-11, with all assumptions in place for the mining and milling of an integrated mine plan. The mine cost includes all mining costs for rehandling of existing ore stockpiles to feed the concentrator. Assumptions were made based on hauling NI ore by truck and feeding the expanded concentrator at 65 kt/d throughput. The higher milling rate, and lower operating cost of the HPGR circuit will result in a lower unit operating cost at the concentrator.

Table 1-11: Copper Mountain Mine—Summary of LOM Operating Costs

Area	LOM (\$/t milled)
Mine Cost per Tonne Milled ¹	5.75
Mill Cost per Tonne Milled	3.87
G&A and Engineering Cost per Tonne Milled	0.51
Total Operating Cost per Tonne Milled	10.14

Notes: ¹ Mining costs are inclusive of costs to rehandle the existing ore stockpiles.
LOM mining cost is \$1.70/tonne mined.

1.22 Economic Analysis

The CMM expansion study updated has been valued using a discounted cash-flow approach in determining the NPV. Annual cash flow projections were estimated over the LOM, including stockpile years, based on the estimates of CAPEX, production costs, and sales revenue. Sales revenue is based on producing copper concentrate with gold

and silver credits. Long-term metal prices of \$3.60/lb of copper, \$1,650/oz of gold, and \$21.35/oz of silver were used and were based on consensus forecasts.

Sensitivity analyses were performed for variations in copper price, copper grade, copper recovery, OPEX, CAPEX, and exchange rates, to determine their relative importance as value drivers.

The economic model was created using various assumptions of development activities and integration of the NI deposit. These developments are still to be approved by the Company's Board. Based on the assumptions contained in this Technical Report, the expansion study update is economically viable, with an after-tax NPV at 8% of \$1,245 million. Section 22 details the yearly cash-flow forecasts and sensitivities analysis.

1.23 Adjacent Properties

The CMM covers all the known significantly mineralized properties in the district. There are currently no adjacent properties with significant mineralization. To the north, within the same belt of rocks, some deposits and properties are relevant to exploration at the Copper Mountain site. The most significant are those associated with the Iron Mask batholith (IMB) in the Afton-Ajax camp near Kamloops, B.C., approximately 150 km north of the CMM. The IMB is about 35 km long, consists of multi-phase diorite and gabbro intrusions, and was emplaced into Nicola Group rocks at approximately the same time as the CMS.

Mineralization at the CMM is similar to that of the New Afton and Ajax properties. The main differences include the existence of a supergene zone at New Afton, with significantly higher gold grades. The vertical extent of mineralization at New Afton, and its proximity to the Ajax deposit, further supports, by analogy, the deeper exploration potential at the CMM.

1.24 Other Relevant Data and Information

1.24.1 Concentrator Throughput

Positive drilling results at CM and NI increased the Mineral Reserve substantially. Under guidance from Ausenco subject matter experts (SME) using Braun and Ausgrind software models, the expansion study update team evaluated the best option for increasing the CM concentrator throughput. The current concentrator permit allows processing up to 50 kt/d; therefore, an additional completely separate 50 kt/d concentrator was considered. The expansion study update team came to the conclusion that the CAPEX of this option is prohibitive compared to simply expanding the existing 45 kt/d capable concentrator. After performing a high-level CAPEX and OPEX analysis, the expansion study update team selected 65 kt/d without coarse particle flotation (CPF) for this expansion study update, which provided the best NPV.

1.24.2 Coarse Particle Flotation

In 2021, Ausenco performed a desktop study to evaluate the potential for CPF in the CM process flowsheet. The positive results of this desktop study led to a commercial laboratory test program in consultation with Eriez

Technologies. Two initial samples were evaluated, leading to positive results and a larger-variability test program. The results from ten variability composite samples, collected from representative locations across the Main, North, and NI pits, aligned with the initial two samples evaluated using the CPF technology. The adoption of CPF in the CMM process plant would require increasing the primary grind from P_{80} 150 μm to P_{80} 300 μm . Despite the positive CPF study results, the Project team decided that further testwork and evaluation are required to adequately understand the potential recovery implications of a coarser primary grind coupled with CPF, compared to the existing flowsheet.

1.24.3 Filtered Tailings

The topic of sand-constructed dams has been much discussed since 2012. FLSmidth was commissioned to perform testwork on the CMM tailings material using thickened, filtered, and comingled flowsheets. The results of the study showed that when thickening the tailings to 62% w/w, filtered material could target 14% w/w, whereas comingled material could target 16% w/w at a ratio of 30% filtered tailings to 70% NER.

Upon completion of the analysis, the CAPEX yielded US\$176 million for a thickened and filtered flowsheet, with an operating cost 330% that of the current tailings dam. The Project team proceeded with a conventional cyclone-sand tailings dam design in the north valley, with a 3:1 slope for added stability, for the purposes of this Technical Report as it is a proven safe technology successfully applied by the CMM.

1.24.4 Power Supply—97 kt/d

Over and above the currently connected load of approximately 100 MW, and the final 65 kt/d study that indicated a connected load of 156 MW, the Project team also studied the requirement for the 97 kt/d throughput scenario, which came to 240 MW. This power demand included upgrading existing power-transfer capability of BC Hydro's transmission network. These items included BC Hydro upgrades such as:

- Transitioning the existing 1L251 138 kV transmission line between BC Hydro NIC substation and the CM SCO substation into a 230 kV transmission line.
- Building a parallel 138 kV transmission line from BC Hydro's NIC substation to CM SCO to get additional power.
- Building a parallel 138 kV transmission line from Princeton Tap to CM SCO to get additional power from FortisBC.
- Based on the cost-benefit analysis, IRR, and NPV, the 65 kt/d over the 97 kt/d concentrator throughput option was selected as the most favourable for this Project, which kept future power requirements at 156 MW.

1.24.5 65 kt/d Project Execution Plan Outline

Plan Objective

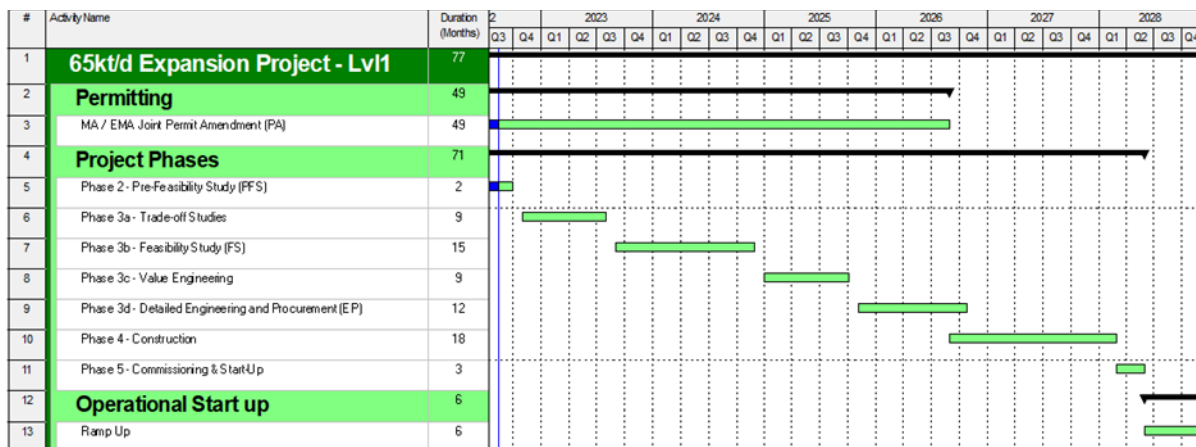
The development of a practical Project Execution Plan (PEP) at this stage of the Project will be integral to the success of the next phase of the work, as it enters the engineering, procurement, construction, and commissioning phases. Following this expansion study update, a feasibility study phase is expected to start in 2023 to continue supporting the required permit amendments in 2022, to be able to achieve an increase in the milling rate to 65 kt/d in 2028.

Schedule

Figure 1-4 shows the overall execution schedule including the installation of the HPGR circuit, addition of Ball Mill 4, regrind circuit vertical mill, additional rougher and cleaner flotation circuits, and the major electrical system upgrades.

Pre-construction activities, construction, commissioning and ramp-up are estimated to take 27 months.

Figure 1-4: 65 kt/d Expansion Schedule



1.25 Interpretation and Conclusions

This section presents the key conclusions of this Technical Report:

- Demonstrates positive economics, to a PFS level of CAPEX and OPEX accuracy, for an increase in process plant throughput, from 45 kt/d to 65 kt/d.
- This expansion project improves site economics with, an NPV (8% discount rate) of approximately \$1,245 million with an initial CAPEX of \$237 million. Total cash-flow generated is approximately \$3,383 million with an AIC of \$1.76/lb for the first 20 years. Therefore, a low-risk, moderate-CAPEX expansion.

- The LOM plan indicates more than 50% and 70% increase in Mineral Reserves and Mineral Resources, respectively, since the last 2020 technical report (Klue et al., 2020).

Below are the key findings of this Technical Report:

- The current long-term LOM plan was produced from the optimized pit shells and Mineral Reserve block model: total pit ore mined is estimated to be 652 Mt, starting in January 2023, with total pit waste mined of approximately 1,356 Mt. The LOM average strip ratio of material moved is 2.08:1 waste:ore tonnes.
- The concentrator will process 697 Mt starting in January 2023, which includes the current low-grade stockpile of approximately 52 Mt.
- Over the first twenty years of the LOM plan, average annual production is 113.6 Mlb of copper, 54.0 koz of gold, and 367.0 koz of silver.
- The total amount of power the CMM requires to increase capacity to 65 kt/d is 156 MW, 56 MW above the current supply, which is easily achievable with BC Hydro upgrades to the incoming power line.
- CMMC has dedicated substantial time and effort during this study update on technologies such as CPF, RopeCon, and Drystack tailings which should be considered in modern processing plant flowsheets. CMMC concluded that more work must be done by means of pilot plant testwork and trade-off studies.

This Technical Report is based on a long operating history. The following experience with the operation provides confidence in this PFS:

- The property has been successfully operated as a bulk, low-cost, copper–gold–silver open pit mine since 2011.
- The operating plan uses existing site infrastructure and minimizes new disturbances.
- The Mineral Reserve is well understood and supports a 32-year mine life, inclusive of 2 years of stockpile reclaim in 2053 and 2054.
- Mineral recoveries are well understood and supported by a geo-metallurgical model that accurately predicts metal recoveries.
- The deposits are non-acid generating (NAG), resulting in low environmental risks and low long-term liability.
- Progressive reclamation is actively implemented and incorporated in mine planning. A reclamation bond with the province is in place. The conceptual mine closure plan will be updated as part of the CMM expansion project. A detailed closure plan will be submitted prior to 12 months before mine closure.
- CMML has Participation Agreements (PA) with the local First Nations and maintains regular engagement through Joint Implementation Committee (JIC) meetings. CMML engages with the Community of Interest (COI) through regular meetings and enjoys strong support from the local communities.

- The CMM expansion project will require amendments to the existing operational permits, MA-29, PE-261, and PA-105340.
- Other potential and anticipated permit authorizations have been reviewed for the CMM expansion project and the time required for these permit developments has been factored into the overall execution schedule.

This Technical Report is completed to the following standards:

- The estimates of Mineral Resources and Mineral Reserves for Copper Mountain have been prepared in compliance with the *NI 43-101, Standards of Disclosure for Mineral Projects* . which also meets the JORC code standards
- It is the opinion of the author that the classification of Proven and Probable Mineral Reserves meets the definitions of Proven and Probable Mineral Reserves as stated by NI 43-101 and defined by the *CIM Standards on Mineral Resources and Reserves—Definitions and Guidelines*.

1.26 Recommendations

The following recommendations aim to advance and fully capture the economic potential of the expansion study update defined in this Technical Report:

- Proceed with a detailed engineering study for the installation of an HPGR circuit with expanded concentrator capacity to support higher mill throughput of 65 kt/d.
- Proceed with a detailed engineering study to confirm the construction plan for increasing the existing tailings impoundment capacity.
- Proceed with a detailed design of the water balance, and water quality modelling associated with the higher mill tonnage rate.
- Finalize a design of site power infrastructure and supply.
- Continue with environmental baseline studies and environmental monitoring to support design and permitting, as it applies to the regulatory process of the CMM expansion project.
- Continue exploration drilling to fully delineate mineralization which remains open.
- Continue engaging with COIs and First Nations.
- Evaluate trolley assist for the mining haul trucks on the east haul road as an effort to reduce mining costs, improve mining productivity, and reduce green house gases (GHG).
- Conduct another, more detail, technology trade-off between trolley assist, haul trucks and conveying system for NI ore to the concentrator.
- Perform pilot plant testwork on CPF technology and conduct trade-off between CPF and Ball Mill 4 installation inclusive of a site visit to a copper-centric CPF commercial installation.
- Conduct site visit to a successful copper-centric HPGR commercial installation.

-
- Conduct a detailed cost estimate and visit a site applying the Doppelmayr conveyance to their concentrator.
 - Install a mast for collecting real-time wind data, to evaluate site renewable energy generation.
 - Investigate mine fleet sustaining capital selections such as electrification of diesel shovels and drills, review of shovel size to reduce loading and haul truck wait times, and installation of a primary crusher dump pocket to reduce haul truck cycle time to reduce mining costs.
 - Continue to optimize the pit designs based on exploration drilling results, trolley assist installations, and investigation of opportunities to further reduce mine OPEX to further increase the Mineral Reserve.
 - Execute geotechnical drilling in time for the North FNERSA.
 - Consider submitting the NI permit amendment application to secure NI development and the current TMF 1,060 masl expansion.
 - Continue with the BC Hydro SIS for a 131 MW supply, which consist of thermal upgrade and installation of fixed capacitor bank between NIC substation and SCO substation to supply an additional 31 MW.
 - Continue studies with BC Hydro for the installation of a parallel transmission line between PRI and SCO to get an additional extra 25 MW power from FortisBC.

APPENDIX B: JORC CODE TABLE 1

The following tables are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of exploration results.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Explanation
<i>Sampling techniques</i>	<ul style="list-style-type: none"> The data used for this Mineral Resources estimate were obtained from drill core and from reverse circulation (RC) samples. Core sampling was generally performed at 3 m intervals for NQ core and 2 m intervals for HQ core, but may be shortened to fit with major lithological or other contacts. Core was halved using a diamond-bladed core saw. RC samples were typically taken at 3 m intervals.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> The majority of historical drilling (1912-2007) at the Copper Mountain Mine (CMM) was diamond drilling, with some percussion holes drilled in the 1950's and RC holes drilled in 1994. Since 2007, the majority of the drilling has been diamond drilling, with some RC drilling carried out in 2021-2022. A number of different drill core diameters have been employed over the history of the mine, including BX (36.6 mm core diameter for historical underground), NQ (47.6 mm core diameter) and HQ (63.5 mm core diameter). From 2007 onwards, the standard method of drilling was to start all holes with HQ core and then reduce to NQ core at depth. Down-hole survey data was absent in pre-1960 drill holes. Down-hole dip data, presumably by acid tests, were included in drill data from 1960 to 1987. From 1988 to 1998, down-hole surveys were obtained using a Pajari instrument, which provided both azimuth and dip data. From 2007, down-hole surveys were obtained using digital REFLEX instruments (or similar systems) which were compass based.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> Core recovery is systematically recorded from the commencement of coring to end of hole, by reconciling against driller's depth blocks in each core box. Core recoveries are typically between 90% to 100% with isolated zones of lower recover. No sample bias has been identified associated with core loss.
<i>Logging</i>	<ul style="list-style-type: none"> Diamond core drill holes have been geologically logged for lithology, structure, alteration, vein types and mineralization. The geological logging of RC chips is recorded using a modified logging template to capture the same major characteristics as the core logging. All drill core was logged prior to sampling. Geotechnical measurements were recorded including Rock Quality Designation (RQD) fracture frequency and core recovery. Faults and fractures are also logged.

Criteria	Explanation
	<ul style="list-style-type: none"> • Drill core is photographed before being cut and sampled. • The logging is of sufficient quality to support the Mineral Resources estimate.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • Sampling, sample preparation and quality control protocols are considered appropriate for the material being sampled. • Diamond drill core was geologically logged, and sample selections were determined based on visual observation of mineralization. Sample intervals were marked on the core, and assay tags were stapled onto the core boxes. Core was photographed in the boxes and moved to the cutting area, where it was cut in half using a manual diamond-bladed saw and one half of the core was placed in a labelled sample bag with an associated assay tag. • Sample lengths were usually 3 m for NQ core and 2 m for HQ core, but either may be shorter depending on geological or mineralogical boundaries. Cut core was placed in plastic bags, sealed with a cable tie, and transported by exploration staff to the CMM laboratory, or an external laboratory, for sample preparation and analysis. • Drill core sample weights typically varied from approximately 5 to 15 kg. Sample sizes are considered appropriate for the style of mineralisation. • RC samples were collected in continuous 3 m intervals and reduced to approximately 12.5% of the original sample size to provide an appropriate sample size for the sample preparation and analysis at the CMM laboratory. Sample reduction was carried out at the drill either by using a rotary wet splitter on the RC rig or by splitting the sample on a rifle splitter. Samples for analysis were collected in pre-numbered bags along with a corresponding Tyvek sample tag and were then sealed with a cable tie. • Sample preparation methods have included crushing and pulverizing; however, the crush and pulverization sizing has slightly changed over time. Currently, the protocol is crush to 70% passing a -10 mesh (<2 mm) sieve, pulverize to 85% passing a -200 mesh (<75 micron) sieve.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> • Sample preparation and analytical laboratories used included the following independent laboratories: Pioneer, Richmond, BC (accreditations unknown); Ecotech, Kamloops, BC (accreditations unknown); ALS Chemex, Vancouver, BC (ISO9001 and ISO17025:2017); Actlabs, Kamloops, BC (ISO9001 and ISO17025:2017); and MSALABS, Langley, BC (ISO9001 and ISO17025:2017). • From 2007 to 2010, sample preparation and primary copper, silver and gold analyses were carried out at Pioneer, Richmond, BC and Ecotech, Kamloops, BC. • From 2010 to early 2022, sample preparation and primary copper and silver analysis of exploration samples (both core and RC) was carried out at the onsite CMM laboratory. This laboratory is not accredited and is not independent of Copper Mountain Mining Corporation (CMMC). However, during this time, check assay procedures were in place at independent accredited laboratories to verify analytical results from the CMM laboratory. Sample pulps that returned >0.1% Cu at the CMM laboratory were routinely sent to these independent laboratories for gold analysis, and approximately 10% of these sample pulps were also analyzed for copper and

Criteria	Explanation
	<p>silver. This equates to approximately 1,800 check assays. These check assay results indicate that sample analysis at the CMM laboratory was acceptable.</p> <ul style="list-style-type: none"> • Aqua regia digestion has been the standard digestion method since 2007. Analytical methods have been primarily by atomic absorption spectroscopy (AAS) for copper and silver, and fire assay/ inductively-coupled plasma (ICP) finish for gold. The CMM laboratory also carried out initial copper analysis of samples using XRF with all samples returning >0.1% copper subsequently analyzed using AAS. • Multi-element suites were determined for selected samples from 2007 to early 2022, and for all exploration samples submitted to MSALABS (starting in March 2022), these multi-element analyses at MSALABS use a four-acid digestion and are reported using ICP methods. • CMMC does not have any information on QA/QC procedures for historical (pre-2007) analytical data. However, these historical data were obtained and compiled by major mining companies for mine design and production, and it is assumed that these data were acquired in an industry-standard manner for their time. • QA/QC measures adopted for the drilling from 2007–2016 included the submission of coarse blanks and certified reference material (CRM, standard). The QA/QC insertion rates consisted of 2.2% coarse blanks and 2.2% CRMs. From 2017–2020, QA/QC measures included the submission of CRMs at an insertion rate of 1.4%, with no coarse blanks included. From 2021 to early 2022, QA/QC measures did not include the submission of CRMs or coarse blanks; however, during this time, the CMM laboratory continued to insert CRMs into the analytical sample stream, at an insertion rate of 5% for both X-ray fluorescence and AAS analyses—a QA/QC measure that had been in place at the CMM Laboratory from 2010 to 2022. From March 2022, sample preparation and primary analysis for exploration samples was carried out at MSALABS, and QA/QC measures included the submission of coarse blanks, CRMs, and half-core duplicates, with an insertion rate of 5% for coarse blanks, 5% for CRMs, and 3.9% for half-core duplicates. Coarse crush duplicate analyses were also carried out by MSALABS, at a rate of 3.2%. • A number of check assay and re-assay programs have been carried out at Copper Mountain (CM). Since 2007, an independent check assay procedure for copper and silver has been place. Approximately 10% of exploration samples with >0.1% copper have been subjected to check assay at independent laboratories. In 2022, 360 samples of archived half core from the 2021–2022 drilling program were sent for re-assay at MSALABS. These samples were of NQ and HQ core, were 1.5 to 3.0 m in length, and represented a range of copper grades. Sample preparation and primary analysis of the original half core samples for 310 of these samples had been carried out at the CMM laboratory and for the remaining 50 at MSALABS. This re-assay program represented a 5% check of primary analyses of >0.1% Cu from the CMM laboratory on samples from the 2021-2022 program and showed that the original assay results from the CMM laboratory were acceptable.

Criteria	Explanation
	<ul style="list-style-type: none"> Based on a review of QA/QC data and the results of check and re-assay programs, the copper, gold and silver data from drill core and RC samples are considered acceptable for use in resource estimation.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> Copper Mountain exploration staff continually verified data, starting with the drilling programs in 2007–2008, which supported the mine restart in 2011, and continuing through the most recent 2022 drill program. In addition, large drilling programs since 2007, which have included QA/QC procedures, have broadly validated the the historical drilling data. Historical drill hole data are supported by more than 11 years of reconciled copper production and operational data. No significant issues have been noted during reconciliation with the exploration data that were collected. There is no direct method for verifying historical (pre-2007) drill data. However, these historical data were obtained and compiled by major mining companies for mine design and production and were presumably collected in an industry-standard manner at that time. The drill hole data used to generate the MRE were manually checked for errors and gaps prior to data upload to Surpac software. Exploration personnel conducted regular reviews of data quality prior to resource estimation. Twelve technical reports (not including amended versions of individual reports) have been filed on the System for Electronic Document Analysis and Retrieval (SEDAR) on the CMM since 2007, the year in which pre-restart exploration and other work began on the CMM. These NI 43-101 technical reports are explicitly required to present evidence that sufficient data verification is performed to support the Mineral Resources and Mineral Reserves estimates current at the time they were prepared. A combination of Copper Mountain staff and the Qualified Persons for the reports provided information on the verification programs performed. No issues that would materially affect the estimates were noted in any of these 12 reports.
<i>Location of data points</i>	<ul style="list-style-type: none"> Historical collar surveys were surveyed by predecessor company survey staff using industry standard theodolite instrumentation to establish local grid control. From 2007 to 2008 drill collar locations were surveyed in by McElhanney Consulting Services Ltd. (McElhanney), using a total station instrument and established property grid controls. For this period, the final drill hole collar locations were surveyed by McElhanney using both a total station and a survey quality global positioning system (GPS) instrument. In 2009, the mine site survey department was created and from that point onwards a Trimble R10 and R12 Total station GPS instrument has been used for surveying in drill hole collars. The coordinate system in use at the mine is UTM Nad83 Zone 10. Topographic surfaces are determined using a by Lidar survey with approximately 0.3 m resolution.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> Drill hole spacing varies throughout the deposit. Historical underground drilling was on the order of 10-30 m spacing. More recent drilling from 2007 onwards, has an average drill hole spacing of approximately 50 x 50 m within the central portion of the

Criteria	Explanation
	<p>Copper Mountain Main, Copper Mountain North and New Ingerbelle zones with wider spaced drilling in the more distal portions of the deposit.</p> <ul style="list-style-type: none"> Both historical and recent CMM drilling intersected the mineralisation at various angles. The data spacing and distribution of drill holes is considered sufficient to define both the geological and grade continuity for the porphyry style mineralisation at the CMM and to support the Mineral Resources estimate. Geological and grade continuity has been demonstrated during the 11 years of production from the current open pit operations.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> The Copper Mountain deposit is an alkalic porphyry deposit with stockwork veinlet and disseminated sulphide mineralization. Stockwork veinlet mineralization is multi-directional but with a strong vertical component and therefore angled drilling has been used to provide unbiased samples of mineralization. There does not appear to be any bias between drilling orientation and assay results.
<i>Sample security</i>	<ul style="list-style-type: none"> The CMM has no information on sample security measures prior to 2007. However, these historical data were obtained and compiled by major mining companies for mine design and production and were presumably collected in an industry-standard manner, including sample security measures, at that time. Since 2007, drilling crews or exploration team members transferred drill core from the drill site to the core-logging area. At the CMM, core is logged at a permanent logging facility (core shack) near the mill building. At New Ingerbelle, core was logged at a facility set up in the disused light-truck shop, proximal to the New Ingerbelle pit. In both cases, the core saws were located beside the logging areas, to facilitate supervision of the core cutters, and to minimize the distance the core needs to be moved. Copper Mountain exploration staff prepared samples for transport to the analytical laboratory. Samples remained in the custody of Copper Mountain on CMM property from sampling to delivery to the CMM laboratory. Sample pulps for primary gold analysis and copper silver check assay at external independent laboratories were transported to the external laboratories by Copper Mountain exploration staff or a contract transportation company. In 2022, either Copper Mountain exploration team members or a contract transportation company transported half core samples from 12 diamond drill holes to an external laboratory, MSALABS, for sample preparation and primary analysis. Individual sample bags were inventoried and sealed in rice sacks before leaving the CMM, then checked and inventoried on arrival at the laboratory; any delivery issues were communicated to Copper Mountain. No significant security or chain of custody issues have been identified.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> Internal verification and audit of Copper Mountain exploration procedures and databases are periodically undertaken. Reviews of assay laboratories have been conducted by both project personnel and owner representatives and have provided ongoing improvement recommendations but have not highlighted material risks to the integrity of the data.

Section 2 Reporting of Exploration Results

Criteria	Explanation
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> Copper Mountain's land position is comprised of a combination of crown grants, mineral claims, mining leases and fee-simple lots all of which are owned by Copper Mountain Mine (BC) Ltd, which is a subsidiary of CMMC. The crown grants, mineral claims, and mineral licenses are in good standing and are included in the company's mining permit.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> The Copper Mountain Project has a long history of exploration, development, and production, beginning with initial exploration in the 1880s. Granby Consolidated Mining, Smelting and Power Company (Granby) acquired the project in 1922–1923, and initiated production following construction of a crushing and milling facility, mostly processing underground ore, which continued, with minor shutdowns, through 1957. Granby carried out a significant amount of exploration drilling during its operations, and data from this phase of work have been preserved Modern exploration activity began in 1966, when Newmont optioned claims opposite the historical Granby Mine on the west side of the Similkameen River. Newmont carried out geological mapping, soil sampling, and geophysical surveys, which resulted in bulldozer trenching uncovering a significant mineralized zone. Subsequent drilling defined sufficient resources to contemplate production. Open pit mining began in 1968, when Newmont Mining Corporation of Canada (Newmont) commissioned the Ingerbelle pit. In 1988, Newmont sold the property to Cassiar Mining Corporation (later to become Princeton Mining Corp.) and mining and exploration continued intermittently through to late 1996. An exploration drilling program was carried out in 1996–1997; thereafter, the property was dormant until Copper Mountain acquired the property in 2006 and resumed exploration in January 2007. Following large exploration drilling programs in 2007 and 2008, Copper Mountain exercised the option, and decided to work towards putting the property back into production. Exploration continued from 2009 to 2010 during completion of the feasibility study, with production commencing in mid-2011 and continuing to the present day.
<i>Geology</i>	<ul style="list-style-type: none"> The Copper Mountain porphyry copper deposit is near the southern end of the Quesnel Terrane—an allochthonous composite crustal fragment consisting of Paleozoic and Mesozoic volcanic, sedimentary, and plutonic rocks. Copper Mountain is one of a number of alkalic porphyry deposits in British Columbia that formed during the Late Triassic to Early Jurassic in the Quesnel and Stikine terranes The southern Quesnel Terrane is dominated by the late Triassic Nicola Group, a subaqueous island arc assemblage composed of volcanic and sedimentary rocks which make up the Nicola Volcanic Arc. At the Copper Mountain deposit, the Nicola Group is cut by an intrusive suite including the composite Copper Mountain Stock (CMS), the Voigt Stock, and the slightly younger, polyphase, Lost Horse Intrusive Complex (LHIC). Copper–gold mineralization post-dates the CMS and is temporally and spatially associated with the LHIC.

Criteria	Explanation
	<ul style="list-style-type: none"> Radiometric age dating indicates that the formation of the Copper Mountain deposit was coeval with the approximately 205 Ma to 200 Ma regional alkalic copper–gold porphyry ore-forming event that stretched the length of the Canadian Cordillera. Host rocks and mineralization in the mine area are cut by numerous late, north–south-trending felsite dykes, related to emplacement of the Cretaceous Verde Creek quartz monzonite approximately 3.5 km northeast of the mine area. Sedimentary and volcanic rocks of the Eocene Princeton Group have been unconformably deposited onto Nicola Group volcanic rocks and LHIC along the northern and eastern margins of the project area and dip about 30° to the north The bulk of the known copper mineralization at Copper Mountain occurs in a north-westerly trending belt of Nicola Group rocks, approximately 5 km long and 2 km wide, that is bounded on the south by the CMS and on the west by the northerly trending Boundary Fault system. The Copper Mountain deposit comprises three zones of mineralisation; Copper Mountain Main, Copper Mountain North and New Ingerbelle zones. Alteration types in the Copper Mountain deposit are typical of porphyry copper deposits. Three major alteration types are observed at the CM deposit: potassic, sodic, and propylitic. Other volumetrically minor alteration types include kaolinitic and sericite-chlorite clay. Copper mineralization occurs as structurally controlled, sulphide vein stockworks, and disseminated sulphides. Mineralization had been subdivided into four types, as follows: 1) disseminated and stockwork chalcopyrite, bornite, chalcocite, and pyrite in altered Nicola Group volcanic rocks and LHIC rocks; 2) bornite-chalcopyrite associated with pegmatite-like veins (coarse masses of orthoclase, calcite, and biotite; 3) magnetite-(±hematite)-chalcopyrite replacements and/or veins); and 4) chalcopyrite-bearing magnetite breccias Due to Pleistocene glacial erosion most of the Copper Mountain deposit is characterized by a relatively fresh erosion surface, with limited surficial oxidation and no significant secondary enrichment of copper.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> No exploration results are reported in this release.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> No exploration results are reported in this release
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> No exploration results are reported in this release
<i>Diagrams</i>	<ul style="list-style-type: none"> No exploration results are reported in this release
<i>Balanced reporting</i>	<ul style="list-style-type: none"> No exploration results are reported in this release
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> No exploration results are reported in this release
<i>Further Work</i>	<ul style="list-style-type: none"> The Copper Mountain deposit remains open laterally and at depth. Exploration targets remain undrilled; targets were generated using a combination of geophysical, geochemical, and structural geology data. Additional geophysical surveys and diamond drilling are planned in 2023.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Explanation
<i>Database integrity</i>	<ul style="list-style-type: none"> Drill core and RC drill data, including assay data, were stored in Excel spreadsheets and subsequently uploaded to an Access database in Geovia Surpac software for Mineral Resources estimation. Assay and geological data were electronically loaded into a Geovia workspace and the database was backed up regularly on Copper Mountain's centralised server system in Vancouver. As a check, drill hole data were plotted in section and plan view and reviewed to ensure that they match with surrounding historical drill hole and other data. Drill-hole data are under the control of the exploration group, and a principal geologist with QA/QC experience is responsible for data management.
<i>Site visits</i>	<ul style="list-style-type: none"> The Competent Person for the Mineral Resources estimate is an employee of Copper Mountain and has visited the site multiple times in the past year.
<i>Geological interpretation</i>	<ul style="list-style-type: none"> The geological interpretation of the Copper Mountain deposit and the current Mineral Resources estimate is based on 6,110 core drill holes (596,317 m) and 1,349 RC and percussion drill holes (109,448 m), for a total of 7,459 drill holes (705,765 m). Interpretation of mineralization trends and structural controls was also supported by more than 280,000 blast holes which were drilled on a nominal 8 x 8 m spacing within the open pit mining areas. There are no alternative interpretations on Mineral Resources estimation. Both geological wireframes and estimation domains were updated for the Mineral Resources estimate using data from drill core and RC drilling programs. Three-dimensional modelling (3-D) was carried out in Geovia Surpac software using drill hole data and control sections and points to guide wireframing of geological surfaces and solids. Sufficient drill hole data exists for the creation of hard boundaries for the CMS and post-mineral felsite mine dykes. The underground limit of caved stope material is based on 3-D wireframes created by Newmont, which had access at the time to all of Granby's underground survey data. The area below the southern end of the CM Main Pit (historically Pit 3) is the only location on the property where historical stopes exist.
<i>Dimensions</i>	<ul style="list-style-type: none"> The bulk of the known copper mineralization at the CMM occurs in a north-westerly trending belt of Nicola Group rocks, approximately 5 km long and 2 km wide, that is bounded on the south by the CMS and on the west by the northerly trending

Criteria	Explanation
	Boundary Fault system. The deposit has a vertical dimension of more than 700 m (1350 m RL to 650 m RL).
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> Exploratory data analysis was undertaken on the drilling data and included analysis of histograms, log probability plots, and box-and-whisker plots. A total of 987 SG measurements were used for the Mineral Resources estimate in the NI Zone and were assigned by way of a nearest-neighbour (NN) interpolation based on a 50 m spherical search, with a uniform SG of 2.78 applied to the surrounding blocks. In the CM Main and CM North zones, an SG of 2.78 was used, consistent with available data and previous estimates. Log-normal cumulative frequency plots were produced for each estimation domain which demonstrated multiple overlapping populations. The upper population of very high-grade copper samples, consisting of less than 0.08% of the total number of samples, was erratic. The next population of assays, consisting of high-grade samples, which formed 0.2% to 4% of the total population, was not erratic. As a result, grade capping was set at two standard deviations above the mean value for copper. The same approach was taken for gold and silver. Currently, precious metals represent approximately 18% of the revenue generated at the mine. Historically, precious metals were not routinely analyzed for. Based on the strong correlation between copper and gold grade, and copper and silver grades, regression equations for each regression domain were used to estimate gold and silver values for pre-2007 drilling. A composite interval of 7.5 m was created downhole from the base of overburden, with breaks occurring at hard boundary surfaces (e.g., mine dykes and CMS contacts). Composite intervals that were less than 50% of the total length (3.75 m) were length weighted into the proceeding composite. Pairwise experimental semivariograms were modelled using Vulcan software for copper. Variogram maps and experimental variograms were created for each estimation domains. A semivariogram model was fitted to each experimental semivariogram in the three main directions of anisotropy. The nugget was obtained using a downhole semivariogram. A review of the variograms indicated that directions of continuity for copper derived from the fitted variogram models were consistent with the geological understanding of the deposit. Gold and silver were estimated using the same semivariogram parameters as copper. The CMM has two separate block models, one for the CM Main and CM North zones, and one for the NI Zone. Both use a UTM coordinate system. The CM Main–North block model is 5220 x 3120 x 1140 metres in size and individual blocks are coded by geological wireframes such as the mine dykes, CMS, cave zones (historical underground stope areas), and the July 2022 end-of-month topographic surface, which incorporates areas of the original pre-mining topography. The NI block model is 2160 x 2805 x 1395 metres in size. Both block models use a 15 x 15 x 15 metre parent block sizes and a 3.25 x 3.25 x 3.25 metre sub-block size. Copper, gold, and silver were estimated into the model using ordinary kriging (OK). A three-pass interpolation approach was used for copper, gold, and silver in the

Criteria	Explanation
	<p>estimation process. This ensured strong local support for estimates in well-informed parts of the model while also allowing an appropriate search to find enough samples for estimation in less-well-informed model areas.</p> <ul style="list-style-type: none"> The search ellipse ranges for each pass were based on a ratio of the sill values for each estimation domain semivariogram. As an example, grade interpolation from the first pass was based on 80% of the maximum sill value from the semivariogram model (Y axis). The second-pass ranges were based on 100% of the sill value and the third and final pass was based on 200% of the sill value for each semivariogram. Validation checks included visual examination of the block model and composites in plan and section views, statistical comparisons of the OK model with a nearest neighbour (NN) estimate, including swath plot analysis for each estimated domain.
<i>Moisture</i>	<ul style="list-style-type: none"> Tonnages are estimated on a dry basis. Moisture is not deemed to have a significant effect on estimation.
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> The current cut-off grade of 0.10% Cu reflects an estimation of break-even grade under current conditions while higher Cu cut-off grades may be used to define mid-grade and high-grade material for stockpiling and mill feed respectively.
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> A level of dilution is captured by the 15 x 15 x 15 metre parent block size while the 3.75 x 3.75 x 3.75 metre sub-blocks allow an increased resolution along ore/waste contacts between mineralized rock and the felsite mine dykes and the CMS. No additional mining dilution or recovery factors have been applied to the Mineral Resource as they are incorporated with the larger parent block size. This assumption is supported by supported by more than 11 years of reconciled copper production and operational data.
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> Metallurgical amenability is derived from current operating CMM plant performance. Metallurgical factors, including recoveries for copper, gold and silver, have been incorporated into the Whittle algorithm which were used to generate the Mineral Resource pit shell. Mineral Resources were constrained by a \$3.50/lb Cu pit shell which was created using the same parameters (costs, metallurgical recoveries, and pit slope angles) that were used for defining Mineral Reserves.
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> No environmental factors were deemed necessary for the estimate as the Mineral Resource is part of an operating mine with managed environmental requirements.
<i>Bulk density</i>	<ul style="list-style-type: none"> The historical tonnage conversion factor used at Copper Mountain was 11.5 ft³/ton (a density of 2.80), which was used for all rock types and resulted in reasonable reconciliation with historical mine production. A total of 987 SG measurements were used for the Mineral Resources estimate in the NI Zone and were assigned by way of a NN interpolation based on a 50 m spherical search, with a uniform SG of 2.78 applied to the surrounding blocks. In the CM Main

Criteria	Explanation
	<p>and CM North zones, an SG of 2.78 was used, consistent with available data and previous estimates.</p> <ul style="list-style-type: none"> Density measurements were made using the weigh-in-air/weigh-in-water technique.
<i>Classification</i>	<ul style="list-style-type: none"> The Mineral Resource was classified using a distance-based methodology. A single-pass NN interpolation using a 250 m (radii) octant-based search was used to calculate 1) the average distance from the centroid of each block to the nearest four drill holes, and 2) the distance to the nearest single drill hole. The octant-based search required a minimum of one composite within three of the octants, with a minimum and maximum of four composites. These two distance-based metrics were then used to classify each block. For example, for a block to be classified as Measured, the average distance to the nearest 4 composites (drill holes) was 45 metres or less, and the closest composite (drill hole) was within 40 metres of the block centroid. These distances for Measured blocks equate to a nominal 50 x 50 m drill hole grid spacing. Indicated blocks were classified using a similar approach based on an 80 m x 80 m drill hole grid spacing, and Inferred blocks were classified based on a 150 m x 150 m drill hole grid spacing. A final smoothing process was applied to reduce the “mixed blocks classification” to appropriate levels. This smoothing process helps to eliminate any isolated clusters of blocks and provides a final class model with improved local and global class continuity. Results reflect the Competent Persons’ view of the deposit.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> In 2019, SRK completed an independent Mineral Resources estimate at NI and reviewed Copper Mountain estimation methodology and concluded that it is reasonable and based on industry standards. In 2022, SLR completed an independent review and geostatistical analysis of grade estimation and classification criteria for the CM Main, CM North, and NI deposits at the CMM. SLR concluded that the 2021 and 2022 Mineral Resources estimates for the CMM were reported in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) (2014) guidelines.
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> The relative accuracy of the Mineral Resources estimate is in accordance with the guidelines of the 2012 JORC Code. The current Mineral Resources estimate is supported by more than 11 years of reconciled copper production and operational data. No significant issues have been noted during reconciliation with the exploration information that was collected or previous Mineral Resources estimates.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	Explanation
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	<ul style="list-style-type: none"> The Mineral Resource used for conversion to Ore Reserve is outlined in this press release. The CM deposit is a large, low to moderate grade, bulk tonnage, porphyry related copper, silver and gold deposits with known mineralization extending over an 8.75 km² area. The Mineral Resource is classified based on geological confidence as a function of grade continuity and drill hole density. Measured and Indicated Mineral Resources were constrained within a “value” pit-shell representing the limit to economic extraction under the specified conditions (prices, recoveries, costs, etc.). Ore Reserves are solely based on Proven and Probable categories derived from Measured and Indicated Mineral Resources. Inferred Mineral Resources are treated as waste in the optimization process and offer some upside in the mine plan during mining. The reported CMM Mineral Resources are inclusive of Ore Reserves.
<i>Site visits</i>	<ul style="list-style-type: none"> The Qualified Person reviewing the estimates has last visited the site in June 2022.
<i>Study status</i>	<ul style="list-style-type: none"> This study presents a life of mine plan for the CMM which integrates defined reserves from the Main, North and Ingerbelle mineralized zones. The study examines the proposed mine plan to support expanding the mill capacity to 65kt per day milled. Copper Mountain endeavors to update resources every 1-2 years based on the amount of new information from drilling, mine production and reconciliation data. As the CMM is a mature mining operation, the updated mine plan is achievable and economically viable taking into consideration of all material modifying factors.
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> The base cut-off grade (0.10% Cu for New Ingerbelle and 0.13% for Copper Mountain Main and North Pits) yields an net smelter return (NSR) value that ensures profitability with the parameters and prices used for the pit shell. Whittle software uses an algorithm that calculates the NSR for each block based on metal grades and estimated recoveries, smelter terms, and operating costs, and uses a discount factor to account for the time-value of money to generate pit shells. Site operating costs include mining cost, processing cost and relevant site general and administration costs.
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> Estimation of the CMM Ore Reserves involved standard steps of mine optimization, mine design, production scheduling and financial modelling. Factors and assumptions have been based on operational experience and mine performance over the last 11years. Inferred resources within the Reserve pit are treated as waste. Due to the approach adopted in the resource model where internal dilution is captured by the smallest available SMU (15m x 15m x 15m block size) combined with a whole block diluted Mineral Resource block model, no additional mining dilution or recovery factors have been applied to the Ore Reserve. This assumption is supported

Criteria	Explanation
	<p>by the actual reconciliation between the resource model and mill performance at the project to date being within an acceptable uncertainty range for the style of mineralization that currently exists at the CMM.</p> <ul style="list-style-type: none"> • Geotechnical design criteria are provided by independent consultant that conduct annual slope stability reviews and form the basis for parameters used in study. Grade control and production drilling will continue to be the same as currently used at the CMM. • Bench heights were designed at 15m, and suitable for the existing mining equipment. • The study assumes that all the current mine and mill expansion infrastructure is and will be available. Trolley Assist infrastructure will also be added on specific roads outlined in the study in addition to the existing 1 km installed within the current pit.
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> • Mineralized material is to be processed at the CMM concentrator. • Metallurgical amenability is derived from current operating CMM plant performance. Metallurgical factors have been incorporated into the Whittle algorithm which constrains the Mineral Resource classification. These include recovery constants for copper, silver and gold specified by domain. • Recovery assumptions are based on operational data and, current mill performance, testwork and historical production. • Recoveries used for copper, silver and gold are based on geo-metallurgical studies with variable recoveries for different resource areas. • No deleterious elements are known from CMM concentrates.
<i>Environmental</i>	<ul style="list-style-type: none"> • The CMM currently operates under its M-29 Mining Permit in conjunction with its MLARD materials management program. Permit amendments are required for mining at Ingerbelle, the expansion of the Copper Mountain Main and North pits and proposed expansion of the Non-economic Rock Storage Area (NERSA). New Ingerbelle additional waste storage beyond the existing designed and permitted storage areas is currently in the permitting phase. • Mineralization and waste rock at the CMM is typically not acid generating. Tailings are planned to be stored in the CMM tailings management facility and land holdings. A permit amendment will be required to expand the current tailing management facility to meet the life of mine tailings requirements.

Criteria	Explanation
<i>Infrastructure</i>	<ul style="list-style-type: none"> All mining infrastructure will continue to be available in conjunction with the existing mine operation. Additional infrastructure required by the current study are: a new haul road and bridge to connect the Copper Mountain pit with the New Ingerbelle pit; new waste rock storage facility for the New Ingerbelle deposit; Trolley Assist infrastructure on specific haul roads; the installation of a third ball mill into the CMM processing facility, which is presently in progress, and the installation of equipment as defined for this 65ktpd expansion.
<i>Costs</i>	<ul style="list-style-type: none"> Capital and operating costs have been determined as part of the update to the Ore Reserve based on the current operating cost base modified for changing activity levels and reasonable cost base reductions over the life of the mine. Operating costs include the mining cost, processing cost and relevant site general and administrative costs. These provisions have been allowed for during the life of mine based on current operating cost metrics. Canadian – US dollar exchange rates are based on Canadian long term bank consensus values. Transportation and concentrate TC/RC are based on existing life-of-mine agreements. There is a 5% NSR royalty payable on approximately 40% of the North deposit, which is accounted for in reserve estimation and financial analysis. Taxation and government charges are well known and applied.
<i>Revenue factors</i>	<ul style="list-style-type: none"> The updated Ore Reserve is based on measured and indicated resources only, that are within ramped, mineable pits generated using US\$2.75 Cu, US\$1,500 Au and US\$18.50, metal prices; recovery estimates, smelter and transportation charges and exchange rates described elsewhere herein. Mill-feed grades come from the block model based on the scheduled mining (GEMCOM mine-sched and Datamine NPVS software) which uses haul road to mill and NERSA profiles and costs. Commodity price assumptions are listed above.
<i>Market assessment</i>	<ul style="list-style-type: none"> The company has a life of mine agreement with a smelter for off-take based on LME pricing. Metal prices are based on current and long-term bank consensus pricing. Market assessments for long-term metal prices were not undertaken for this study.
<i>Economic</i>	<ul style="list-style-type: none"> The output from the mining plan has been used for the financial model. Inflation has not been added under the assumption that it would be within time frames and values within the level of accuracy of the study and/or balanced by corresponding changes in metal prices. The discount rate used for pit design and the economic analysis is 8%. Sensitivities were conducted on changes on input parameters, including copper price, capital costs, operating costs and dollar exchange rate, demonstrating Ore Reserve viability over a range of inputs.

Criteria	Explanation
<i>Social</i>	<ul style="list-style-type: none"> The company has good social support for its operations and has participation agreements with local First Nations. Copper Mountain regularly consults with the Town of Princeton and the defined Community of Interest, and this continued engagement with the community and developing and maintaining one-on-one relationships with key stakeholders is important to maintain stakeholder support for the mine operation.
<i>Other</i>	<ul style="list-style-type: none"> The mining operation is subject to normal weather-related operating risks such as severe rain or snow events, as well as labour unrest and supply of key operating parts such as fuel, grinding media, etc. The CMM is a 75%/25% partnership with Mitsubishi Materials Ltd., who arranged and backstop the debt financing and have a life of mine off-take agreement. The partnership predates Copper Mountain and extends back to the 1970's when Newmont operated the mine, including the Ingerbelle deposit. All government approvals and permits, land holdings, etc. are in good standing. Permit amendments for the mining of satellite pits have been routinely applied for and granted. While not necessarily contingent to additional mining, proximity of the mine site to the Town of Princeton, provincial highways, forest harvesting companies and other stakeholders requires continued engagement to maintain the current good relations with all such parties.
<i>Classification</i>	<ul style="list-style-type: none"> The Ore Reserve uses Measured and Indicated Resources only. The resource classification is based on data density and geostatistical estimations of mineralization continuity, as described in Section 3. Ore Reserves are solely based on Proven and Probable categories from Measured and Indicated Mineral Resources. Inferred blocks are treated as waste in the optimization process and offer some upside in the mine plan during mining. The reported CMM Mineral Resources are inclusive of Ore Reserves It is the competent person's view that the resource classifications are appropriate.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> The reserve estimate and mine plan were prepared under the supervision of Alberto Chang, P.Eng. a Qualified Person.
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> The accuracy of resource and subsequent reserve estimates is best determined by mine-site reconciliation studies. Past studies at the CMM have indicated that reconciliation of resource estimation methods are appropriate and accurate to within +/- 7% on contained copper for mill-feed material grades; and 2) accuracy of reserve estimates is moderate for low-grade stockpile material.