

NI 43-101 TECHNICAL REPORT

NEW AFTON MINE

BRITISH COLUMBIA, CANADA

**Qualified Persons:** 

Joshua Parsons, P.Eng

Devin Wade, P.Geo.

Jennifer Katchen, P.Eng.

Vincent Nadeau-Benoit, P.Geo.

Matthew Davis, P.Eng.

Emily O'Hara, P.Eng.

Effective Date: December 31, 2024

Signature Date: February 10, 2025

New Gold Inc. Brookfield Place 181 Bay Street, Suite 3320 Toronto, Ontario, Canada M5J 2T3



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Authors:

"Signed and Sealed"

Joshua Parsons, P.Eng. Principal Mine Engineer New Afton Mine

New Gold Inc.

"Signed and Sealed"

Jennifer Katchen, P.Eng.

**Chief Metallurgist** 

**New Afton Mine** 

New Gold Inc.

"Signed and Sealed"

Devin Wade, P.Geo.

**Chief Exploration Geologist** 

New Afton Mine New Gold Inc.

"Signed and Sealed"

Vincent Nadeau-Benoit, P.Geo.

Director, Mineral Resources

New Gold Inc.

"Signed and Sealed"

Matthew Davis, P.Eng.

Superintendent, Tailings and Surface

New Afton Mine

New Gold Inc.

"Signed and Sealed"

Emily O'Hara, P.Eng.

Manager, Water Strategy and Stewardship

New Gold Inc.

# TABLE OF CONTENTS

SIGNAT	TURE PAGE	I
TABLE	OF CONTENTS	II
LIST OF	F FIGURES	X
	F TABLES	
CAUTIC	DNARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	XI
LISTS (	OF ABBREVIATIONS	XV
1 SU	JMMARY	1
1.1	Introduction	1
1.2	Terms of Reference	
1.3	PROPERTY DESCRIPTION AND LOCATION	
1.4	MINERAL RIGHTS, SURFACE RIGHTS, ROYALTIES, AND AGREEMENTS	
1.5	GEOLOGY AND MINERALIZATION	
1.6	HISTORY	4
1.7	DRILLING AND SAMPLING	4
1.8	Data Verification	5
1.9	METALLURGICAL TESTING	6
1.10	MINERAL RESOURCE ESTIMATES	€
1.11	MINERAL RESOURCE STATEMENT	8
1.12	MINERAL RESERVE ESTIMATES	10
1.13	MINERAL RESERVE STATEMENT	
1.14	MINING METHODS	
1.15	LIFE OF MINE PLAN	
1.16	RECOVERY METHODS	
1.17	PROJECT INFRASTRUCTURE	
1.18	Tailings Storage Facilities	
1.19	ENVIRONMENTAL, PERMITTING AND SOCIAL CONSIDERATIONS	
1.20	MARKETS AND CONTRACTS	
1.21	CAPITAL COST ESTIMATES	
1.22	OPERATING COST ESTIMATES	
1.23	ECONOMIC ANALYSIS	
1.24	RISKS AND OPPORTUNITIES	
1.25		
1.26		
2 IN	TRODUCTION	24
2.1	Introduction	24
2.2	TERMS OF REFERENCE	24

	2.3	Qualified Persons	. 25
	2.4	EFFECTIVE DATES	25
	2.5	Information Sources and References	26
3	REL	IANCE ON OTHER EXPERTS	27
4	PRO	DPERTY DESCRIPTION AND LOCATION	.28
	4.1	PROPERTY LOCATION	. 28
	4.2	LAND TENURE	. 29
	4.2.	1 Surface Rights	. 29
	4.2.	2 Mineral Tenure	.31
	4.3	ROYALTIES AND AGREEMENTS	.34
	4.4	PERMITS AND AUTHORIZATIONS	.34
	4.5	COMMENTS ON PROPERTY DESCRIPTION AND LOCATION	34
5	ACC	CESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY	′35
	5.1	LOCATION AND ACCESSIBILITY	. 35
	5.2	INFRASTRUCTURE AND LOCAL RESOURCES	35
	5.3	CLIMATE AND PHYSIOGRAPHY	35
	5.4	SURFACE RIGHTS	36
6	HIS	TORY	37
	6.1	OWNERSHIP AND DEVELOPMENT HISTORY	. 37
	6.2	HISTORICAL MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES	38
	6.3	PAST PRODUCTION	38
7	GE	DLOGICAL SETTING AND MINERALIZATION	39
	7.1	REGIONAL GEOLOGY	. 39
	7.2	LOCAL GEOLOGY	41
	7.3	PROPERTY GEOLOGY	43
	7.4	MINERALIZATION AND ALTERATION	46
8	DEF	POSIT TYPES	51
9	EXF	PLORATION	52
	9.1	GEOLOGICAL MAPPING	52
	9.2	GEOCHRONOLOGY SAMPLES	52
	9.3	UNDERGROUND DEVELOPMENT SAMPLING	53
	9.4	GEOPHYSICAL SURVEYS	53
	9.5	Petrographic Studies	53
	9.6	FELDSPAR STAINING	54
	9.7	ISOTOPE STUDIES	54
	9.8	ARTIFICIAL INTELLIGENCE STUDIES	
	9.9	EXPLORATION DRIFTS	54
	9.10	EXPLORATION POTENTIAL	55

10	DRILLIN	NG	56
1	0.1 200	00–2018 New Afton Drilling	58
1	0.2 20	19–2024 New Afton Drilling	59
	10.2.1	Drilling Contractors and Equipment	59
	10.2.2	Drill Hole Coordinates and Downhole Surveys	59
	10.2.3	Diamond Drill Core Logging Procedures	59
	10.2.4	Summary of Results	61
1	0.3 Co	MMENTS ON DRILLING	61
11	SAMPL	E PREPARATION, ANALYSES, AND SECURITY	62
1	1.1 200	00–2003	62
1	1.2 200	05–2011	62
1	1.3 20	12-Present	63
1	1.4 As:	SAY QA/QC	64
	11.4.1	2000–2003	64
	11.4.2	2005–2006	64
	11.4.3	2007–2011	65
	11.4.4	2012-Present	65
1	1.5 Co	MMENTS ON SAMPLE PREPARATION, ANALYSES, AND SECURITY	68
12	DATA V	ERIFICATION	69
1	2.1 His	STORICAL VERIFICATION PROGRAMS	69
	12.1.1	2000–2003	
	12.1.2	2005–2006	
	12.1.3	2007–2011	
	12.1.4	2012–2019	
1		w Gold Verification	
	12.2.1	Database	
	12.2.2	Mineral Resources and Mineral Reserves Checklists	
1		TERNAL VERIFICATION	
	12.3.1	SLR Consulting	
1		RIFICATION COMPLETED BY THE QUALIFIED PERSONS	
	12.4.1	Verification Completed by Mr. Vincent Nadeau-Benoit	
	12.4.2	Verification Completed by Mr. Joshua Parsons	
13	MINERA	AL PROCESSING AND METALLURGICAL TESTING	73
1	3.1 Pr	EVIOUS METALLURGICAL TESTING	73
1	3.2 His	STORICAL PROCESSING PERFORMANCE	73
1	3.3 C-2	ZONE METALLURGICAL TESTING	73
1	3.4 EAS	ST EXTENSION METALLURGICAL TESTING	75
1	3.5 D-2	ZONE METALLURGICAL TESTING	76
1	3.6 CLI	EANER CIRCUIT UPGRADE METALLURGICAL TESTING	76
1	3.7 PR	EDICTIVE COPPER AND GOLD RECOVERY FORMULAS	77

13.8	COMMENTS ON MINERAL PROCESSING AND METALLURGICAL TESTING	79
14 MIN	IERAL RESOURCE ESTIMATES	80
14.1	Introduction	80
14.2	DATABASE	81
14.3	GEOLOGICAL MODELS AND ESTIMATION DOMAINS	81
14.4	Compositing	84
14.5	SEGREGATION BY ELEVATION	84
14.6	TREATMENT OF OUTLIERS	84
14.7	BULK DENSITY	85
14.8	Variography	86
14.9	BLOCK MODEL PARAMETERS	89
14.10	Interpolation Parameters	90
14.11	BLOCK MODEL VALIDATION	91
14.	11.1 Visual Inspection	91
14.	11.2 Statistics and Swath Plots	91
14.12	CLASSIFICATION	93
14.13	REASONABLE PROSPECTS FOR EVENTUAL ECONOMIC EXTRACTION	93
14.14	MINERAL RESOURCES STATEMENT	94
14.15	FACTORS THAT MAY AFFECT THE MINERAL RESOURCES ESTIMATES	95
14.16	COMMENTS ON MINERAL RESOURCE ESTIMATES	96
15 MIN	IERAL RESERVE ESTIMATES	97
15.1	Introduction	97
15.2	MINERAL RESERVE ESTIMATION METHODOLOGY	97
15.3	DILUTION AND MINING RECOVERY	98
15.4	NSR Cut-Off Value	98
15.5	RECONCILIATION	99
15.6	MINERAL RESERVE STATEMENT	100
15.7	FACTORS THAT MAY AFFECT THE MINERAL RESERVES	101
15.8	COMMENTS ON MINERAL RESERVE ESTIMATES	101
16 MIN	IING METHODS	102
16.1	Introduction	102
16.2	MINING METHODS	
16.3	MINE DESIGN AND MINING SEQUENCE	
16.3		
16.	· ·	
16.		
16.	<u>c</u>	
	GEOMECHANICS	
16.	•	
16.		
16.	4.3 Ground Support	109

16.4.4	Cavability	109
16.4.5	Fragmentation	110
16.4.6	Stope Design	110
16.4.7	Surface Subsidence	110
16.4.8	Structural Model	111
16.4.9	Underground Cave Monitoring	111
16.4.10	Mudrush Management	112
16.4.11	Air Blast Management	112
16.5 LIFE	E OF MINE PLAN	113
16.6 MIN	NE INFRASTRUCTURE AND SERVICES	114
16.6.1	Integrated Operations Centre	114
16.6.2	Materials Handling System	115
16.6.3	Explosives Handling and Storage	116
16.6.4	Underground Maintenance Shops	116
16.6.5	Fuel Bay	116
16.6.6	Batch Plant	116
16.6.7	Utility and Fire Water	116
16.6.8	Compressed Air and Electricity	117
16.6.9	Communications	117
16.6.10	Ventilation Systems	117
16.6.11	Underground Dewatering System	118
16.6.12	Refuge Stations	119
16.7 Min	NE EQUIPMENT	119
16.8 Co	MMENTS ON MINING METHODS	120
17 RECOV	ERY METHODS	121
17.1 Pro	OCESS DESCRIPTION	121
17.1.1	Crushing	122
17.1.2	Grinding	122
17.1.3	Flotation	123
17.1.4	Dewatering	123
17.1.5	Thickened and Amended Tailings (TAT)	124
17.2 Pro	OCESSING IMPROVEMENT PROJECTS	124
17.2.1	Secondary Crushing	124
17.2.2	Cleaner Circuit Upgrade	124
17.3 Pro	OCESSING REQUIREMENTS	125
17.3.1	Processing Plant Consumables	125
17.3.2	Water Circulation and Consumption	125
17.3.3 E	nergy Requirements	125
17.4 Coi	MMENTS ON RECOVERY METHODS	125
18 PROJEC	CT INFRASTRUCTURE	127

	18.1	Sur	FACE BUILDINGS AND FACILITIES	127
	18.2		CTRICAL POWER	
	18.3	TAIL	INGS STORAGE FACILITIES	129
	18.3	3.1	Afton Pit TSF	129
	18.3	3.2	New Afton TSF	130
	18.3	3.3	Historical Afton TSF	130
	18.3	3.4	Pothook TSF	131
	18.3	3.5	TSF Performance Monitoring	131
	18.3	3.6	Tailings Stabilization	132
	18.4	Con	IMENTS ON PROJECT INFRASTRUCTURE	133
19	MAF	RKET	STUDIES AND CONTRACTS	134
	19.1	MAR	KETS	134
	19.2		TRACTS	
	19.3	Con	IMENTS ON MARKET STUDIES AND CONTRACTS	134
20	EΝV	/IROI	NMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT	135
	20.1	INTR	ODUCTION	135
	20.2	SITE	CONDITIONS AND MONITORING	135
	20.2	2.1	Air Quality	135
	20.2	2.2	Ambient Noise and Vibration	136
	20.2	2.3	Geochemistry	136
	20.2	2.4	Surface Water Quality	137
	20.2	2.5	Groundwater Quality	137
	20.2	2.6	Aquatic Resources	138
	20.2	2.7	Terrestrial Flora and Fauna	
	20.2	2.8	Species at Risk and Critical Habitat	139
	20.2	2.9	Environmental Compliance	139
	20.3	MINI	E WASTE MANAGEMENT	
	20.3		Tailings Management	
	20.3	3.2	Waste Rock Dumps	
	20.3	3.3	Closure Requirements for Tailings Management Facilities	141
	20.4		ER MANAGEMENT	
	20.5		IRONMENTAL STUDIES	
	20.6		JECT PERMITTING	
	20.6		Current Permits, Licences, and Authorized Works	
	20.6		Required Authorizations for Development	
	20.7		IAL OR COMMUNITY ASPECTS	
	20.7		Social and Economic Impacts	
	20.7		Indigenous Communities	
	20.7		Cultural Heritage	
	20.8		CLOSURE	
	20.8	3.1	Progressive Reclamation	148

	20.8	3.2	Closure and Post-Closure Monitoring	.148
	20.8	3.3	Closure Cost Estimate	.148
	20.9	Con	IMENTS ON ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACTS	149
21	CAF	PITAL	AND OPERATING COSTS	150
	21.1	Intr	ODUCTION	150
	21.2	Сар	ITAL COSTS	150
	21.3	OPE	RATING COSTS	151
22	ECC	NONC	/IC ANALYSIS	153
23	AD	JACE	NT PROPERTIES	154
24	ОТН	HER F	RELEVANT DATA AND INFORMATION	155
25	INT	ERPF	RETATION AND CONCLUSIONS	156
	25.1	Intr	ODUCTION	156
	25.2	MINE	ERAL RIGHTS, SURFACE RIGHTS, ROYALTIES, AND AGREEMENTS	156
	25.3	GEO	LOGY, MINERALIZATION, AND EXPLORATION	156
	25.4	DRIL	LING AND ANALYTICAL DATA COLLECTION IN SUPPORT OF MINERAL RESOURCE ESTIMATION	157
	25.5	MET	ALLURGICAL TESTWORK	157
	25.6	MINE	ERAL RESOURCE ESTIMATES	157
	25.7	MINE	ERAL RESERVE ESTIMATES	158
	25.8	MINE	E PLAN	158
	25.9	REC	OVERY METHODS	158
	25.10	IN	FRASTRUCTURE	159
	25.11	М	ARKETS AND CONTRACTS	159
	25.12	C	APITAL COST ESTIMATES	160
	25.13	0	PERATING COST ESTIMATES	160
	25.14	E	CONOMIC ANALYSIS	160
	25.15	R	ISKS AND OPPORTUNITIES	160
26	REC	COM	MENDATIONS	162
27	REF	ERE	NCES	163
റം	CE	OTIE!	CATES OF OUALIEED DEDSONS	160

## LIST OF FIGURES

Figure 4-1: Location map	28
Figure 4-2: Map of surface ownership and mineral tenure	29
Figure 7-1: Simplified geology of the Quesnel Terrane modified from BCGS MapPlace, 2024	40
Figure 7-2: Local geology of the New Afton Mine	42
Figure 7-3: Geology map of the New Afton mine area	45
Figure 7-4: Location and geometry of New Afton mineralized zones relative to lithological units	47
Figure 10-1: Location of drill holes within the mining lease	57
Figure 10-2: Drill hole traces used to define the 0.2% AuEq grade shell and Resource estimate	58
Figure 13-1: Copper recovery curves at a processing rate of 16,000 tpd	78
Figure 13-2: Gold recovery curves at a processing rate of 16,000 tpd	78
Figure 14-1: Longitudinal view of low-grade estimation domains	83
Figure 14-2: Experimental correlograms and fitted models for copper – Main Zone (above 4,900 m)	89
Figure 14-3: Swathplot (X-axis slices) for copper – Main Zone	92
Figure 14-4: Swathplot (Z-axis slices) for copper – Main Zone	92
Figure 16-1: New Afton mining zones	103
Figure 16-2: Plan view of B3 block cave footprint design	104
Figure 16-3: Plan view of C-Zone block cave footprint design	106
Figure 16-4: East Extension typical level layout (4,730 Level)	107
Figure 16-5: Schematic representation of LOM ventilation circuit	118
Figure 17-1: Simplified process flowsheet	122
Figure 18-1 Surface layout of New Afton Mine	128

## LIST OF TABLES

Table 1-1: New Afton Mineral Resource estimate as of December 31, 2024	9
Table 1-2: New Afton Mineral Reserve estimate as of December 31, 2024	12
Table 1-3: LOM production schedule	15
Table 1-4: Capital cost estimates	20
Table 1-5: Operating cost estimates	21
Table 4-1: Surface tenures	30
Table 4-2: Mineral tenures	31
Table 6-1: Production from New Afton Mine 2012–2024	38
Table 7-1: Geological characteristics of resource areas and mineralized zones	48
Table 9-1: Summary of exploration work at New Afton	52
Table 10-1: Summary of New Gold drilling at New Afton (2000-2024)	56



#### Technical Report New Afton Mine

Table 11-1: Standards and blanks for 2012-2024 programs	66
Table 11-2: Pulp and coarse duplicates for 2012-2024 programs	67
Table 13-1: Predictive copper and gold recovery formulas	77
Table 14-1: Copper-equivalent calculation parameters	80
Table 14-2: Estimation domains	82
Table 14-3: Capping and outlier thresholds per estimation domains	85
Table 14-4: Mean density by elevation	86
Table 14-5: Correlograms for copper, gold, and silver per mineral estimation domains	87
Table 14-6: Correlograms for copper, gold, and silver per refined mineral estimation domains	88
Table 14-7: Block model dimensions	90
Table 14-8: Interpolation parameters for gold, copper, and silver	90
Table 14-9: Parameters for Mineral Resource cut-off NSR	94
Table 14-10: New Afton Mineral Resource Estimate as of December 31, 2024	95
Table 15-1: Parameters for Mineral Reserve cut-off NSR	99
Table 15-2: Lift 1 reconciliation	99
Table 15-3: New Afton Mineral Reserve estimate as of December 31, 2024	100
Table 16-1: Geotechnical properties by mining zone	108
Table 16-2: Geotechnical properties by lithology	108
Table 16-3: LOM production schedule	114
Table 16-4: List of major mine equipment	120
Table 17-1: Consumption of reagents and consumables	125
Table 18-1 Thickened and amended tailings properties	130
Table 20-1: Federally and provincially listed species at risk	139
Table 20-2: Approved amendments to <i>Permit M-229</i>	144
Table 21-1: Capital cost estimates	151
Table 21-2: Operating cost estimates	152



# CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain information contained in this Technical Report, including any information relating to New Gold's future financial or operating performance are "forward looking". All statements in this Technical Report, other than statements of historical fact, which address events, results, outcomes or developments that New Gold expects to occur are "forwardlooking statements". Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the use of forward-looking terminology such as "plans", "expects", "is expected", "budget", "scheduled", "targeted", "estimates", "forecasts", "intends", "anticipates", "projects", "potential", "believes" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will be taken", "occur" or "be achieved" or the negative connotation of such terms. Forwardlooking statements in this Technical Report include, but are not limited to statements with respect to: the Company's guidance and expectations regarding production, costs, capital investments and expenses on a mine-by-mine and consolidated basis, associated timing and accomplishing the factors contributing to those expected results; anticipated mine life; Mineral Reserve and Mineral Resource estimates; grades expected to be mined and milled at the Company's operations; planned activities and timing for 2025 and future years at New Afton Mine (as defined below), including planned development and exploration activities and related expenses; underground development successfully breaking through into the open pit in 2025 and the ability to haul ore via the open pit haul road as a result thereof; successfully completing intended development and exploration initiatives in 2025 at New Afton; expectations that the mineralogy in C-Zone will be consistent with the hypogene sulphide mineralization in the West Cave; New Afton Mine's enhanced capacity to accurately track ground deformations and successfully mitigate potential impacts; successfully completing the overall NATSF (as defined herein) stabilization project in the first half of 2026; successfully transitioning from B3 block cave to C-Zone block cave production in 2025; expectations that copper, gold and silver production will increase significantly over the next three years at New Afton; the Company's ability to successfully extend New Afton's mine life beyond 2031; the intended installation of a second gyratory crusher at New Afton and the anticipated elimination of truck haulage costs resulting therefrom; the intention to take advantage of existing processing capacity at the New Afton mill and successfully processing up to 16,000 tpd (as defined herein); expectations that C-Zone operating costs will be significantly lower than current B3 unit mining costs; successfully transitioning to a period of production growth and decreasing costs at New Afton and the generation of strong cash flow expected to result therefrom over the coming years; the Company's ability to successfully convert Mineral Resources to Mineral Reserves over the next few years; planned focus areas and initiatives regarding New Afton's underground exploration program; successfully reassessing C-Zone height of draw assumptions in the coming years; the Company's ability to successfully establish a Mineral Resource and Mineral Reserve estimate for the East Extension, the evaluation of potential mining methods and anticipated capital investment required; the accuracy of expectations regarding the continued improvement of D-Zone potential with additional drilling; the achievement of developing a critical mass of Mineral Resources in the D-Zone to support a prefeasibility study and potential step-change in New Afton Mineral Reserves resulting therefrom; the potential for discovery of new mining zones outside the main deposit and above the C-Zone footprint elevation; expectations regarding the sufficiency of New Afton's processing plant, infrastructure and tailings storage facility to process sufficiently more ore beyond the current mine life; the potential for discovery of porphyry copper-gold deposits in South-Central British Columbia; the Company's plans to use regional high-grade ore as supplemental mill feed and the

incremental cash flow expected therefrom; successful undertaking of planned underground and regional exploration initiatives at New Afton; and expectations regarding the management and mitigation of risk factors and the possible impacts on the Company.

All forward-looking statements in this Technical Report are based on the opinions and estimates of management as of the date such statements are made and are subject to important risk factors and uncertainties, many of which are beyond New Gold's ability to control or predict. Certain material assumptions regarding such forward-looking statements are discussed in this Technical Report, New Gold's annual and quarterly management's discussion and analysis ("MD&A") and the Annual Information Form (as defined below) filed on SEDAR+ (www.sedarplus.ca) and EDGAR (www.sec.gov). In addition to assumptions discussed in more detail elsewhere, the forward-looking statements in this Technical Report are also subject to the following assumptions: (1) there being no significant disruptions affecting New Gold's operations, including material disruptions to the Company's supply chain, workforce or otherwise; (2) political and legal developments in jurisdictions where New Gold operates, or may in the future operate, being consistent with New Gold's current expectations; (3) the accuracy of New Gold's current Mineral Reserve and Mineral Resource estimates and the grade of gold, copper and silver expected to be mined; (4) the exchange rate between the Canadian dollar and U.S. dollar and commodity prices being approximately consistent with current levels and expectations for the purposes of 2025 guidance and otherwise; (5) prices for diesel, natural gas, fuel oil, electricity and other key supplies being approximately consistent with current levels; (6) equipment, labour and material costs increasing on a basis consistent with New Gold's current expectations; (7) arrangements with First Nations and other Indigenous groups in respect of the Rainy River Mine and New Afton Mine being consistent with New Gold's current expectations; (8) all required permits, licences and authorizations being obtained from the relevant governments and other relevant stakeholders within the expected timelines and the absence of material negative comments or obstacles during any applicable regulatory processes; and (9) the results of the life of mine plans for the Rainy River Mine and the New Afton Mine described herein being realized.

Forward-looking statements are necessarily based on estimates and assumptions that are inherently subject to known and unknown risks, uncertainties and other factors that may cause actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking statements. Such factors include, without limitation: price volatility in the spot and forward markets for metals and other commodities; discrepancies between actual and estimated production, between actual and estimated costs, between actual and estimated Mineral Reserves and Mineral Resources and between actual and estimated metallurgical recoveries; equipment malfunction, failure or unavailability; accidents; risks related to early production at the Rainy River Mine, including failure of equipment, machinery, the process circuit or other processes to perform as designed or intended; the speculative nature of mineral exploration and development, including the risks of obtaining and maintaining the validity and enforceability of the necessary licences and permits and complying with the permitting requirements of each jurisdiction in which New Gold operates, including, but not limited to: uncertainties and unanticipated delays associated with obtaining and maintaining necessary licences, permits and authorizations and complying with permitting requirements; changes in project parameters as plans continue to be refined; changing costs, timelines and development schedules as it relates to construction; the Company not being able to complete its construction projects at the Rainy River Mine or the New Afton Mine on the anticipated timeline or at all; the ability to successfully implement strategic plans; volatility in the market price of the Company's securities; changes in national and local government legislation in the countries in which New Gold does or may in the future carry on business; compliance with public company disclosure obligations; controls, regulations and political or economic developments in the countries in which New Gold does or may in the future carry on business; the Company's dependence on the Rainy River Mine and New Afton Mine; the Company not being able to complete its exploration drilling programs on the anticipated timeline or at all; inadequate

water management and stewardship; tailings storage facilities and structure failures; failing to complete stabilization projects according to plan; geotechnical instability and conditions; disruptions to the Company's workforce at either the Rainy River Mine or the New Afton Mine, or both; significant capital requirements and the availability and management of capital resources; additional funding requirements; diminishing quantities or grades of Mineral Reserves and Mineral Resources; actual results of current exploration or reclamation activities; uncertainties inherent to mining economic studies including the Technical Reports for the Rainy River Mine and New Afton Mine; impairment; unexpected delays and costs inherent to consulting and accommodating rights of First Nations and other Indigenous groups; climate change, environmental risks and hazards and the Company's response thereto; ability to obtain and maintain sufficient insurance; management and reporting of ESG matters; actual results of current exploration or reclamation activities; fluctuations in the international currency markets and in the rates of exchange of the currencies of Canada, the United States; global economic and financial conditions and any global or local natural events that may impede the economy or New Gold's ability to carry on business in the normal course; inflation; compliance with debt obligations and maintaining sufficient liquidity; the responses of the relevant governments to any disease, epidemic or pandemic outbreak not being sufficient to contain the impact of such outbreak; disruptions to the Company's supply chain and workforce due to any disease, epidemic or pandemic outbreak; an economic recession or downturn as a result of any disease, epidemic or pandemic outbreak that materially adversely affects the Company's operations or liquidity position; taxation; fluctuation in treatment and refining charges; transportation and processing of unrefined products; rising costs or availability of labour, supplies, fuel and equipment; information systems security threats; adequate infrastructure; relationships with communities, governments and other stakeholders; perceived reputation amongst stakeholders; labour disputes; effectiveness of supply chain due diligence; the uncertainties inherent in current and future legal challenges to which New Gold is or may become a party; defective title to mineral claims or property or contests over claims to mineral properties; competition; loss of, or inability to attract, key employees; use of derivative products and hedging transactions; reliance on third-party contractors; counterparty risk and the performance of third party service providers; investment risks and uncertainty relating to the value of equity investments in public companies held by the Company from time to time; the adequacy of internal and disclosure controls; conflicts of interest; the lack of certainty with respect to foreign operations and legal systems, which may not be immune from the influence of political pressure, corruption or other factors that are inconsistent with the rule of law; and the successful acquisitions and integration of business arrangements and realizing the intended benefits therefrom; and information systems security threats. In addition, there are risks and hazards associated with the business of mineral exploration, development, construction, operation and mining, including environmental events and hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins, flooding or drought and gold bullion losses (and, in each case, the risk of inadequate insurance or inability to obtain insurance to cover these risks) as well as "Risk Factors" included in this Technical Report. Forward-looking statements are not guarantees of future performance, and actual results and future events could materially differ from those anticipated in such statements. All of the forward-looking statements contained in this Technical Report are qualified by these cautionary statements. New Gold expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, events or otherwise, except in accordance with applicable securities laws.



## LISTS OF ABBREVIATIONS

#### **UNITS**

°C	degree Celsius
μ	micron
а	annum
Α	ampere
C\$	Canadian dollars
cfm	cubic feet per minute
cm	centimetre
cm <sup>2</sup>	square centimetre
d	day
dia.	diameter
dmt	dry metric tonne
g	gram
g/L	gram per litre
g/t	gram per tonne
ha	hectare
hp	horsepower
k	kilo (thousand)
kg	kilogram
km	kilometre
km/h	kilometre per hour
km²	square kilometre
kW	kilowatt
kWh	kilowatt-hour
L	litre
lb	pound
m	metre
М	mega (million)

m² square metre m³ cubic metre m³/h cubic metre per hour Ma mega annum (million years) masl metre above sea level mg milligram mm millimetre MPa megapascal Mt million tonne MVA megavolt-amperes MW megawatt MWh megawatt-hour oz troy ounce P80 80% passing size of the tertiary hydrocyclone overflow in microns ppb part per billion ppm part per million s second t metric tonne tpa tonne per annum (year) tpd tonne per day tphod tonne per hour US\$ United States dollar W watt wmt wet metric tonne wt% weight percent		
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W watt wmt wet metric tonne	tph	tonne per hour
wmt wet metric tonne	US\$	United States dollar
	W	watt
wt% weight percent	wmt	wet metric tonne
	wt%	weight percent

#### **TERMS**

3D	three-dimensional
AA	atomic absorption
AEP	annual exceedance probability
Ag	silver
AIA	Archaeological Impact Assessment
APTSF	Afton Pit Tailings Storage Facility
As	arsenic
Au	gold
В3	Block 3 block cave

CA	Cooperation Agreement, subscribed between New Gold and SSN
CRF	cemented rockfill
Cu	copper
CuEq	copper-equivalent
EDF	environmental design flood
EMA	BC Environmental Management Act (SBC 2003, Chapter 53)
EMC	Environmental Management Committee

#### Technical Report New Afton Mine

ENV	BC Ministry of Environment and Parks— formerly the Ministry of Environment and Climate Change Strategy
EOR	Engineer of Record
FMEA	failure modes and effects analysis
G&A	general and administrative expenses
HATSF	Historical Afton Tailings Storage Facility
НСТ	humidity cell testing
HHERA	Human Health and Ecological Risk Assessment
HOD	height of draw
HR	hydraulic radius
HR <sub>CR</sub>	critical hydraulic radius
HSRC	Health, Safety and Reclamation Code
HW	Hangingwall zones
IMB	Iron Mask Batholith
IOC	Integrated Operations Centre
IST	in situ stress testing
ITRB	Independent Tailings Review Board
k-feldspar	potassium feldspar
LHD	load-haul-dump
LiDAR	light detection and ranging remote sensing
LOM	life of mine
LTE	long-term evolution
MAC	Mining Association of Canada
max	maximum
МСМ	BC Ministry of Mines and Critical Minerals (formerly Ministry of Energy, Mines and Low Carbon Innovation)
min	minimum
MG	mine grid (elevation)
MoE	Ministry of Environment and Climate Change Strategy (now ENV and WLRS)
MFLRNO	Ministry of Forests, Lands, Natural Resource Operations and Rural Development (now WLRS)
MPBX	multi-point borehole extensometers
NN	nearest neighbour
NATSF	New Afton Tailings Storage Facility
NSERC	Natural Sciences and Engineering Research Council
NSR	net smelter return
NWWMP	Northwest Water Management Pond

OES	optical emission spectroscopy
ОК	ordinary kriging
P.Eng.	Professional Engineer
P.Geo.	Professional Geologist
РСВС	GEOVIA PCBC software from Dassault Systèmes
Pd	palladium
PHTSF	Pothook Pit Tailings Storage Facility
PM	particulate matter
PM2.5	fine particulate matter in air that are 2.5 micrometres or less in diameter
PM10	fine particulate matter in air that are 10 micrometres or less in diameter
Pt	platinum
QA	quality assurance
QC	quality control
QP	Qualified Person
QPO	Quantifiable Performance Objective
RCP	Reclamation and Closure Plan
RMR <sub>89</sub>	rock mass rating
RQD	rock quality designation
RSBC	Revised Statutes of British Columbia
S	sulphur
SAG	semi-autogenous grinding
SBC	Statutes of British Columbia
SFR	staged flotation reaction
SIB	Skeetchestn Indian Band
SMC	semi-autogenous mill comminution
SPI	SAG Power Index
SSN	Stk'emlupsemc Te Secwepemc Nation
TARP	Trigger Action Response Plan
TAT	thickened and amended tailings
TRU	Thompson Rivers University
TSF	tailings storage facility
TSM	Towards Sustainable Mining, a MAC standard
TteS	Tkemlúps te Secwépemc
WLRS	Ministry of Water, Lands and Resource Stewardship
WMP	water management pond
WQG- FWAL	Water Quality Guidelines for the Protection of Freshwater Aquatic Life



## 1 SUMMARY

#### 1.1 INTRODUCTION

The New Afton Mine (New Afton) is an underground copper-gold mine located in British Columbia, Canada. New Gold Inc. (New Gold) holds a 100% ownership interest in the property and Ontario Teachers' Pension Plan holds a 19.9% free cash flow interest. The New Afton Mine consists of the currently operating Block 3 (B3) and C-Zone block cave mines, the planned East Extension mining zone, and the New Afton processing facility and associated infrastructure.

This technical report was prepared by the following Qualified Persons, all full-time employees of New Gold:

- Mr. Joshua Parsons, P.Eng., Principal Mine Engineer at New Afton.
- Mr. Devin Wade, P.Geo., Chief Exploration Geologist at New Afton.
- Ms. Jennifer Katchen, P.Eng., Chief Metallurgist at New Afton.
- Mr. Vincent Nadeau-Benoit, P.Geo., Director, Mineral Resources at New Gold.
- Mr. Matthew Davis, P.Eng., Superintendent, Tailings and Surface at New Afton.
- Ms. Emily O'Hara, P.Eng., Manager, Water Strategy and Stewardship at New Gold.

#### 1.2 TERMS OF REFERENCE

The Mineral Resource and Mineral Reserve estimates reported herein were prepared in conformity with generally accepted standards set out in the *Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Mineral Resources & Mineral Reserves Estimation Best Practice Guidelines* (November 2019) (CIM (2019) Guidelines) and were classified according to *CIM Definition Standards for Mineral Resources & Mineral Reserves* (May 2014) (CIM (2014) Standards).

All units of measurement in this report are metric unless otherwise stated. A local mine grid coordinate system is sometimes used throughout this report, in which mine grid north is rotated 50 degrees west of UTM north (NAD83 Zone 10) and where mine grid elevation (denoted by the abbreviation "MG") is obtained by adding 5,000 m to the elevation measured above mean sea level. All currencies are expressed in United States dollars (USD, US\$) unless otherwise stated. Contained gold and silver metal is expressed as troy ounces (oz). All material tonnes are expressed as dry tonnes (t) unless stated otherwise. A list of abbreviations is provided at the beginning of this report, with abbreviations for symbols and units listed first and abbreviations of other words listed next (Lists of Abbreviations).



#### 1.3 Property Description and Location

The New Afton Mine is in the South-Central Interior region of British Columbia, Canada, approximately 10 km west of the City of Kamloops and approximately 350 km northeast of Vancouver. The approximate centre of the property is located at 50° 39' latitude north and 120° 31' longitude west, or 5614800N and 675500E using NAD83, Zone 10 North Universal Transverse Mercator (UTM) coordinates. The nominal elevation of the property is approximately 700 metres above mean sea level (masl).

The mine is located just west of the junction of the Trans-Canada Highway No. 1 with Coquihalla Highway No. 5, which both provide year-round road access. Access to the site is by a mine road located off the Trans-Canada Highway. The Kamloops airport is served by regular scheduled flights to Vancouver and Victoria, British Columbia, and Calgary, Alberta. The Canadian National Railway and Canadian Pacific Railway both pass through Kamloops.

British Columbia Hydro and Power Authority (BC Hydro) transmission lines, a FortisBC Inc. (FortisBC) natural gas pipeline, and a Pembina Pipeline Corporation (Pembina) oil pipeline traverse the mining lease north of the historical Afton pit. A water pipeline, approximately four kilometres in length, delivers fresh water from Kamloops Lake to the mine site. New Gold purchased the water pipeline and pump house facilities from Teck as part of the purchase agreement in 2007. New Gold has four active water licences to withdraw water from Kamloops Lake for mining and milling operations.

The Kamloops area is in the rain shadow of the British Columbia Coast Mountains and is characterized by a semiarid climate. Precipitation is relatively modest, averaging approximately 257 mm annually (of which 175 mm is rainfall), with light winter snow and infrequent rain in the spring and fall. The area has warm summers, when temperatures can reach 38°C, and cool winters, during which temperatures tend to hover around the freezing mark but can drop as low as -29°C for short periods. The mine operates year-round.

### 1.4 MINERAL RIGHTS, SURFACE RIGHTS, ROYALTIES, AND AGREEMENTS

New Gold's mineral tenures in the mine area comprise cell claims, legacy claims, and a mining lease. Mineral tenures cover a total area of 21,714.17 hectares (ha), which includes the 902.3 ha mining lease. New Gold owns a 100% interest in these tenures, some of which are subject to certain royalties.

In addition to the mineral tenures, a portion of the property is covered by a mining permit (*Permit M-229*) which gives New Gold the right to establish surface works and to mine. The permit area encompasses most, but not all, of the mining lease area, as well as a portion of several mineral claims. Among other things, the terms of the permit require that New Gold maintain a reclamation bond which is currently under review.

New Gold holds surface rights over approximately 2,274.54 ha within and adjacent to the New Afton *Mine Permit M-229*. Most of the surface holdings were obtained from Teck Resources Limited (Teck) and its subsidiary in September 2007. Other parcels have since been added via option and purchase agreements with several parties.

New Gold has engaged in a number of royalty agreements with various third parties on relatively small parcels within the overall property, none of which cover the Mineral Reserves. Additionally, New Gold is party to a Cooperation Agreement with the Tk'emlúps te Secwépemc and the Skeetchestn Indian Band (together referred to



as SSN). The Cooperation Agreement provides that a fixed royalty amount must be paid annually until the full amount is reached in 2030. The New Afton Mine is not subject to any other back-in rights payments, agreements or encumbrances.

#### 1.5 GEOLOGY AND MINERALIZATION

The New Afton Mine is hosted in allochthonous rocks of the Quesnel Terrane, a Cordilleran volcanic and magmatic island-arc assemblage that was accreted onto the continental margin of North America during the Late Triassic to Early Jurassic periods. Major regional deformation events include Early to Middle Jurassic thrusting and folding during docking, post-accretion episodic compressional events until the Cretaceous, and extensional deformation that resulted in the deposition of overlap sedimentary and volcanic assemblages during the Tertiary.

The New Afton deposit, and its associated hydrothermal systems, occurs where the Late Triassic to Early Jurassic mafic to intermediate volcanic and volcaniclastic rocks of the Nicola Group are in contact with the multi-phase Late Triassic to Early Jurassic alkaline intrusions of the Iron Mask Batholith. Post-accretion Early to Middle Eocene sedimentary and volcanic rocks of the Kamloops Group unconformably overlie the island-arc assemblages.

Regional-scale fault zones are interpreted as principal controls for the intrusion of the batholithic rocks and emplacement of mineralization. The Iron Mask Batholith is interpreted to be the causative intrusion for copper-gold porphyry mineralization and epithermal gold mineralization in the district. It is subdivided into four main phases: the Pothook diorite, Pothook Hybrid, Cherry Creek monzonite and Sugarloaf diorite. It also includes dykes that are spatially associated with structural zones developed along the margins of intrusions which are interpreted to control the intrusive and hydrothermal history of the area.

The New Afton deposit is classified as a silica-saturated alkalic copper-gold porphyry deposit. Copper-gold alkalic porphyry mineralization results from late-stage hydrothermal activity driven by remnant heat from the porphyry intrusion. Thermal gradients within these systems give rise to broadly concentric, although often complexly intermingled, zones of alteration and mineralization.

At New Afton, copper-gold mineralization typically occurs as east-west subvertical tabular zones of disseminations, stringers, and fracture-filling sulphides within rocks of the volcanic Nicola Group and the diorite. The deposit consists of three principal zones:

- The Main zone, located on the western edge of the Pothook diorite is subdivided into Lift 1 East, Lift 1 West (both mined out), B3, C-Zone, and D-Zone mining zones; mining is currently focused on the B3 and C-Zone.
- The Hangingwall (HW) zones are smaller satellite zones located along the southern margin of the Pothook diorite.
- The Eastern zones include two separate areas located on the northern margin of the Pothook diorite: East Extension and K-Zone. East Extension is currently in the mine planning phase and K-Zone is currently being explored.



Mineralization is subdivided into three types: hypogene (either chalcopyrite- or bornite-dominant), secondary hypogene (sometimes referred to as mesogene) (overprint of tennantite-enargite + tetrahedrite and bornite + chalcocite rims), and supergene (native copper and chalcocite).

The alteration paragenesis at New Afton comprises a complex sequence of potassic to calc-potassic and propylitic alteration, in turn overprinted by fault-controlled phyllic assemblages, followed by localized argillic alteration. Copper-gold mineralization is directly related to biotite-dominant potassic/calc-potassic alteration in the central core of the system. Alteration assemblages are categorized and modelled into six principal alteration domains: calcic, biotite-dominant potassic/calc-potassic, potassium (K)-feldspar-dominant potassic/calc-potassic, propylitic, phyllic, and argillic.

Alkalic porphyry deposits like New Afton are contrasted with calc-alkalic types based on the size and chemical nature of the magmatic body, differences in rock chemistry, and styles of alteration and mineralization. Other notable alkalic porphyry-related deposits include Mount Polley, Copper Mountain, and Mount Milligan.

#### 1.6 HISTORY

The first significant mining-related activity in the Afton area commenced in 1970, when Afton Mines discovered the Afton deposit. Teck Corporation and Iso Mines Ltd. acquired the Afton property in 1973 and initiated engineering and metallurgical studies. Commercial production commenced at the Afton open pit mine in late 1977. Mining took place at the Afton, Crescent, Pothook, and Ajax pits. The mine processed approximately 23.0 million tonnes (Mt) of ore from 1977 to 1997 at average grades of 0.85% Cu and 0.52 g/t Au.

In 1999, the Afton mining leases expired and the ground was staked by Westridge Ltd. and Indogold Development Ltd. DRC Resources Corporation (DRC) acquired an option on the property and surrounded it with additional staking and in 2000 began a concerted exploration program to test the potential for additional mineralization extending beyond the Afton open pit. This work resulted in the successful delineation of the underground Mineral Resource below the Afton open pit. DRC underwent a name change to New Gold Inc. in May 2005.

From late-2004 to September 2005, an exploration decline was developed from the south wall of the Afton pit to provide access for infill drilling, exploration drilling, and bulk sampling of the deposit. From 2005 to 2007, Hatch Ltd. (Hatch) completed a Feasibility Study for a block cave mine (including East Cave, West Cave, and B3 Cave) and a conventional grinding-flotation mill operation (Hatch, 2007). New Gold approved the project and commenced underground development in 2007.

From 2012 to 2024, New Afton produced 880 million pounds (Mlb) of copper, 953 kilo-ounces (koz) of gold, and 2.9 million ounces (Moz) of silver.

#### 1.7 DRILLING AND SAMPLING

New Gold has completed approximately 490 km of surface and underground drilling on the New Afton mining lease from 2000 to 2024. Of this, a total of 1,047 diamond drill holes with a cumulative length of 426,131 m were used for the Mineral Resource estimate. Since 2019, drilling was mainly conducted underground and to a far lesser extent at surface. Most of the underground drilling was completed with HQ and NQ diamond drill core with a focus

of increasing the confidence and resolution of the Mineral Resource. During this period, 162,010 m were drilled in 591 drill holes, focusing mainly on characterizing underground resource targets at East Extension, Hangingwall, and D-Zone. Underground preliminary exploration drilling targeted Al-targets and K-Zone, while surface exploration drilling focused on near-mine targets on the mining lease.

Core samples are selected at two-metre intervals. Sample tags are stapled to the boxes at the start of every sample and the core is marked for core cutter reference. Trained core cutters cut the core samples in half using an Almonte automatic core saw. Half is retained in the core box and the other half is inserted into labelled clear poly bags along with the sample tag; the bag is then zip tied. Samples are then bundled into clearly labelled larger rice bags which are zip-tied; shipment paperwork I completed for delivery or for pickup from personnel from the primary assay lab.

Core samples are weighed for a received weight and then racked in order and placed into a  $40^{\circ}$ C drying oven until dry. Dried samples are removed from the drying ovens and weighed a second time to record the dried weight. Samples are transported to preparation stations where the entire sample is crushed to 80% passing 2mm, riffle-split to  $^{\sim}1$  kg and pulverized to 95% passing 105  $\mu$ m. A 50 g pulp sample is analyzed for gold (Au), platinum (Pt), and palladium (Pd) by fire assay with ICP optical emission spectroscopy (OES) finish with a lower detection limit of 2 ppb for gold and of 5 ppb for platinum and palladium. A 0.5 g sample is analyzed for 36 elements by four-acid digestion with ICP Optical Emission Spectroscopy (4A-ICPOES) finish.

Rejects are placed into a plastic bag and stored in sample storage and sent to New Afton mine site for long-term storage at the end of the program. Samples are properly identified and recorded in a secure maxgeo DataShed relational database server. The samples are stored in a secure location on the New Afton mine site and always remain in the custody of New Gold personnel or their designates.

#### 1.8 DATA VERIFICATION

Data verification programs were carried out by independent consultants and operations personnel over time. New Gold implements a series of routine verification procedures to ensure the reliable collection of exploration data. All work is conducted by appropriately qualified personnel under the supervision of qualified geologists.

New Afton staff carried out a data verification program for the assay tables included in the drill hole databases by spot-checking 10% of the assay data from a selection of drill holes that intersected the mineralized wireframe domains, thus relevant to the current Mineral Resource estimate. The validation was done by comparing the selected information entered in the digital database with that of the original laboratory certificates. Additional checks included a comparison of the drill hole collar location data with the digital models of the surface topography and excavation models, as well as a visual inspection of the downhole survey information. The validation routines in Seequent Leapfrog Geo and Maptek Vulcan software, consisting of checking for overlapping samples and duplicate records, were also carried out.

The on-site database administrator, under the supervision of the New Afton Resource geology team, validated the quality assurance and quality control (QA/QC) results when received from the laboratories.



Due to persistent technical difficulties with a newer version of maxgeo LogChief, logging was migrated to cloud-based Seequent MX Deposit in 2022. Much like LogChief, templates in MX Deposit restrict inputs to ensure consistency and accuracy.

Assay results are emailed from the lab to the database administrator as comma-delimited (CSV) files then imported directly into DataShed using a set import template.

The Qualified Persons individually reviewed the information in their areas of expertise. There were no limitations in the ability of the Qualified Person to verify the data. The Qualified Persons concluded that the information supported Mineral Resource and Mineral Reserve estimation and could be used in mine planning and in the economic analysis that supports the Mineral Reserve estimates.

#### 1.9 METALLURGICAL TESTING

Initial metallurgical testing was performed in 2008 and 2009 to evaluate the mineralogy of the deposit and contribute to the design of New Afton's processing plant and tailings facility. Several studies and tests were performed as part of the testing program; these included mineralogical studies, modal analyses, grinding tests, flotation tests, gravity tests, variability tests, and dewatering tests. It was determined that conventional crushing, grinding, and concentration processes were appropriate given the mineralogy of the deposit.

Since the New Afton Mine commenced production in 2012, additional metallurgical testwork has been completed to support the evaluation of C-Zone, East Extension, and D-Zone. In 2014, metallurgical testing was carried out to determine the amenability of C-Zone mineralization to the New Afton processing flowsheet. The objectives of the laboratory testwork were to assess the chemical and mineralogical characteristics, comminution performance, and metallurgical performance of C-Zone mineralization. Similar testwork was completed for East Extension and D-Zone in 2022 and 2024, respectively. Results of the testwork indicated that C-Zone, East Extension, and D-Zone mineralization is amenable to processing using the current New Afton flowsheet.

Further testwork was completed in 2023 and 2024 to evaluate alternative flotation technologies for use in the cleaner flotation circuit with the objective of improving cleaner recoveries at a given rougher flotation mass pull. Six flotation technologies from four different vendors were evaluated in the first phase which compared potential layouts, costs and estimated metallurgical performance. Two of these flotation technologies were selected for pilot testing at the New Afton concentrator. Based on the results of this testwork, layout considerations and its extensive use in similar applications, the Glencore Jameson cell was chosen for the cleaner upgrade project, replacing the third cleaner Outotec tank cells.

Based on testwork results, predictive recovery formulas were developed (based on feed grades, grind size, and throughput rate) to forecast copper and gold recoveries for the New Afton life of mine (LOM) plan and financial models.

#### 1.10 MINERAL RESOURCE ESTIMATES

Two block models were generated to estimate Mineral Resources at New Afton. The two models cover the same extent but have different block sizes to provide more flexibility with choice of mining methods. A " $10 \times 10 \times 10$  m"

model was generated to estimate Mineral Resources for zones considered suitable for mining through block caving. A " $5 \times 5 \times 5$  m sub-blocked" model was generated to test potential applicability of more selective underground mining methods.

The recently discovered K-Zone was estimated but is not reported in the Mineral Resource Statement given its early exploration stage, local geological uncertainty that results from low angles of drilling, and ongoing preliminary engineering studies on potential mining methods.

The database close-out date for the Mineral Resource estimate was November 4, 2024. The Mineral Resource estimate has an effective date of December 31, 2024, the date used for mining depletion.

New Afton resource domains are grade shells modelled at specific grade thresholds. The geometry of these grade shells follows other geological elements modelled independently of grade; these include lithological contacts, structures, and alteration and mineralization styles. The high density of drilling information commonly limits the degree of freedom in the interpretation of the grade shells. Low-grade domains were generated for all mineralized zones at a grade threshold of 0.2% copper-equivalent grade (CuEq). In addition, subdomains were modelled for East Extension, K-Zone, and HW1 Zone to constrain higher-grade mineralization associated with bornite mineralization. Subdomains grade thresholds are 5.0% CuEq for East Extension, and 1.0% CuEq for K-Zone and HW1 Zone. These subdomains, contained within the low-grade domains, were only used for the estimation of the "5 × 5 × 5 m subblocked" model. Estimation was also carried out in complementing lithological domains including monzonite dykes, diorite, and Nicola Group volcanic rocks. The picrite unit, a lithological domain, is assigned a grade of zero for all metals contained within. All domains are used as hard boundaries during the estimation process.

Drill hole composites are length-weighted and were generated as 2-metres long, down-the-hole, with estimation domains acting as a hard boundary. Outlier samples were identified, on a domain-by-domain basis, using histograms and probability plots of the distribution of copper, gold, and silver; a visual review of their location relative to the surrounding data was also conducted. Outlier samples were controlled by using traditional capping directly in the composite database and by limiting the influence of outlier samples in the grade interpolation. The capped composites above the outlier threshold grade are restricted to a maximum distance of influence of 10% of the search ellipsoid above an elevation of 4,900 m MG, and 17% below an elevation of 4,900 m.

Bulk density measurements were conducted on a total of 2,784 drill core samples by approved laboratories using industry-accepted methods. Analysis of the measurements indicates that density tends to increase with depth. Density values in the block models are applied by elevation, except for supergene mineralization, which is given an overall lower density.

Continuity analysis was completed separately for copper, gold, and silver on a domain-by-domain basis using the capped 2-metre composites.

The " $10 \times 10 \times 10$  m model" uses a nominal block size measuring  $10 \times 10 \times 10$  metres. The " $5 \times 5 \times 5$  m sub-blocked model" is an octree-type model with a parent block size measuring  $5 \times 5 \times 5$  metres which can be subdivided into a minimum block size measuring  $0.625 \times 0.625 \times 0.625$  metres: the estimation domains act as sub-blocking triggers. The block sizes of each model are considered appropriate with respect to the current drill hole spacing, the size and thickness of the estimation domains, and the mining method.

Technical Report New Afton Mine

The block model grades for copper, gold, and silver are estimated using ordinary kriging (OK). All grade estimations use length-weighted composited drill hole assay data. The estimations were conducted in a single pass using a search ellipsoid measuring  $150 \times 150 \times 40$  m for the block caving model and a search ellipsoid measuring  $150 \times 150 \times 20$  m for the stope mining model.

The estimation pass of the " $10 \times 10 \times 10$  m model" used a minimum of 5 and up to 54 composites (depending on the commodity and domain) and a minimum of 3 and up to 15 composites for the estimation pass of the " $5 \times 5 \times 5$  m sub-blocked model". The maximum number of composites was 9 per drill for the " $10 \times 10 \times 10$  m model" and was 3 per drill for the " $10 \times 10 \times 10$  m model".

The results of the modelling process were validated using several methods. These include a thorough visual review of the model grades in relation to the underlying drill hole sample and composite grades, comparisons with previous resource estimates, and comparisons with other estimation methods using statistics and swath plots.

Mineral Resources were classified in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014). Mineral Resources were classified as follows:

- Measured: blocks with copper, gold, and silver grades estimated by a minimum of three drill
  holes located within a distance of 30 m or less. This is achieved with drill holes at a nominal
  spacing (drill spacing) of approximately 50 m.
- Indicated: blocks with copper, gold, and silver grades estimated by a minimum of three drill holes and located within a distance of 50 m or less. This is achieved with drill holes at a nominal spacing (drill spacing) of approximately 80 m.
- Inferred: blocks which do not meet the criteria for Measured or Indicated Mineral Resources but are within a maximum distance of 50 m from a single drill hole.

East Extension is classified using the same criteria as the other zones even though it is reported through a stope mining method and is drilled with a tighter spacing of approximately 20 m between drill holes. Because grade continuity is lower when applying the stope mining cut-off grade, optimized stopes for East Extension that were classified as Measured were downgraded to Indicated.

For Mineral Resources reported using a bulk-mining method, conceptual resource caves were modelled by determining a cave footprint using a cut-off grade of 0.33% CuEq and projecting it to the top of the cave column. Mineral Resources are reported within the constraining cave shapes using a cut-off grade of 0.15% CuEq, which corresponds to the cut-off grade that covers processing and General and Administration costs. For Mineral Resources reported with a stope mining method, stope optimization of underground Mineral Resources was carried out using Deswik Stope Optimizer at a cut-off grade of 0.98% CuEq. The stopes were constrained to a minimum mining shape of 20 m along the strike, height of 20 m, and 5 m width.

#### 1.11 MINERAL RESOURCE STATEMENT

The Mineral Resource estimate for New Afton as of December 31, 2024, is presented in Table 1-1. Mineral Resources are reported exclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.



Table 1-1: New	Afton Minera	I Resource estimate	as of Decembe	r 31 2024
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Mining Method		Tonnes		Grade		Contained Metal			
	Category	(000s)	Gold (g/t)	Silver (g/t)	Copper (%)	Gold (koz)	Silver (koz)	Copper (Mlb)	
	Measured	51,195	0.58	1.81	0.67	958	2,976	758	
Underground	Indicated	29,101	0.37	1.33	0.48	349	1,242	308	
Bulk	Measured & Indicated	80,297	0.51	1.63	0.60	1,307	4,217	1,066	
	Inferred	132	0.19	0.54	0.19	1	2	1	
Underground	Measured	-	-	-	-	-	-	-	
Stope	Indicated	1,346	1.02	4.93	1.14	44	213	34	
(East	Measured & Indicated	1,346	1.02	4.93	1.14	44	213	34	
Extension)	Inferred	-	-	-	-	-	_	-	
	Measured	51,195	0.58	1.81	0.67	958	2,976	758	
Total	Indicated	30,448	0.40	1.49	0.51	393	1,455	342	
	Measured & Indicated	81,643	0.51	1.69	0.61	1,352	4,431	1,100	
	Inferred	132	0.19	0.54	0.19	1	2	1	

#### Notes:

- Mineral Resources have been estimated by Vincent Nadeau-Benoit, P.Geo., and Joshua Parsons, P.Eng., both full-time employees of New Gold, and Qualified Persons as defined by National Instrument 43-101. The estimate conforms to the CIM Definition Standards for Mineral Resources and Mineral Reserves.
- 2. Mineral Resources are reported exclusive of Mineral Reserves.
- 3. Mineral Resources are estimated using metal price assumptions of US\$4.20 per pound of copper, US\$1,980 per ounce of gold, and US\$24 per ounce of silver, and a foreign exchange rate assumption of 1.30 C\$/US\$.
- 4. For underground bulk mining, Mineral Resources are reported within mineable shapes created using a cutoff grade of 0.33% CuEq; due to the selectivity of the bulk mining method, blocks below 0.15% CuEq within
  the mineable shapes are not reported. For stope mining, Mineral Resources are reported within mineable
  shapes created using a cut-off grade of 0.98% CuEq and include must-take material.
- 5. Numbers may not add up due to rounding.

Factors that may affect the Mineral Resource estimate include changes to the following: metal price and exchange rate assumptions; assumptions used to generate the estimation domains; local interpretations of mineralization geometry and continuity of mineralized zones; geological and mineralization shape and geological and grade continuity assumptions; treatment of high-grade gold values; density assignments; geotechnical, including locations of historically mined-out voids, as well as mining and metallurgical recovery assumptions; input and design parameter assumptions that pertain to the assumptions for underground mining constraining the estimates; Assumptions as to the continued ability to access the site, retain mineral and surface rights titles, maintain environment and other regulatory permits, and maintain the social licence to operate.



#### 1.12 MINERAL RESERVE ESTIMATES

Mineral Reserves are reported for the B3, C-Zone, and East Extension mining zones. B3 is an operating block cave. C-Zone is a block cave in the production ramp-up phase, with commercial production achieved in the fourth quarter of 2024. East Extension is planned as a stoping zone and is not yet in production.

B3 and C-Zone Mineral Reserves are estimated using the 2024 block caving model with a block size of  $10 \times 10 \times 10$  m. Measured and Indicated Mineral Resources were converted to Probable Mineral Reserves. Due to the uncertainty associated with estimating movement of material within the block caves, no Proven Mineral Reserves are reported for B3 and C-Zone.

East Extension Mineral Reserves are estimated using the 2024 stope mining model with a block size of  $5 \times 5 \times 5$  m. Indicated Mineral Resources were converted to Probable Mineral Reserves.

Mineral Reserves tonnes and grades are stated at a mill feed reference point, allowing for dilution and mining recovery, and are reported accounting for depletion as of December 31, 2024. Cut-off net smelter return (NSR) values of US\$24 and US\$100 are applied to block caving and stoping Reserves, respectively. Mineral Reserves are supported by mine designs, development and production schedules, and cost estimates completed as part of New Afton's 2025 life of mine (LOM) planning process.

Mineral Reserve block models are generated by adding an NSR attribute, in US\$ per tonne, to each block in the Resource block models. Blocks classified as Inferred Mineral Resources, or without a Resource classification, are set to zero grade and zero NSR.

B3 and C-Zone block-cave Mineral Reserves are estimated using GEOVIA PCBC software (PCBC) from Dassault Systèmes, designed specifically for the planning and scheduling of block cave mines. PCBC generates vertical or inclined draw columns above each drawpoint (referred to as slice files) for which properties are derived from the block model. In block caving, the height of draw (HOD) refers to the vertical height above the drawpoint from which material is extracted. At New Afton, a minimum HOD of 50 m is applied for block-cave Mineral Reserves and the maximum HOD parameter for B3 and C-Zone is set at 350 m and 450 m, respectively.

Through the application of the cut-off NSR and caving parameters—which include minimum and maximum HOD, fragmentation assumptions, drawpoint geometry, and mixing characteristics—the PCBC model estimates the tonnes and properties of material to be extracted from each drawpoint. The model incorporates dilution from the top of the columns and the side walls of the cave, depending on the assumed mixing characteristics. PCBC mixing parameters and options have been refined over 12 years of experience at New Afton operating the Lift 1 and B3 block caves. Several PCBC models are generated using a range of parameters to assess the level of confidence in the model outputs. PCBC then uses historical production, the applied maximum HOD, and the mixing parameters to predict the production tonnage and grade.

Mineral Reserves for East Extension, planned as a stoping zone, are estimated using Deswik mine planning software. Deswik Stope Optimizer is first used to define potential stoping zones, based on a cut-off NSR of US\$100/t and stope dimensions of 20 m high × 14 m long. Stope width is variable, ranging from 5 to 20 m. Next, Deswik CAD is used to design mining drifts to access the stoping areas and other mine infrastructure. Stopes are then analyzed for inclusion into the Mineral Reserve inventory by analyzing capital costs, considering the development required to



enable mining of the designed stopes and other mining infrastructure requirements. Deswik Scheduler is used to generate the development and production schedules.

Block cave dilution is simulated dynamically within PCBC, based on the geometry of the cave, mixing parameters, and mining sequence. The remaining Mineral Reserves at B3 block cave are assumed to have a dilution factor of 28.8%, as the top of the draw columns are mined in the final year of production. Total dilution over the life of the C-Zone block cave is estimated at 33.8%, which includes 2.2% internal dilution. A key objective for the C-Zone mine design and draw sequence is to minimize dilution from the unmineralized picrite lithology located south of the ore body. As such, early cave growth is prioritized on the north side of the footprint, away from the picrite contact. The cave back will be brought back to a more even height at mid-HOD. Ore recovery in the block caves is assumed to be 100% of the mixed/diluted block model.

Dilution assumptions for East Extension stopes are based on the outputs of Matthew's empirical stope stability model, considering the rock mass quality and planned stope dimensions. Dilution is currently estimated at 10.8%, with 5.8% from hanging-wall and footwall overbreak at the block model grade and 5% backfill dilution at zero grade. Longitudinal stopes are planned for the extraction of the high-grade core of the deposit, within a lower-grade halo. Therefore, hanging wall and footwall overbreak is expected to be low grade. The mine design allows for 3 m wide rib pillars between stopes to minimize backfill dilution. A 93% mining recovery factor is applied to stope tonnes to account for unblasted ore in the shoulders of the stopes and unmucked ore remaining on the floor of the stopes.

The net smelter return (NSR) is the estimated proceeds per tonne from the sale of mineral products after the application of metallurgical recoveries and deductions for transport, smelting, refining, and marketing charges, as well as royalty payments. NSR is calculated for each block in the block model using the metal prices of \$3.50/lb copper, \$1,650/oz gold, and \$20/oz silver, metallurgical recoveries based on the grade-recovery curves for each ore type, and costs and smelter deductions aligned with the LOM plan. Mineral Reserves are reported above a breakeven NSR cut-off value equal to the total site operating cost per tonne, which includes mining, processing, and G&A costs. The NSR cut-off value for block caving and stoping is US\$24/t and US\$100/t, respectively.

#### 1.13 MINERAL RESERVE STATEMENT

The Mineral Reserve estimate for New Afton as of December 31, 2024, is presented in Table 1-2.



Table 1-2: New Afton Mineral Reserve estimate as of December 31, 2024

Zone	Category	Tonnes (000s)		Grade		Contained Metal		
			Gold (g/t)	Silver (g/t)	Copper (%)	Gold (koz)	Silver (koz)	Copper (Mlb)
	Proven	-	-	-	-	-	-	-
В3	Probable	941	0.49	1.1	0.57	15	33	12
	Proven & Probable	941	0.49	1.1	0.57	15	33	12
	Proven	-	-	-	-	-	-	-
C-Zone	Probable	37,664	0.64	1.6	0.70	772	1,957	585
	Proven & Probable	37,664	0.64	1.6	0.70	772	1,957	585
	Proven	-	-	-	-	-	-	-
East Extension	Probable	962	1.31	8.5	1.63	41	263	35
Extension	Proven & Probable	962	1.31	8.5	1.63	41	263	35
Total	Proven	-	-	-	-	-	-	-
	Probable	39,567	0.65	1.8	0.72	828	2,253	631
	Proven & Probable	39,567	0.65	1.8	0.72	828	2,253	631

#### Notes:

- Mineral Reserves have been estimated by the New Afton mine planning team under the supervision of Joshua Parsons, P.Eng., a full-time employee of New Gold, and a Qualified Person as defined by National Instrument 43-101. The estimate conforms to the CIM Definition Standards for Mineral Resources and Mineral Reserves.
- Mineral Reserves are estimated using metal price assumptions of US\$3.50 per pound of copper, US\$1,650
  per ounce of gold, and US\$20 per ounce of silver, and a foreign exchange rate assumption of C\$1.30:
  US\$1.00.
- 3. B3 and C-Zone block cave Mineral Reserves are reported at a cut-off NSR of US\$24/t and East Extension Mineral Reserves are reported at a cut-off NSR of US\$100/t, based on processing costs of US\$9.00/t processed, G&A costs of US\$3.50/t processed, block caving costs of US\$11.50/t ore mined, and stoping costs of US\$87.50/t ore mined. Metallurgical recoveries vary depending on ore type and grades.
- 4. Numbers may not add up due to rounding.

Factors that may affect the Mineral Reserve estimates include the following: changes to the long-term copper and gold price and exchange rate assumptions; changes to the parameters used to derive the cave outlines and stope shapes and determine the cut-off values; changes to geotechnical and hydrogeological assumptions; changes to the cave mixing model and dilution estimates; changes to metallurgical recovery assumptions; changes to inputs to capital and operating cost estimates; and ability to maintain social and environmental licence to operate.

#### 1.14 MINING METHODS

The New Afton underground mine consists of three zones, each at different stages of development:

B3 is a fully operational block cave that has been in production since 2021.



- C-Zone is a block cave that transitioned from production ramp-up phase to commercial production in the fourth quarter of 2024.
- East Extension is planned as a long-hole stoping zone and is not yet in production.

The East Cave and West Cave, together referred to as Lift 1, were mined from 2011 to 2022 and are now depleted.

The block cave mining method involves development of a footprint at the base of the cave that includes an undercut level for initiating the cave and an extraction level from which ore is mucked from drawpoints for the duration of the cave. Block caving initially requires up-front capital investment in development and footprint construction; however, the subsequent production period requires minimal capital investment which is why block caving is considered the underground mining method with the lowest unit mining costs. Other benefits of block caving include high production rates and low environmental impacts.

The mining plan for East Extension, located east of C-Zone, is to use a longitudinal long-hole stoping method. The method involves the development of drifts along the strike of the ore body at regular level intervals, followed by drilling and blasting of stopes between levels and mucking the broken ore from the lower level using load-hauldumps (LHDs). After completion of ore extraction, stopes are filled using a combination of rockfill and cemented rockfill.

The underground mine is accessed by decline from a portal on surface located to the south of the processing plant. From surface to a depth of 650 m below surface, a single 5.5 m wide  $\times$  6.0 m high decline is used for both vehicle access and the conveyor, which is suspended from the back of the decline. From this elevation to the bottom of C-Zone at 1,150 m below surface, the mine has two declines: a 5.5 m wide  $\times$  5.8 m high access decline and a 5.5 m wide  $\times$  6.0 m high conveyor decline.

The B3 block cave extraction level is approximately 160 m below the mined-out Lift 1 and 760 m below surface. The B3 footprint measures approximately  $250 \times 125$  m for a footprint area of approximately 31,000 m<sup>2</sup>. The B3 extraction level is designed with four longitudinal strike drives and 111 drawpoints arranged in a straight-through (El Teniente-style) pattern. B3 has a total of 65 drawbells at a spacing of  $16.5 \times 27.0$  m. Orepasses are located on the level's east side.

The C-Zone extraction level is located approximately 390 m below the B3 extraction level and 1,150 m below surface. The footprint of C-Zone is approximately  $460 \times 120$  m for an area of approximately 55,000 m<sup>2</sup> and includes a footwall access, conveyor decline, and five levels, listed from top to bottom: extraction level; undercut level; haulage level; ventilation level; and dewatering level. The extraction level has 17 transverse crosscuts, with 91 drawbells and a total of 177 drawpoints arranged in a herringbone layout with a drawbell spacing of  $18.0 \times 27.0$  m.

East Extension is a new zone that was added to Mineral Reserves in 2024. Located 120 m east of the C-Zone block cave, and 150 m above the C-Zone extraction level, East Extension Mineral Reserves extend approximately 200 m vertically and 140 m along strike. The zone contains 114 stopes designed in three panels separated by sill pillars. Stoping is sequenced bottom-up within each panel and retreats east to the ramp access on each level. Development of the East Extension ramp is scheduled to commence in the second half of 2025 and ore production is planned to take place concurrently with production from the C-Zone block cave from 2026 to 2031.



The New Afton materials handling system consists of orepasses, underground crushers, a conveyor system to surface, and underground truck haulage. All ore and waste is transported to surface via the crushing and conveying system. The system consists of two FLSmidth 1100 mm × 1800 mm gyratory crushers, located on the Lift 1 and C-Zone haulage levels. The two gyratory crushers can feed the conveyor system simultaneously by adjusting their respective apron feeder speeds at the bottom of the ore bins. The Lift 1 conveyor system consists of five conveyors and transfer stations to surface. The C-Zone conveyor system consists of four conveyors and transfer stations, tying into the Lift 1 conveyor system at its first transfer station.

The New Afton underground mine has all the required mobile mining equipment to support current block cave production and C-Zone development. Mining activities are carried out by New Gold personnel and equipment, utilizing mining contractors where required, mostly to support C-Zone cave construction. The purchase of additional mining equipment is considered in the LOM plan to facilitate the C-Zone production ramp up and mining of the East Extension zone.

#### 1.15 LIFE OF MINE PLAN

The New Afton life of mine (LOM) Plan considers block cave mining from B3 and C-Zone and longitudinal stoping from East Extension, with ore processed at the New Afton processing plant to produce a copper concentrate with saleable gold and silver. Based on 2024 Mineral Reserves, New Afton has a Reserve mine life to 2031, with total production of 696.6 koz of gold, 554.9 Mlb of copper, and 1,670.3 koz of silver after considering metallurgical recoveries.

Mining of the B3 block cave is expected to be completed in 2025. C-Zone mining production is expected to ramp up to approximately 4.4 Mt of ore in 2025 and 5.7 to 6.0 Mt per year from 2026 to 2030. In periods when the mining rate exceeds the processing rate, intermediate-grade ore will be stockpiled on surface until it can be processed at a later time.

Development of the East Extension access ramp is scheduled to start from both the top and bottom in 2025, with first ore from East Extension expected in 2026. In 2025, lateral development also includes 675 m of exploration drift. From 2026 to 2031, East Extension is expected to provide approximately 500 tonnes per day (tpd) of high-grade supplementary mill feed.

With the ramping up of C-Zone block cave, the processing rate is planned to increase from an average of 13,750 tonnes per operating day (tpod) in the fourth quarter of 2024 to full capacity of approximately 16,000 tpd by the end of 2026. New Afton has achieved these processing rates in the past during mining of the Lift 1 block caves. Feed grades are planned to increase as C-Zone caving advances into the core of the deposit, peaking in 2027 and 2028, and as higher-grade ore from East Extension is fed to the plant. Gold and copper production are expected to increase by 38% and 35%, respectively, from 2024 to 2027 because of the increased processing rates and higher feed grades.

The New Afton LOM plan is shown in Table 1-3.



Table 1-3: LOM production schedule

	2025	2026	2027	2028	2029	2030	2031	Total
Underground Mining								
B3 ore tonnes mined (kt)	941	-	-	-	-	-	-	941
C-Zone ore tonnes mined (kt)	4,359	5,707	5,998	6,036	5,734	5,474	4,355	37,664
East Extension ore tonnes mined (kt)	-	180	211	159	159	198	56	962
Total ore tonnes mined (kt)	5,300	5,887	6,208	6,195	5,893	5,673	4,411	39,567
Lateral development (m)	4,512	4,227	797	-	-	-	-	9,536
Vertical development (m)	320	249	-	-	-	-	-	569
Processing	·							
Ore processed (kt)	5,102	5,633	5,778	5,721	5,788	5,830	5,715	39,567
Gold feed grade (g/t)	0.48	0.77	0.90	0.84	0.66	0.50	0.36	0.65
Copper feed grade (%)	0.56	0.87	0.97	0.91	0.72	0.56	0.42	0.72
Silver feed grade (g/t)	1.4	2.2	2.5	2.1	1.6	1.4	1.0	1.8
Gold recovery (%)	83.3	85.3	86.1	86.1	84.4	82.4	79.6	84.5
Copper recovery (%)	87.5	88.8	89.8	90.0	88.5	87.4	85.3	88.6
Silver recovery (%)	72.6	76.0	77.1	77.2	74.3	72.2	67.9	74.7
Gold production (koz)	66.2	119.1	143.5	132.9	104.4	77.0	53.5	696.6
Copper production (Mlb)	55.6	96.2	111.0	103.0	80.9	63.3	44.8	554.9
Silver production (koz)	166.2	299.2	355.8	304.8	225.4	193.6	125.3	1,670.3

#### 1.16 RECOVERY METHODS

The New Afton process plant has been in operation since mid-2012. The plant is a mineral concentrator. The process flowsheet consists of conventional crushing and grinding circuits, a flotation circuit, and a gravity circuit to produce a copper-gold concentrate.

Since initial commissioning, the process plant has undergone several major updates to increase processing capacity, maintain metallurgical recoveries, facilitate the processing of different ore types, and produce thickened and amended tailings (TAT). Major plant updates are listed below:

- 2015: A mill expansion was completed to add a tertiary stage of grinding and additional cleaner flotation capacity. This allowed throughput to increase to approximately 16,000 tpd.
- 2017: Additional rougher flotation capacity was added.
- 2018: To facilitate the processing of supergene ore and produce a separate native copper
  concentrate, gravity recovery capacity was added to the ball mill circuit and was increased in
  each of the tertiary and regrind circuits. In the ball mill circuit, two inline pressure jigs (one
  rougher and one cleaner) were installed along with a magnetic separator for removal of
  magnetite from the cleaner jig concentrate.
- 2021–2022: The TAT plant was commissioned in two stages, producing thickened tailings in 2021 and thickened tailings amended with cement in 2022. Prior to this, the cleaner-scavenger and



rougher flotation tailings were combined at the final tailings pump-box and pumped to the sands plant at the NATSF (New Afton tailings storage facility). The coarse and fine fractions were separated by hydrocycloning to meet dam construction requirements. The TAT processing facility replaced this hydrocycloning stage.

2023: With processing of supergene ore being completed during the third quarter of 2022, the
gravity circuit operation was adjusted to focus on recovery of gold rather than that of native
copper. The concentrates from the flotation and gravity circuits were combined to produce the
final bulk copper-gold-silver concentrate for dewatering.

In 2024, the New Afton Mine processed 4.19 Mt with average metallurgical recoveries of 87.25% for gold, 88.94% for copper, and 75.24% for silver, including a small amount through ore purchase agreements. The processing plant throughput is currently limited by mine production and, with C-Zone ramping up over the next few years, the New Afton Mine intends to take advantage of the existing processing capacity at the mill to process up to 16,000 tpd.

Two processing improvement projects are planned for 2025 with the objective of maintaining or improving metallurgical recoveries at the higher throughput rates as C-Zone ramps up to full production:

- Introduction of secondary crushing.
- Upgrade of cleaner circuit.

An MMD 625 mineral sizer was installed as a temporary crusher in the C-Zone conveyor decline to improve material-handling efficiency during development and construction of C-Zone. The sizer will be moved in 2025 to its permanent location, downstream of the gyratory crusher, to provide secondary crushing; this will improve mill grinding efficiency, mill throughput stability and thus metal recovery when C-Zone achieves full production.

In the second half of 2025, the existing third cleaner flotation bank ( $4 \times 5$  m³ Outotec Tank Cells) will be replaced by a Glencore Jameson E1732/4 cell. The existing second cleaner flotation bank ( $5 \times 5$  m³ Tank Cells) will be repurposed to operate as a recleaner-scavenger bank. The purpose of the upgrade is to increase overall copper and gold recoveries of C-Zone ore at a given final concentrate grade by improving the recovery of ultrafine particles in the cleaner circuit and by maintaining cleaner recoveries at a higher rougher mass pull. The Jameson cell provides increased cleaning efficiency for a given footprint with lower energy consumption.

The New Afton processing facility uses one source of fresh water and multiple sources of reclaimed water. Water drawn from Kamloops Lake is used for applications requiring fresh rather than reclaimed water, as well as to make up any deficit in the site water balance. Water is reclaimed from the pond generated by consolidating tailings in the NATSF and transported via the PHTSF (Pothook Tailings Storage Facility) for use as mill process water. The underground dewatering system also supplies the mill with process water. The majority of mill process water is reclaimed from the tailings thickener overflow. Minor sources of process water include the HATSF (Historical Afton Tailings Storage Facility) wells and the dewatering system for the APTSF.

Most of the power consumption at the mill occurs in the grinding circuit. With a SAG (semi-autogenous grinding) mill that requires an average of 4.5 MW, a ball mill requiring an average of 5.45 MW, a tertiary mill requiring an average of 2.1 MW and a regrind mill requiring an average of 0.45 MW, an average consumption of 105,000 MWh per annum is needed to grind the ore to the optimal grind size for flotation and gravity separation.



#### 1.17 PROJECT INFRASTRUCTURE

The New Afton Mine is in operation and has all the required infrastructure to support the operation. The mine is immediately adjacent to Highway 1, approximately 10 km from the City of Kamloops. A paved road staffed with a security gate connects the highway to the mine offices. A network of roads on the site service the various mine facilities.

Surface infrastructure supporting the New Afton operation includes: a processing facility, a thickened and amended tailings (TAT) plant, maintenance workshops, warehouses, an assay lab, the integrated operations centre, mine dry buildings, offices, explosives magazines, a concrete batch plant, ventilation fans and heaters, and electrical and pumping facilities.

Bottled potable water is supplied to the site by a local vendor. Fresh water pumped from Kamloops Lake is treated for use in sinks, showers and toilets, used in processing and in underground mine. Site septic waste is trucked to the Kamloops Sewage Treatment Center for disposal.

Currently, BC Hydro supplies the mine with 49.5 MW of electrical power via a connection located between the Savona Substation and the Douglas Substation. This connection consists of a 138 kV overhead line terminal and approximately 1.1 km of 138 kV transmission line to the site's substation.

A BC Hydro transmission upgrade was completed in 2024 to increase the site demand capacity from 34.5 MW to 49.5 MW to support C-Zone production in addition to operation of the B3 block cave, the new TAT plant, water evaporators, and potential C-Zone fleet electrification. A new 40/53 MVA transformer and substation were installed at the mine in mid-2024, twinning the existing site substation to accommodate the power demand increase.

#### 1.18 TAILINGS STORAGE FACILITIES

There are four tailings storage facilities (TSFs) on the New Afton mine site:

- The Afton Pit TSF (APTSF), which is the primary facility for LOM tailings deposition.
- The New Afton TSF (NATSF), which holds all of the Lift 1 and majority of B3 tailings and can be
  used for further deposition as required.
- The Historical Afton TSF (HATSF), which holds the tailings from the original Afton operation and has since been inactive.
- The Pothook TSF (PHTSF), which acts as a site water reservoir, doesn't currently receive any tailings.

The Afton Pit TSF (APTSF), is a historical open pit that was mined from 1977 to 1997 and is now used for storage of thickened and cement amended tailings (TAT). An overview of the TAT plant is provided in Section 17 of this technical report. Tailings have been deposited into the APTSF since late-2022; commencing after Lift 1 caving activities were ceased. No active caving is occurring vertically underneath areas of TAT deposition to reduce the risks of fines and dilution entering the cave. The current LOM plan is to deposit 43.9 Mt (33.8 Mm³) in the APTSF, which will utilize approximately 55% of the Total APTSF storage capacity.



TAT is currently discharged into the APTSF from three discharge points along the west side of the pit rim, and from a fourth deposition point on the southeast side of the pit rim. The overall deposition objective is to form a tailings surface that slopes to the northeast to maintain potential surface ponding away from the B3 and C-Zone cave footprints and directs surface drainage towards the water reclaim infrastructure situated along the APTSF access road.

All TSFs located on the New Afton Mine site undergo thorough review and oversight from qualified professionals including, at minimum, the following evaluations:

- Quarterly inspections from the New Afton Mine TSF Qualified Person. (The TSF Qualified Person
  is a required role according to the Health, Safety and Reclamation Code for Mines in British
  Columbia. This role is currently fulfilled by the New Afton Tailings and Surface Superintendent.)
- Annual inspections from facility Engineers of Record (EORs).
- Twice annual site and technical review from the Independent Tailings Review Board (ITRB).
- Dam Safety Reviews performed every five years.
- Third-party reviews as required by regulators.

The projected ground movement from the block cave is well understood and has led to the development of stabilization plans for the NATSF and HATSF and formed the basis for producing TAT for deposition in the APTSF. A stabilization program is underway at the NATSF and HATSF to provide appropriate controls to prevent a significant uncontrolled release of tailings. New Afton has implemented a stringent subsidence monitoring and adaptive management plan during the stabilization and mining period to effectively manage risk. The stabilization program involves NATSF and HATSF EORs and additional consultant review, following industry best practices for worker safety and operations.

All TSFs and block cave induced subsidence is monitored/tracked through a combination of InSAR (a radar satellite imagery technique), drone-based photogrammetry, and a comprehensive suite of surface and subsurface instrumentation.

Stabilization strategies for both the NATSF and HATSF include pond removal, dewatering/depressurization of the in situ tailings, and consolidation of in situ tailings before mining induced subsidence is expected to affect the facilities.

Pond removal at the HATSF was accomplished by transferring water to the NATSF when the facility was being utilized as the primary tailings disposal facility. Pond removal at the NATSF is successfully being managed through converting operations to utilize process water rather than fresh water wherever possible and the use of mechanical evaporators to accelerate natural evaporation processes.

Dewatering and depressurization at each facility are carried out using conventional groundwater wells and submersible pumps. At the HATSF, wick drains, and a surcharge load have been effectively used to achieve consolidation and flowability objectives. At the NATSF, wick drains, in combination with dewatering wells, have been successful and are continuing to be utilized to meet both dewatering, depressurization, and consolidation objectives.



Additionally, a crest raise along portions of Dam C and Dam B is underway to maintain freeboard requirements as subsidence affects these areas.

Subsidence models and site observations are continually reviewed and used to confirm that stabilization timelines are achievable. The stabilization targets are managed through Quantifiable Performance Objectives (QPOs) and Trigger Action Response Plans (TARPs) and are updated as new information becomes available

As of February 2024, the HATSF structures and stabilization measures have been constructed and are suitable for their intended use. HATSF stabilization objectives have been achieved and no additional mitigation plan is necessary at this time. NATSF stabilization activities are on track to be materially completed by the Q1-2026 target date, which is approximately two years earlier than the forecasted subsidence impacts.

#### 1.19 Environmental, Permitting and Social Considerations

New Afton maintains effective compliance with applicable permits and regulations and has implemented strong and transparent governance to maintain this compliance and drive continuous improvement. Baseline environmental studies and an extensive ongoing monitoring program are conducted to track and mitigate any environmental issue which may arise. Characterization and ongoing monitoring were completed for air quality, ambient noise and vibration, geochemistry, surface water quality, groundwater quality, sediment quality, aquatic resources, terrestrial flora and fauna, and social and heritage considerations. Tailings and water management are well understood and managed. New Gold holds all major permits and licences for mine operations at New Afton, and a *Mines Act* permit amendment for the mining of East Extension will be sought.

New Afton maintains strong relationships with Indigenous partners and collaborates with them on environmental and business matters. A Cooperation Agreement is in place with the Stk'emlupsement Te Secwepement Nation.

The most recent *Reclamation Liability Cost Estimate* (RLCE) of New Afton Mine, as submitted to the government on November 1, 2024, is C\$70,428,000. Based on the standard regulatory discount rates applicable in British Columbia the Net Present Value is C\$48,185,000. Since BC regulations don't allow to discount the total RLCE below C\$50,000,000; the bonding for the site is therefore expected to be fixed at C\$50,000,000.

#### 1.20 Markets and Contracts

New Afton produces a high-quality clean copper concentrate with typical copper grade, high gold grade, payable silver credits, and relatively low levels of impurities. Because of its quality and the continuing strong global demand for concentrate, the current New Afton concentrate is readily marketable to any of several smelters or concentrate marketing firms. Smelting and refining terms include treatment charges and refining charges which are generally known, with penalty charges for contaminants such as arsenic and mercury in the concentrates. Penalty terms are generally more variable than the treatment and refining terms. Concentrates from New Afton are typically sold through concentrate marketing firms, with long-term contracts that cover several years.

New Gold has a number of contracts, agreements, and purchase orders in place for goods and services that are required for the operation of the mine. All contracts and agreements are negotiated with vendors and have a



contractual scope, terms, and conditions. The most significant of those contracts cover the maintenance services, fuel, explosives, grinding media, milling reagents, and concentrate haulage.

New Afton has multiple contracts for the sale of concentrates at terms consistent with industry standards. There are other contracts for the transportation of concentrates, port services in Vancouver, and representation services related to concentrate analysis at delivery. New Afton does not engage in forward metal sales or hedging.

New Afton also entered into and maintains a cooperation agreement with the Stk'emlupsemc Te Secwepemc Nation.

#### 1.21 CAPITAL COST ESTIMATES

Capital costs are based on budget estimates from supplier and contractor quotes, engineering designs, maintenance strategies, production plans, and recent operating history. They are listed in Table 1-4. All costs are in US dollars and are based on an exchange rate assumption of C\$1.35: US\$1.00 for 2025 to 2027 and C\$1.30: US\$1.00 for the remainder of the LOM Plan.

Total LOM capital is expected to be approximately \$191 million, including \$43.4 million of sustaining capital and \$147.6 million of growth capital, with capital costs expected to taper off over the next three years as C-Zone construction is completed. East Extension total capital is expected to be \$41 million; it will benefit from the ability to utilize the C-Zone materials handling, ventilation, and dewatering systems and other mine infrastructure.

Table 1-4: Capital cost estimates

Category	2025	2026	2027	2028	2029	2030	2031	Total	
Sustaining Capital (\$ millions)									
C-Zone	0.4	0.9	5.2	4.6	4.6	4.7	-	20.4	
East Extension	-	1.9	0.5	-	-	-	-	2.4	
Other	5.8	12.3	0.5	1.1	0.3	-	0.6	20.6	
Total Sustaining Capital	6.2	15.1	6.2	5.7	4.9	4.7	0.6	43.4	
Growth Capital (\$ millions	)								
C-Zone	85.6	-	-	-	-	-	-	85.6	
East Extension	16.3	21.7	0.5	0.3	-	-	-	38.8	
Other	17.2	6.0	-	-	-	-	-	23.2	
Total Growth Capital	119.1	27.7	0.5	0.3	-	-	-	147.6	
Total Capital (\$ millions)	125.3	42.8	6.7	6.0	4.9	4.7	0.6	191.0	

Note: Other capital cost includes tailings, processing, and other surface infrastructure.

#### 1.22 OPERATING COST ESTIMATES

The basis for the operating cost estimate is the New Afton budget and LOM plan and recent unit cost history. The production plan drove the calculation of the mining and processing costs, as the mining mobile equipment fleet, workforce, contractors, power, and consumables requirements were calculated based on specific consumption rates. Consumable prices and labour rates are based on current contracts and agreements. LOM operating costs are



shown in Table 1-5. Block cave mining costs and processing costs are expected to remain relatively in line with 2024 actual costs over the next three years despite the increased production rate, due to lower fixed costs per tonne and the elimination of truck haulage from B3 block cave, reducing the costs per tonne. Mining costs increase in 2026 as East Extension is mined using the long-hole stoping method, which has a higher cost per tonne than the block cave method. Mining and processing unit costs decrease in 2028-2031 primarily driven by a reduction in mobile equipment rebuilds and a decreased cement requirement associated with tailings deposition.

Table 1-5: Operating cost estimates

	2025	2026	2027	2028	2029	2030	2031	Total / Average		
Total Operating Costs (\$ m	Total Operating Costs (\$ millions)									
Mining	55.7	76.1	76.3	72.3	70.7	72	48.9	472		
Processing	63.6	60.6	58.2	56.2	54.3	53.0	49.7	395.6		
G&A	24.3	21.5	20.3	20.6	20.3	19.0	14.4	140.4		
Other	12.5	10.2	21.3	16.9	17.5	16.1	33.9	128.4		
Total	156.1	168.4	176.1	166.0	162.8	160.1	146.9	1,136.4		
Unit Operating Costs (\$/t;	orocessed	)								
Mining	10.92	13.52	13.21	12.63	12.21	12.34	8.56	11.93		
Processing	12.47	10.76	10.07	9.83	9.38	9.09	8.69	10.00		
G&A	4.76	3.82	3.51	3.61	3.51	3.26	2.51	3.55		
Other	2.43	1.80	3.70	2.96	3.01	2.75	5.94	3.24		
Total	30.59	29.89	30.47	29.02	28.12	27.45	25.71	28.72		

Note: Other operating cost includes concentrate transport costs, inventory movements, royalties, and other costs. Mining costs are inclusive of primary crushing and conveyance to surface.

#### 1.23 ECONOMIC ANALYSIS

This section is not required as New Gold is a producing issuer, the New Afton Mine is currently in production, and no material expansions are planned in the current LOM plan.

Mineral Reserves for the New Afton Mine are supported by a positive cash flow.

#### 1.24 RISKS AND OPPORTUNITIES

The major risks to the New Afton Mine are associated with the following elements:

- Negative variations to the copper and gold price assumptions.
- Significant additional dilution or ore losses due to cave deviation or variations to the mine plan.
- Oversized material or hung drawpoints during the early stages of C-Zone cave propagation, potentially limiting daily tonnage until additional drawpoints are blasted.
- Significant delays to the completion of the tailings stabilization project, impacting C-Zone production.

1- Summary 21



- Changes in geotechnical conditions and modelling parameters, including but not limited to:
  - The extent and magnitude of subsidence affecting site infrastructure.
  - Convergence in underground production drifts exceeding expectations.

Cave growth deviation and induced stress from the C-Zone block cave impacting underground development and infrastructure.

The major opportunities are as follows:

- Extension of mine life and improved production profile through conversion of Mineral Resources to Mineral Reserves, including K-Zone, D-Zone, and HW Zone.
- Potential to expand mineralization and identify new zones with additional drilling.
- Further improvements in metallurgical recoveries with process plant improvements.
- Further reduction in TAT cement consumption with additional testing and analysis.
- Overperformance of drawpoints in C-Zone pulling in residual grade from B3 post closure.

#### 1.25 Interpretation and Conclusion

New Afton Mineral Resources and Mineral Reserves have been estimated using industry-accepted practices and are reported using the 2014 CIM Definition Standards.

Under the assumptions in this technical report, the New Afton LOM Plan shows a positive cash flow and supports the Mineral Reserve estimate. The projected mine plan is achievable under the set of assumptions and parameters used.

#### 1.26 RECOMMENDATIONS

K-Zone is a new zone of copper-gold porphyry mineralization with potential to increase New Afton's Mineral Resources and Mineral Reserves. The recommended work program is for additional underground drilling to better define the internal grade distribution and further test the overall footprint of the zone. In addition to drilling, proposed work includes development of an exploration drift at the 4500 Level to improve drilling angles, shorten the length of exploration holes, and improve the overall definition of the zone. The drilling program also includes surface drilling to test the larger K-Zone footprint towards the east. Drilling results will be used to support resource estimation work and aim at improving the confidence in the modelling and resource classification of K-Zone, and guide engineering studies on applicable methods of mining.

The work program consists of an approved budget including US\$9M for drilling and US\$5M for exploration drift development. Proposed drilling totals 35,000 m and includes 10,000 m of infill drilling for resource conversion, and 25,000 m for footprint expansion. Exploration drift totals 700 m of development and includes three drill bays. This budget is included in the cost estimates for 2025.

In addition to K-Zone, the New Afton Mine has a significant Mineral Resource base and includes exploration targets with the potential for conversion to Mineral Reserves. Zones to the east of the current block caves and above the elevation of the C-Zone extraction level have been identified as a promising opportunity to extend the New Afton

1- Summary 22



Technical Report New Afton Mine

mine life that would require a minimal investment of capital. The Qualified Persons recommend that technical studies be conducted to assess the potential feasibility of these zones, by using geotechnical analysis, mining method selection, conceptual mine design, evaluation of materials handling and ventilation requirements, surface subsidence implications, and capital and operating cost estimates. Existing human resources at New Afton Mine have the capacity to complete these studies, supported by external consultants where required.



## 2 Introduction

#### 2.1 Introduction

The New Afton Mine (New Afton) is an underground copper-gold mine located in British Columbia, Canada. New Gold Inc. (New Gold or the Company) holds a 100% ownership interest in the property and Ontario Teachers' Pension Plan holds a 19.9% free cash flow interest. The New Afton Mine consists of the currently operating B3 and C-Zone block cave mines, the planned East Extension mining zone, and the New Afton processing facility and associated infrastructure.

New Gold is a Canadian-based gold and copper producer with two operating mines in Canada: the Rainy River gold mine in Ontario and the New Afton copper-gold mine in British Columbia. Additionally, the Company owns one site in Mexico, the Cerro San Pedro Mine, now in reclamation. New Gold is continually working to maximize shareholder value through diversifying production, maintaining an attractive risk profile, and enhancing growth potential in a safe and environmentally and socially responsible manner.

#### 2.2 TERMS OF REFERENCE

This technical report, prepared in accordance with *National Instrument 43-101 – Standards of Disclosure for Mineral Projects* (NI 43-101) and *Form 43-101F1*, documents the Mineral Resource and Mineral Reserve estimates, as of December 31, 2024, and updates the technical information for the current mining operation at New Afton to an effective date of December 31, 2024. The prior technical report on New Afton, titled "Technical Report for the New Afton Mine, British Columbia, Canada," with an effective date of February 28, 2020, was compiled by Roscoe Postle Associates Inc. (RPA).

The Mineral Resource and Mineral Reserve estimates reported herein were prepared in conformity with generally accepted standards set out in the *Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Mineral Resources & Mineral Reserves Estimation Best Practices Guidelines (November 2019)* (CIM (2019) Guidelines) and were classified according to the *CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014)* (CIM (2014) Standards).

All units of measurement in this report are metric. A local mine grid coordinate system is sometimes used throughout this report, in which mine grid north is rotated 50 degrees west of UTM north (NAD83 Zone 10) and mine grid elevation (denoted by the abbreviation "MG") is obtained by adding 5,000 m to the elevation measured above mean sea level. All currencies are expressed in United States dollars (USD, US\$) unless otherwise stated. Contained gold and silver metal is expressed as troy ounces (oz) and contained copper is expressed as pounds (lb). All material tonnes are expressed as dry tonnes (t) unless stated otherwise. A list of abbreviations is provided at the beginning of this report (List of Abbreviations).

2- Introduction 24



#### 2.3 QUALIFIED PERSONS

This technical report was prepared by the following Qualified Persons, all full-time employees of New Gold:

- Mr. Joshua Parsons, P.Eng., Principal Mine Engineer at New Afton.
- Mr. Devin Wade, P.Geo., Chief Exploration Geologist at New Afton.
- Ms. Jennifer Katchen, P.Eng., Chief Metallurgist at New Afton.
- Mr. Vincent Nadeau-Benoit, P.Geo., Director, Mineral Resources at New Gold.
- Mr. Matthew Davis, P.Eng., Superintendent, Tailings and Surface at New Afton.
- Ms. Emily O'Hara, P.Eng., Manager, Water Strategy and Stewardship at New Gold.

Mr. Parsons, Mr. Wade, Ms. Katchen, and Mr. Davis are employees of New Afton Mine and work full-time at the mine. Mr. Nadeau-Benoit visited the New Afton Mine on numerous occasions, including most recently on November 18 to 21, 2024. Ms. O'Hara visited the New Afton Mine on numerous occasions, including most recently on November 4 to 7, 2024.

Mr. Parsons is responsible for Sections 12.3, 12.4.2, 14, 15, 16, 19, 21, and 22; he also shares responsibility for related disclosures in Sections 1, 25, and 27 of the technical report. Mr. Wade is responsible for Sections 7, 8, 9, 10, 11, and 26, and shares responsibility for related disclosures in Sections 1, 25, and 27 of the technical report. Ms. Katchen is responsible for Sections 13 and 17, and shares responsibility for related disclosures in Sections 1, 25, and 27 of the technical report. Mr. Nadeau-Benoit is responsible for Sections 12.1, 12.2, 12.4.1, 14, and shares responsibility for related disclosures in Sections 1, 25, and 27 of the technical report. Mr. Davis is responsible for Section 18 and shares responsibility for related disclosures in Sections 1, 25, and 27 of the technical report. Ms. O'Hara is responsible for Sections 2, 3, 4, 5, 6, 20, 23, and 24 and shares responsibility for related disclosures in Sections 1, 25, and 27 of the technical report.

#### 2.4 EFFECTIVE DATES

Ther following effective dates are pertinent to this technical report:

- Most recent information on mineral tenure and surface rights: December 31, 2024.
- Date of the latest information on environmental, permitting, and social considerations:
   December 31, 2024.
- Database close-out date for the Mineral Resource estimates: November 4, 2024.
- Effective date of the Mineral Resource estimate December 31, 2024.
- Effective date of the Mineral Reserve estimate: December 31, 2024.
- Effective date of the financial analysis that supports the Mineral Reserves: December 31, 2024.

The overall effective date of this technical report is December 31, 2024.

2- Introduction 25



### 2.5 Information Sources and References

Reports and documents listed in Section 27 of this technical report were used to support the preparation of this technical report. Additional information was provided by New Gold personnel as required.

The following New Gold employees contributed to various aspects of the report under the supervision of the Qualified Persons:

- Mr. Corey Kamp, P.Eng., Director, Mining and Rock Mechanics.
- Mr. Luke Holdstock, Manager, Environment, Lands, and Permitting at New Afton.
- Mr. Tyler Roberts P.Eng., Superintendent, Technical Services at New Afton.
- Mr. Grant Kornelson, Manager, Projects and Supply Chain at New Afton.
- Ms. Jane McCaw, Principal, Regulatory Permitting and Corporate Land Management.
- Ms. Esther Martinez, Manager, Finance at New Afton.

2- Introduction 26

## 3 Reliance on Other Experts

The information, conclusions, opinions, and estimates contained in this technical report are based on information available to New Gold at the time of preparation of this technical report.

The Qualified Persons have not performed an independent verification of the land title and tenure information, as summarized in Section 4 of this technical report, nor have they verified the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties, as summarized in Section 4 of this technical report. For this topic, the Qualified Persons of this report have relied on information provided by the legal department of New Gold.

The Qualified Persons have relied on various New Gold departments for guidance on cost allocation and applicable taxes, royalties, and other government levies or interests, applicable to revenue or income from the New Afton mine, as described in Sections 4, 19, 20, and 21.

Except for the purposes legislated under applicable securities laws, any use of this technical report by any third party is at that party's sole risk.

## 4 PROPERTY DESCRIPTION AND LOCATION

#### 4.1 PROPERTY LOCATION

The New Afton Mine is located in the South-Central Interior region of British Columbia, Canada, approximately 10 km west of the City of Kamloops and approximately 350 km northeast of Vancouver (Figure 4-1). The approximate centre of the property is located at 50° 39' latitude north and 120° 31' longitude west, or 5614800N and 675500E using NAD83, Zone 10 North Universal Transverse Mercator (UTM) coordinates. The nominal elevation of the property is approximately 700 metres above mean sea level (masl).

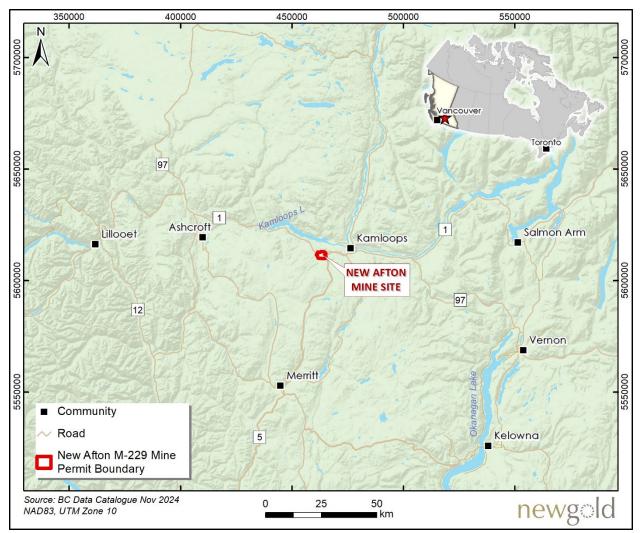


Figure 4-1: Location map

## 4.2 LAND TENURE

#### 4.2.1 SURFACE RIGHTS

New Gold holds surface rights plus a section of Crown property (Crown land in British Columbia is land owned by the provincial government) within and adjacent to the area covered by the New Afton *Mine Act Permit M-229*; which constitutes approximately 2,274.54 ha, as shown in Figure 4-2. Most of the surface holdings were obtained from Teck Resources Limited (Teck) and its subsidiary in September, 2007. Other parcels have since been added via option and purchase agreements with several parties. The section of Crown property will revert back to the Crown once New Gold's reclamation responsibilities have been completed. A list of fee-simple surface tenures is provided in Table 4-1.

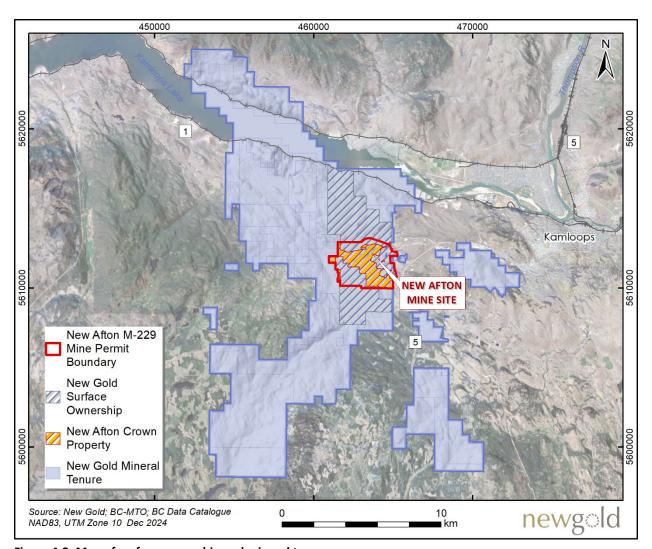


Figure 4-2: Map of surface ownership and mineral tenure



Table 4-1: Surface tenures

Property Location	Class	Parcel Identifier	Account Number/ Roll Number	Name	Acres	Hectares
Kamloops Rural		012-988-731	724 000740.000	DL 551	120.00	48.56
Kamloops Rural	Major Industry	013-012-541	724 01005.000	DL 893/Pot Luck Mineral Claim (surface)	51.65	20.90
Kamloops Rural	Major Industry	013-012-550	724 01010.000	DL 894/Gold Mask MC (surface)	51.65	20.90
Kamloops Rural	Major Industry	013-012-568	724 01015.000	DL 895/Midnight MC (surface)	23.05	9.33
Kamloops Rural	Major Industry	013-012-576	724 01020.000	DL 896/Bonanza MC (surface)	50.20	20.32
Kamloops Rural	Major Industry	013-012-584	724 01025.000	DL 897/Boss MC (surface)	51.62	20.89
Kamloops Rural	Major Industry	013-012-592	724 01030.000	DL 898/Nighthawk MC (surface)	49.46	20.02
Kamloops Rural	Major Industry	013-012-614	724 01035.000	DL 899/Cliff MC (surface)	37.94	15.35
Kamloops Rural	Major Industry	013-012-622	724 01040.000	DL 900/Piper MC (surface)	25.81	10.44
Kamloops Rural		014-388-421	724 012573.005		123.64	50.04
Kamloops Rural		014-389-517	724 012573.010		36.36	14.71
Kamloops Rural		014-388-391	724 012573.020		160.00	64.75
Kamloops Rural		014-389-304	724 012582.055		38.00	15.38
Kamloops Rural		014-389-347	724 012582.060		30.80	12.46
Kamloops Rural		014-389-380	724 012582.065		22.86	9.25
Kamloops Rural	Business/Other	016-315-863	724 02075.000	DL 2017	124.14	50.24
Kamloops Rural		No PID	724 02245.000	DL 2172	3.90	1.58
Kamloops Rural	Major Industry	014-421-666	724 12582.000		45.24	18.31
Kamloops Rural	Farm	014-295-857	724 12585.000		320.00	129.50
Kamloops Rural	Farm	014-295-903	724 12585.010		128.90	52.16
Kamloops Rural	Major Industry	004-603-222	724 12585.050		133.58	54.06
Kamloops Rural	Farm	014-296-331	724 12586.000		320.00	129.50
Kamloops Rural	Farm	014-296-543	724 12586.010		107.20	43.38
Kamloops Rural	Farm	014-296-349	724 12586.020		160.00	64.75
Kamloops Rural	Farm	014-297-230	724 12587.000		160.00	64.75
Kamloops Rural	Farm	014-301-750	724 12593.000		320.00	129.50
Kamloops Rural	Farm	014-301-806	724 12594.000		640.00	259.00
Kamloops Rural	Farm	014-303-191	724 12595.000		160.00	64.75
Kamloops Rural	Farm	014-308-711	724 12597.010		160.00	64.75
Kamloops Rural	Farm	014-306-221	724 12597.030		143.50	58.07
Kamloops Rural	Farm	014-314-371	724 12598.000		197.00	79.72
Kamloops Rural	Farm	014-309-149	724 12598.020		160.00	64.75
Kamloops Rural	Major Industry	No PID, new in 2009	724 18517.000	Mine Permit Area	5.00	2.02
Kamloops Rural	Farm	014-388-251	724 012570.000		164.00	66.37
Kamloops Rural	Farm	014-388-260	724 012570.005		164.00	66.37
Kamloops Rural	Farm	014-388-278	724 012570.015		328.00	132.74
Kamloops Rural	Farm	014-388-294	724 012573.000		320.00	129.50
Kamloops Rural	Farm	014-388-316	724 12572.030		163.00	65.96
Kamloops Rural	Farm	014-388-308	724 12571.010		160.00	64.75
Kamloops Rural	Farm	014-388-324	724 12571.000		160.00	64.75
Total Area					5,620.50	2,274.54



#### 4.2.2 MINERAL TENURE

Mineral title in British Columbia is acquired and maintained under the Mineral Tenure Act and its predecessor Acts (the Mineral Act and the Placer Mining Act). The Mineral Titles Branch administers the legislation related to the acquisition, exploration, and development of mineral, placer mineral, and coal rights in British Columbia. In January of 2005, an internet-based Mineral Title administration system (Mineral Titles Online or MTO) became active and online staking became the only way to acquire new mineral tenure in British Columbia. There are three types of mineral tenure in British Columbia:

- Legacy claims (staked in the field prior to January 2005).
- Cell claims (staked online post January 2025).
- Mining lease (application to the Ministry, payment of fee, legal boundary survey, annual maintenance payment).

New Gold's mineral tenures in the mine area comprise cell claims, legacy claims, and a mining lease. Mineral claims cover a total area of 20,812 ha, and the mining lease covers 902.3 ha. The extent of mineral tenures which underlie the New Afton property is shown in Figure 4-2. A list of these tenures is provided in Table 4-2. New Gold owns a 100% interest in these tenures, some of which are subject to certain royalties (Section 4.3).

In addition to the mineral tenures, a portion of the property is covered by *Mines Act Permit M-229* which gives New Gold the right to establish surface works and to mine. The permit area is shown in Figure 4-2 and encompasses most, but not all, of the mining lease area, as well as a portion of several mineral claims. Among other things, the terms of the permit require that New Gold maintain a reclamation bond which is currently under review. The current Reclamation and Closure Plan was submitted to the MCM on November 1, 2024, with a bond recommendation of C\$50 million.

Table 4-2: Mineral tenures

Title Number	Claim Name	Owner	Title Type	Title Subtype	Map Number	Expiry Date	Area (ha)
220090	PYTHON NO.16 FR.	282146 (100%)	Mineral	Claim	0921068	2025/JUL/15	25
220275	LINE NO.3	282146 (100%)	Mineral	Claim	0921068	2025/JUL/15	25
221488	FAY 1 FR	282146 (100%)	Mineral	Claim	0921068	2025/JUL/15	25
372644	AFTON 8	282146 (100%)	Mineral	Claim	0921068	2029/MAR/08	25
372645	AFTON 9	282146 (100%)	Mineral	Claim	0921068	2029/MAR/08	25
372646	AFTON 10	282146 (100%)	Mineral	Claim	0921068	2029/MAR/08	25
372647	AFTON 11	282146 (100%)	Mineral	Claim	0921068	2029/MAR/08	25
378688	AFTON 8	282146 (100%)	Mineral	Claim	0921068	2032/MAR/08	500
378918	HUGH 1	282146 (100%)	Mineral	Claim	0921068	2032/JUN/08	25
378919	HUGH 2	282146 (100%)	Mineral	Claim	0921068	2032/JUN/08	25
378920	HUGH 3	282146 (100%)	Mineral	Claim	0921068	2032/JUN/08	25
378921	HUGH 4	282146 (100%)	Mineral	Claim	0921068	2032/JUN/08	25
378922	HUGH 5	282146 (100%)	Mineral	Claim	0921068	2032/JUN/08	25
379304	AFTON 19	282146 (100%)	Mineral	Claim	0921068	2032/MAR/08	25
406650	GM 69	282146 (100%)	Mineral	Claim	0921068	2029/FEB/01	500
513980		282146 (100%)	Mineral	Claim	0921	2025/JUL/15	553.205

Title Number	Claim Name	Owner	Title Type	Title Subtype	Map Number	Expiry Date	Area (ha)
514167	AFTON	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	225.139
514194		282146 (100%)	Mineral	Claim	0921	2032/MAR/08	1637.761
517047	AFTON	282146 (100%)	Mineral	Claim	0921	2025/MAR/08	40.974
517157	AFTON	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	204.764
517259	AJAX	282146 (100%)	Mineral	Claim	0921	2025/JUL/15	81.967
517263		282146 (100%)	Mineral	Claim	0921	2025/JUL/15	20.495
517360	NEW AFTON	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.492
521727	AJAX	282146 (100%)	Mineral	Claim	0921	2025/APR/30	451.696
521728		282146 (100%)	Mineral	Claim	0921	2025/APR/30	513.26
521729	AJAX	282146 (100%)	Mineral	Claim	0921	2025/APR/30	389.965
524303	AFTON DAM	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.492
524304	AFTON DAM 1	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.491
524305	AFTON DAM 2	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.491
525508	AFTON DAM 3	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.492
528243	SMELTER	282146 (100%)	Mineral	Claim	0921	2025/MAR/08	20.485
529020	COPPER LOAD	282146 (100%)	Mineral	Claim	0921	2032/JAN/31	20.485
534787	AF EXT 11	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.482
534788	AF EXT12	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.476
537230	AFTON DAM 3	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	40.983
537231	AFTON DAM 2	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	40.978
546063	711 1014 57111 2	282146 (100%)	Mineral	Lease	0921	2025/NOV/29	902.3
549226	AFTON NW 5	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	491.2601
549268	AFTON NW 6	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.4746
549270	AFTON NW 7	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	81.9232
552399	ML EXT 1	282146 (100%)	Mineral	Claim	0921	2025/FEB/20	20.4819
552400	ML EXT 2	282146 (100%)	Mineral	Claim	0921	2025/FEB/20	20.4834
594462	AFTON EEA	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	184.4098
595819	AJ-W	282146 (100%)	Mineral	Claim	0921	2025/APR/30	123.1781
606247	AFTON NW 8	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	81.9442
642268	AFTON NW 9	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.4656
650330	PYTHON NW CELL	282146 (100%)	Mineral	Claim	0921	2025/JUL/15	20.4853
654890	IRON MASK 1	282146 (100%)	Mineral	Claim	0921	2025/JUL/15	20.4853
654891	IRON MASK 2	282146 (100%)	Mineral	Claim	0921	2025/JUL/15	20.487
765242	HUGH 6 REPL	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.4942
830915	AFTON NW 11	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.4639
830920	AFTON NW 12	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	40.9295
830925	AFTON NW 13	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	429.219
832096	AFTON NW 15	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.487
835552	AJ MAGNUM W	282146 (100%)	Mineral	Claim	0921	2025/JUL/15	40.9742
837062	AFTON WEST	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	430.2645
855837	AFTON NW 16	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	20.4621
862155	AFTIN NW 17	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	40.8821
1011918	AFTON NW 10	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	122.8264
1011918	AFTON NW 18	282146 (100%)	Mineral	Claim	0921	2032/IVIAR/08 2032/FEB/08	20.442
1016942	Bill1	282146 (100%)	Mineral	Claim	0921	2032/FEB/08 2032/MAR/08	655.944
1025173	AFTON NW 19	282146 (100%)	Mineral	Claim	0921	2031/JAN/07	20.4402
1026061	DORADO	282146 (100%)	Mineral	Claim	092I 092I	2032/MAR/08 2025/JUL/15	102.4832

## Technical Report New Afton Mine

Title Number	Claim Name	Owner	Title Type	Title Subtype	Map Number	Expiry Date	Area (ha)
1038487	WOOD PROPERTY	282146 (100%)	Mineral	Claim	0921	2030/MAR/27	1415.4146
1038488	WOOD PROPERTY	282146 (100%)	Mineral	Claim	0921	2032/JAN/08	451.0337
1038489	WOOD PROPERTY	282146 (100%)	Mineral	Claim	0921	2032/JAN/08	389.5294
1042485	AJAX 2	282146 (100%)	Mineral	Claim	0921	2025/APR/30	389.8131
1043220	NEDROBERTS	282146 (100%)	Mineral	Claim	0921	2032/MAR/08	61.4607
1043271	CHERRY1	282146 (100%)	Mineral	Claim	0921	2031/MAR/27	102.4238
1043793		282146 (100%)	Mineral	Claim	0921	2032/MAR/08	40.9794
1049040		282146 (100%)	Mineral	Claim	0921	2032/JAN/07	491.4324
1049047		282146 (100%)	Mineral	Claim	0921	2032/JAN/07	102.4031
1050395	MAXINE 1	282146 (100%)	Mineral	Claim	0921	2032/MAR/07	122.653
1050396	MAXINE 2	282146 (100%)	Mineral	Claim	0921	2032/MAR/07	327.1183
1050397	COPPER JACK	282146 (100%)	Mineral	Claim	0921	2032/MAR/07	163.688
1050398	AFTON NW 1	282146 (100%)	Mineral	Claim	0921	2032/MAR/07	61.4472
1050400	AFTON NW 2	282146 (100%)	Mineral	Claim	0921	2031/MAR/07	1125.645
1050401	AFTON NW 3	282146 (100%)	Mineral	Claim	0921	2032/MAR/07	1206.764
1050403	AFTON NW 4	282146 (100%)	Mineral	Claim	0921	2031/MAR/07	633.93
1050405	AFTON NW 5	282146 (100%)	Mineral	Claim	0921	2032/MAR/07	204.6374
1055302	AFTOM 1	282146 (100%)	Mineral	Claim	0921	2032/OCT/01	266.2583
1056644	AKILA	282146 (100%)	Mineral	Claim	0921	2025/MAY/25	40.9774
1057595	AFTON SW 1	282146 (100%)	Mineral	Claim	0921	2031/JAN/07	20.5066
1059782	CHERRY2	282146 (100%)	Mineral	Claim	0921	2031/MAR/08	40.9755
1061368		282146 (100%)	Mineral	Claim	0921	2031/JUN/08	368.6904
1066112		282146 (100%)	Mineral	Claim	0921	2027/JAN/10	328.178
1069836		282146 (100%)	Mineral	Claim	0921	2027/JAN/10	2052.4263
1069837		282146 (100%)	Mineral	Claim	0921	2027/JAN/10	841.9913
1069850		282146 (100%)	Mineral	Claim	0921	2027/JAN/10	410.2372
1071538	KAMLOOPS-BEATON	282146 (100%)	Mineral	Claim	0921	2030/SEP/08	40.965
1091113		282146 (100%)	Mineral	Claim	0921	2025/JAN/26	40.9634
1101275		282146 (100%)	Mineral	Claim	0921	2025/JAN/27	40.951
1101308		282146 (100%)	Mineral	Claim	0921	2025/JAN/27	61.4684
1107397		282146 (100%)	Mineral	Claim	0921	2025/SEP/14	82.0032
1112659		282146 (100%)	Mineral	Claim	0921	2025/APR/26	40.9476
1114780	Ajax 3	282146 (100%)	Mineral	Claim	0921	2025/AUG/01	20.5137
						Total:	21,714.17



#### 4.3 ROYALTIES AND AGREEMENTS

New Gold has engaged in a number of royalty agreements with various third parties on relatively small parcels within the overall property, none of which cover the Mineral Reserves.

Additionally, New Gold is party to a Cooperation Agreement with the Tk'emlúps te Secwépemc and the Skeetchestn Indian Band (together referred to as SSN). The Cooperation Agreement provides that a fixed royalty amount must be paid annually until the full amount is reached in 2030. The Cooperation Agreement is discussed further in Section 20.7.2.

The New Afton Mine is not subject to any other back-in rights payments, agreements or encumbrances.

#### 4.4 PERMITS AND AUTHORIZATIONS

New Gold has all required permits to continue carrying out mining and processing operations at New Afton. Further discussion of these permits can be found in Section 20 of this technical report.

#### 4.5 COMMENTS ON PROPERTY DESCRIPTION AND LOCATION

The Qualified Person provides the following comments:

- Information provided by New Gold's legal and tenure experts on the mining tenure held by New Gold in the New Afton Mine area supports that the Company has valid title that is sufficient to support Mineral Reserves.
- New Gold holds sufficient surface rights to support current mining operations and mining of Mineral Reserves.
- Environmental liabilities for the New Afton Mine are typical of those that would be expected to be associated with a mining operation conducted via open pit and underground mass mining methods.

The Qualified Person is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the property that are not discussed in this report.

# 5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

#### 5.1 LOCATION AND ACCESSIBILITY

The New Afton Mine is located 350 km northeast of Vancouver and 10 km west of Kamloops, British Columbia, in the South-Central Interior of British Columbia. The mine is located on the south side of the Thompson River Valley, on the site of the past-producing Afton Mine. The mine is located just west of the junction of the Trans-Canada Highway No. 1 with Coquihalla Highway No. 5, which both provide year-round road access. Access to the site is by a mine road located off the Trans-Canada Highway. The Kamloops airport is served by regular scheduled flights to Vancouver and Victoria (British Columbia), and Calgary (Alberta). The Canadian National Railway and Canadian Pacific Railway both pass through Kamloops.

#### 5.2 INFRASTRUCTURE AND LOCAL RESOURCES

Kamloops is a major transportation hub for highway, air, and railroad. The local economy includes healthcare, tourism, education, forestry, and mining industries. The City of Kamloops has a population of approximately 100,000. The area has a ready supply of trained workers and professionals with suppliers and contractors to support heavy industry.

British Columbia Hydro and Power Authority (BC Hydro) transmission lines, a FortisBC Inc. (FortisBC) natural gas pipeline, and a Pembina Pipeline Corporation (Pembina) oil pipeline traverse the mining lease north of the historical Afton pit. A water pipeline approximately four km in length can deliver fresh water from Kamloops Lake to the mine site. New Gold purchased the water pipeline and pump house facilities from Teck as part of the purchase agreement in 2007. New Gold has four active water licences to withdraw water from Kamloops Lake for mining and milling operations.

Further discussion about existing infrastructure at the New Afton Mine is provided in Section 18 of this technical report.

#### 5.3 CLIMATE AND PHYSIOGRAPHY

The Kamloops area is located in the rain shadow of the British Columbia Coast Mountains and is characterized by a semi-arid climate. Precipitation is relatively modest, averaging approximately 257 mm annually (of which 175 mm is rainfall), with light winter snow and infrequent rain in the spring and fall. The area has warm summers, where temperatures can reach 38°C, and cool winters, during which temperatures tend to hover around the freezing mark. During the winter, short periods of cold weather can occur where temperatures drop to as low as -29°C. The mine operates year-round.

Technical Report New Afton Mine

The landscape is characterized by hilly, till-covered terrain and dispersed small alkaline water bodies. Relief adjacent to Kamloops Lake is a few hundred metres or more. The most significant topographic features within the mining lease are the historical Afton and Pothook open pits and the reclaimed waste rock dumps of the Afton Operating Corporation, the former operator. Kamloops Lake, a widening of the Thompson River, is located north of the mining lease and bisects the Afton mineral tenure. Due to the continental semi-arid climate, vegetation consists of open grasslands and sparse pine forests. Higher elevations are more densely forested.

#### 5.4 SURFACE RIGHTS

New Gold owns the land that encompasses all existing surface infrastructure related to the New Afton Mine. This land ownership is sufficient for the mine's future operations without requiring further land acquisition. Section 4 outlines this topic in more detail.



## 6 HISTORY

#### 6.1 OWNERSHIP AND DEVELOPMENT HISTORY

Exploration in the area of the New Afton Mine began in the mid-1800s, as prospectors pushed into the interior of British Columbia following the Fraser and Caribou gold rushes. The Iron Mask property, staked in 1896, was the first in the Kamloops district. A 100 ft shaft was sunk on the Pothook deposit in 1898. Mining was carried out from the turn of the 20<sup>th</sup> century through until 1927 at several gold, copper, and silver mines including the Pothook, Iron King, Copper King, and Iron Mask. The Afton property claims were staked over the Pothook workings in 1949 by Mr. Axel Bergland. This was followed by sporadic, and largely unsuccessful, exploration work by a number of parties through the 1950s and 1960s. Mr. Chester Millar acquired the property in the mid-1960s and formed a private company called Afton Mines Ltd. (Afton Mines) to carry out exploration work.

The first significant mining-related activity in the Afton area commenced in 1970, when drilling by Afton Mines intercepted 52 m at 0.4% Cu in what ultimately became the Afton deposit. Over 45,700 m of drilling was carried out by a number of operators over the following three years.

Teck Corporation (Teck) and Iso Mines Ltd. (Iso) acquired the Afton property in 1973 and initiated engineering and metallurgical studies. Commercial production commenced at the Afton open pit mine in late 1977. Mining took place at the Afton, Crescent, Pothook, and Ajax pits. The mine closed in 1991, reopened again in 1994, closing finally in 1997.

In 1999, the Afton mining leases expired and the ground was staked by Westridge Ltd. and Indogold Development Ltd. DRC Resources Corporation (DRC) acquired an option on the property, staked additional claims, and in 2000 began a concerted exploration program to test the potential for additional mineralization extending beyond the Afton open pit.

From late-2004 to September 2005, following several positive technical studies and further exploration drilling conducted by DRC, an exploration decline was developed from the south wall of the Afton pit to provide access for infill drilling, exploration drilling, and bulk sampling of the deposit. In May 2005, DRC changed its company name to New Gold Inc.

From 2005 to 2007, Hatch Ltd. (Hatch) completed a Feasibility Study for a block cave mine (including East Cave, West Cave, and B3 Cave) and conventional grinding-flotation mill operation (Hatch, 2007), New Gold approved the project and commenced underground development in 2007.

During construction of the project, exploration drilling extended the mineralization at depth to identify what is now referred to the C-Zone. Further drilling conducted from 2012 to 2016 confirmed and delineated the zone, and the C-Zone Feasibility Study was completed by New Gold in January 2015.

Since most of the significant and relevant exploration was conducted by New Gold or its predecessor, DRC, this work is described in Section 9.

6- History 37



#### 6.2 HISTORICAL MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

Although a number of historical Mineral Resource estimates and Mineral Reserve estimates have been prepared for New Afton throughout its life, none of these estimates are currently regarded as significant.

#### 6.3 PAST PRODUCTION

The Afton open pit mine processed approximately 23.0 Mt of ore from 1977 to 1997 at average grades of 0.85% Cu and 0.52 g/t Au.

The New Afton Mine achieved commercial production in July 2012. The East and West block caves, referred to as Lift 1, were mined from 2012 to 2022 and are now depleted. The B3 block cave commenced in 2021 and is currently in full production. New Afton's fourth block cave, C-Zone, achieved commercial production in October 2024 and is currently ramping up to full production. A mill expansion was completed in 2015. From 2012 to 2024, New Afton produced 880 Mlb of copper and 953 koz of gold, and also processed a small quantity of ore through ore purchase agreements from 2022 to 2024; the production history is summarized in Table 6-1. New Afton also produced silver as a by-product, for a total silver production of 2.9 Moz from 2012 to 2024.

Table 6-1: Production from New Afton Mine 2012–2024

	Tonnes	Copper		Gold			Silver			
Year	Processed (kt)	Grade (% Cu)	Recovery (%)	Production (Mlb Cu)	Grade (g/t Au)	Recovery (%)	Production (oz Au)	Grade (g/t Ag)	Recovery (%)	Production (oz Ag)
2012	1,970	0.79	84	28.5	0.73	80	36,807	1.58	74	74,371
2013	4,087	0.93	86	72.0	0.78	85	87,177	1.89	77	192,499
2014	4,792	0.94	85	84.5	0.81	83	104,589	2.31	69	243,898
2015	5,097	0.90	85	86.0	0.78	83	105,487	2.35	70	268,243
2016	5,773	0.81	84	87.3	0.65	82	98,098	2.21	69	281,493
2017	5,993	0.85	81	90.6	0.56	80	86,163	2.49	67	322,757
2018	5,354	0.87	83	85.1	0.53	85	77,329	2.73	70	327,662
2019	5,584	0.78	83	79.4	0.47	82	68,785	2.32	76	314,399
2020	5,532	0.72	82	72.1	0.45	80	64,220	2.09	74	275,090
2021	4,886	0.70	81	61.7	0.41	81	52,452	2.23	73	256,529
2022	3,323	0.51	83	31.1	0.47	84	37,788	1.34	66	94,682
2023	3,065	0.77	91	47.4	0.72	90	62,637	1.59	77	121,128
2024	4,187	0.65	89	54.0	0.60	87	71,550	1.42	75	144,741
Total	59,643	0.79	84	880.0	0.60	83	953,082	2.13	72	2,917,492

6- History 38

## 7 GEOLOGICAL SETTING AND MINERALIZATION

This section is based mainly on the overview technical paper by Lipske et al. (2020).

#### 7.1 REGIONAL GEOLOGY

The geological history of the Canadian Cordillera has largely been shaped by collisional plate tectonics which resulted in the accretion of allochthonous terranes onto the North American plate. The New Afton Mine is hosted within Mesozoic rocks of the Quesnel Terrane, an island-arc assemblage that was accreted onto the continental margin of North America during the Late Triassic to Early Jurassic periods. The Quesnel Terrane forms part of the Intermontane Belt which extends from the United States border into the Yukon Territory (Figure 7-1).

Bounded on both sides by Paleozoic to Mesozoic rocks—the Cache Creek Complex to the west and of the Kootenay Terrane to the east—the Quesnel Terrane records Late Triassic arc-related volcanism and magmatism followed by Early to Middle Jurassic thrusting and folding associated with docking of the island-arc complex onto the North American plate. Porphyry-related mineralization occurred mainly at the culmination stage of the island arc. Rocks of the Quesnel terrane were subsequently affected by episodic compressional events until the Cretaceous, and later by extensional deformation in the Eocene that resulted in the deposition of Tertiary sedimentary and volcanic rocks that unconformably overlie rocks of the Quesnel Terrane.

The Quesnel Terrane hosts several other porphyry-related producing mines, such as Copper Mountain, Highland Valley Copper, Mount Polley, and Mount Milligan.

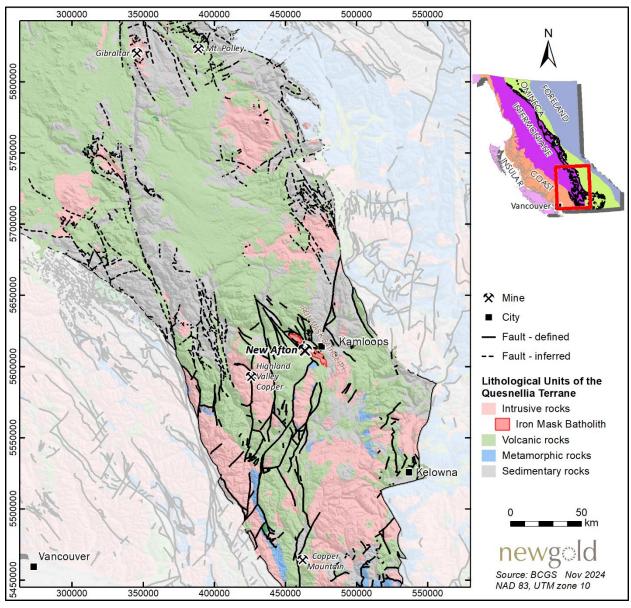


Figure 7-1: Simplified geology of the Quesnel Terrane modified from BCGS MapPlace, 2024

#### 7.2 LOCAL GEOLOGY

The New Afton Mine occurs within the Quesnel Terrane at the contact between volcanic rocks of the Nicola Group and alkaline intrusions of the Iron Mask Batholith (Figure 7-2). The Nicola Group consists of Late Triassic to Early Jurassic intermediate to mafic submarine volcanic, volcaniclastic, and sedimentary rocks. The Iron Mask Batholith is a multi-phase Late Triassic to Early Jurassic intrusive suite defined by two main plutons. Together, the two plutons form an elongated intrusive complex that extends over a strike length of 34 km and spans up to 4 km in width.

Four principal intrusive phases are documented within the two plutons of the Iron Mask Batholith. From oldest to youngest, these phases include the Pothook diorite, the Pothook Hybrid (mix of Pothook diorite and Nicola volcanic partial melt), the Cherry Creek monzonite, and the Sugarloaf diorite. Uranium-lead zircon geochronological agedating indicates similar ages for the Pothook diorite, Pothook Hybrid, and Cherry Creek monzonite: ca. 204 Ma (Mortensen et al., 1995). The Sugarloaf diorite is younger, with a geochronological age of ca. 196.3 Ma (Logan et al., 2007).

The Iron Mask Batholith is interpreted to be the causative intrusion for copper-gold porphyry mineralization and epithermal gold mineralization in the district. The associated hydrothermal systems occur most commonly at contact zones between phases of the Iron Mask Batholith and the Nicola Group host rocks. These, in turn, are locally uncomfortably overlain by post-mineral sedimentary units of the Jurassic Ashcroft Formation, interpreted to have been deposited in deep basins of the island-arc.

Post-accretion Early to Middle Eocene sedimentary and volcanic rocks of the Kamloops Group unconformably overlie the Nicola Group and the Iron Mask Batholith. The Kamloops Group consists of siliciclastic sedimentary rocks, tuff units, and amygdaloidal andesite units of the Tranquille Formation and volcanic rocks of the Dewdrop Flats Formation. Several prominent diabase sills cut the upper part of the Tranquille Formation. The youngest rocks outcropping in the region are Miocene alkaline flood basalts and Miocene-Pleistocene basalt of the Chilcotin Group.

Typically, no penetrative tectonic foliation is observed within the Nicola Group and Iron Mask Batholith, although rocks are generally folded and faulted. They were affected by several generations of deformation, including faulting during compression along northwest-trending shear zones related to the island-arc subduction and subsequent accretion, and extensional and strike-slip faults associated with later crustal relaxation during the Eocene. Throughout the district, Nicola Group rocks are regionally metamorphosed to greenschist facies and locally metamorphosed to hornfels where in proximity to batholith-related intrusions.

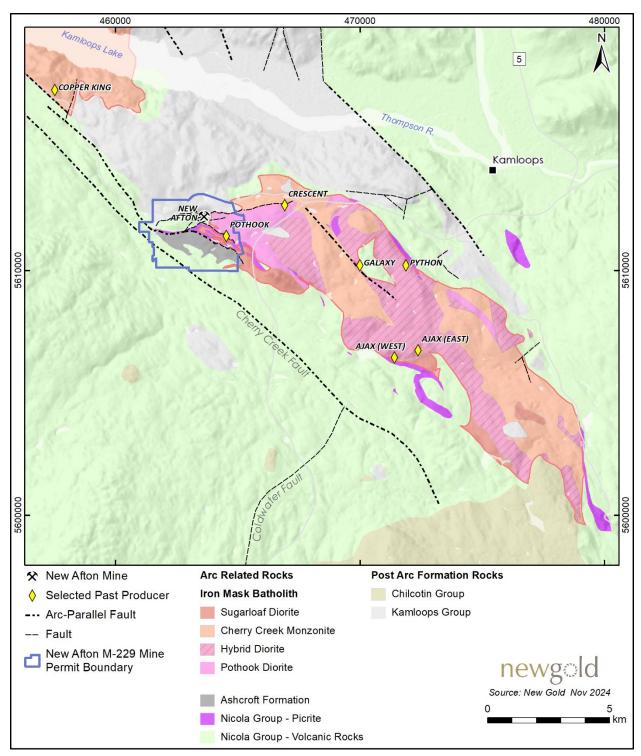


Figure 7-2: Local geology of the New Afton Mine

#### 7.3 PROPERTY GEOLOGY

The New Afton deposit is located at the northwest end of the southern pluton of the Iron Mask batholith; it straddles the contact between the Pothook diorite and volcanic rocks of the Nicola Group (Figure 7-3). The deposit is bounded to the south by a picrite unit, itself intruded by dykes of the Sugarloaf diorite. Several post-mineral mafic and latite dykes crosscut the other intrusive and volcanic rocks. These dykes are irregular, discontinuous, and volumetrically limited, but appear to have some correlation with structural zones that controlled the emplacement of mineralization. Two suites of younger sedimentary rocks sit unconformably on top of the Nicola Group rocks and Iron Mask intrusive phases: the Ashcroft Formation to the south and the Kamloops Group to the north.

The New Afton mine area is crosscut by a series of arc-related regional-scale brittle-ductile shear zones of various orientations including northwest-, east-, and northeast-trending. Such shear zones are commonly developed along the margins of intrusive bodies; they are interpreted to control the emplacement of the Iron Mask Batholith and related hydrothermal alteration and mineralization. Later episodes of post-mineral extension reactivated these structures, leading to dextral brittle faulting along pre-existing northeast-trending shear zones and to normal movement along pre-existing northwest-trending shear zones.

Lithological units in the vicinity of the mine are described as follows, from oldest to youngest.

Nicola Group volcanic rocks: Nicola Group volcanic rocks dip moderately to steeply to the north; facies comprise polylithic and monolithic breccias, crystalline tuffs, and andesitic to basaltic flows. The unit can be subdivided into the following fragmental and non-fragmental subtypes:

- Fragmental volcanic breccias comprise poorly sorted, variably coloured, massive to phyric, angular to sub-rounded, lapilli- to block-sized clasts hosted in a dark chloritic volcanic matrix. Breccias are monomictic to polymictic and contain clasts of porphyritic diorite, andesite, basalt, picrite, and aphyric volcanic rock, all enclosed within a coarse-grained crystal-rich matrix.
- Non-fragmental and mostly coherent crystal tuffs and andesite flows are dominated by very fineand fine- to medium-grained subhedral to anhedral, broken and/or embayed phenocrysts of plagioclase ± pyroxene ± hornblende. They typically contain less than five percent by volume of coarse ash to lapilli lithic fragments within a variably altered fine-grained matrix.

Picrite: Part of the Nicola Group volcanic stratigraphy, the picrite unit was a critical control for channeling hydrothermal fluids at New Afton. In the vicinity of the mine, the picrite unit dips steeply to the north and is typically well foliated and with sheared contacts. It is dark blue-green to black, strongly magnetic and is composed of fine- to coarse-grained, subhedral to euhedral altered olivine crystals within moderate to strong chlorite-talctremolite-magnetite hornfels, with local porphyroblastic olivine ± scapolite and local zeolite-filled vesicles. Orthocumulate, autoclastic breccia, and pepperite-like textures are common.

Pothook Diorite: The Pothook diorite is grey-green, fine- to medium-grained, with crystal texture ranging from equigranular "salt and pepper" to seriate. It is primarily composed of subhedral to euhedral plagioclase, biotite, and pyroxene. Poikilitic biotite is diagnostic, although challenging to recognize when the diorite is moderately to strongly altered.

**Monzodiorite:** At New Afton, the monzodiorite is interpreted to be the causative intrusive phase of high-grade bornite mineralization. The monzodiorite unit is light to dark orange-pink and mottled brown, porphyritic to subtrachytic, and is primarily composed of subhedral to euhedral potassium (K)-feldspar, white plagioclase laths, biotite, and hornblende, often with accessory leucoxene. It is strongly altered to pervasive or patchy K-feldspar and biotite, and patchy to fracture-controlled black biotite-chlorite-specularite.

Cherry Creek Monzonite: The Cherry Creek monzonite is interpreted to be the source of heat and metals for the New Afton deposit. The monzonite body is in contact to the west and southwest with Nicola Group volcanic rocks and to the east and southeast with the Pothook diorite. The intrusion appears to narrow down plunge to the southwest and splits into several thinner dikes near surface. It is partially fault-bounded and trending east-northeast through the deposit area, bending on the east side of the property to a more southeasterly trend. The principal phase of the Cherry Creek monzonite is composed of subhedral to euhedral orthoclase, plagioclase, and biotite with accessory magnetite, hornblende, apatite, titanite, and rare zircon. Textures vary from porphyritic to fine-grained equigranular to trachytic. It is variably altered by K-feldspar, epidote, and magnetite ± actinolite alteration.

**Sugarloaf Diorite:** South of the main deposit, dykes and sills of the Sugarloaf Diorite are common towards and within the Pothook pit. This brown-grey diorite is fine- to medium-grained with 1–1.5 mm hornblende and plagioclase phenocrysts in a fine-grained groundmass of feldspar and magnetite. Regionally, this unit has considerable textural variation and is associated with albite alteration.

**Eocene Kamloops Group:** These sedimentary rocks are pale to medium grey-brown and vary in composition from mudstone to conglomerate. Pebble conglomerates are moderately sorted, clast- or matrix-supported, with rounded to subangular clasts. Pebbles consist of chert, mudstone, and interbedded volcanic and sedimentary rocks. Bedded siltstone, mudstone, and sandstone are locally interbedded with juvenile coal seams. The sedimentary rocks are likely derived from a proximal volcanic protolith of Eocene age.

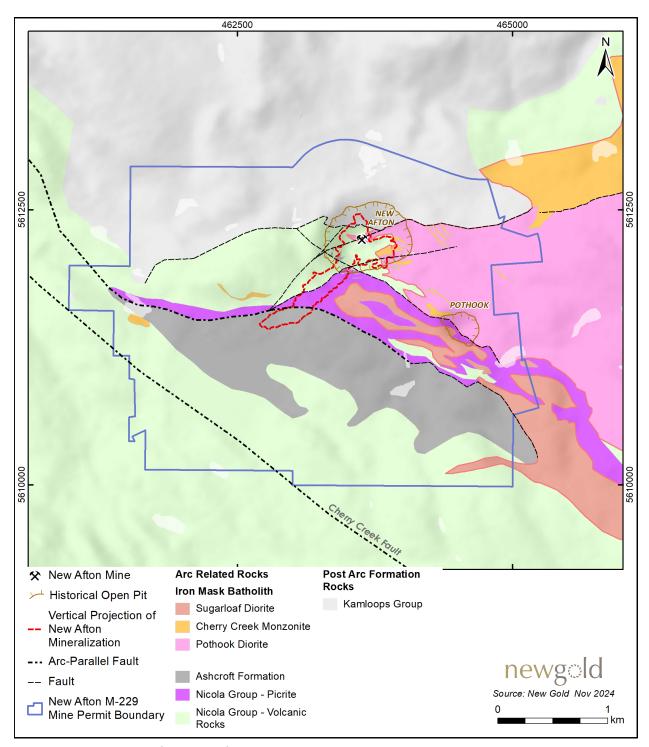


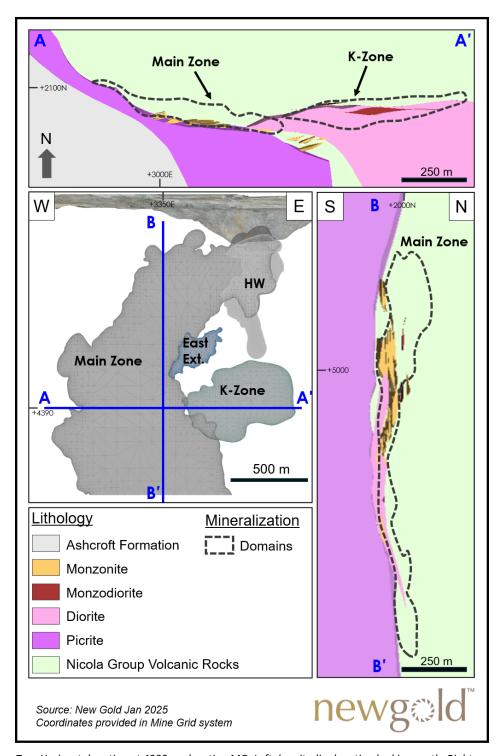
Figure 7-3: Geology map of the New Afton mine area

#### 7.4 MINERALIZATION AND ALTERATION

The New Afton deposit is a silica-saturated alkalic copper-gold porphyry deposit associated with magmatic phases of the Iron Mask Batholith. Copper-gold mineralization typically occurs as east-west subvertical tabular zones of disseminations, stringers, and fracture-filling sulphides within volcanic rocks of the Nicola Group and Pothook diorite. Host rocks have been altered and mineralized by multiple phases of monzonite intrusions and by dykes believed to be of Cherry Creek affinity. The monzonite intrusions and dykes are spatially associated with mineralization, although are not generally mineralized themselves whereas the monzodiorite dykes are often well mineralized. New Afton mineralized zones can be broadly categorized into three main areas: the Main Zone, Hangingwall (HW) zones, and Eastern zones.

- The Main Zone is a southwest-plunging tabular zone located on the western edge of the Pothook diorite; the zone extends for over 550 m along strike and over 1.5 km down-plunge. It begins on surface as the Afton Pit and continues underground subdivided into Lift 1 East, Lift 1 West, B3, C-Zone, and D-Zone mining zones. The B3 and C-Zone mining zones of the Main Zone are the only zones currently being mined.
- The HW zones are smaller satellite zones located along the southern margin of the Pothook diorite. They are roughly tabular and extend 325 m along strike and 800 m at depth.
- The Eastern zones include two separate areas located on the northern margin of the Pothook diorite: East Extension and K-Zone. East Extension is a tabular, southwest-plunging zone, that extends approximately 300 m along strike and 300 m at depth. K-Zone is currently being explored; its geometry is similar to that of East Extension, but its absolute dimensions are not known.

The mineralized zones (based on the 0.2% CuEq grade shells) are projected on a longitudinal view in Figure 7-4, together with plan-section (top) and cross-section (right) views showing their spatial and geometrical relationships with lithological units. Table 7-1 summarizes the dominant host lithology, interpreted causative intrusion, dominant alteration, and dominant style of mineralization for each mineralized zone. It also includes a description of the mineralization and associated alteration domains for each zone.



Top: Horizontal section at 4390 m elevation MG. Left: longitudinal section looking north. Right: cross-section looking west, at 3350 m E MG

Figure 7-4: Location and geometry of New Afton mineralized zones relative to lithological units



Table 7-1: Geological	characteristics of	f resource areas an	d mineralized zones
Table 7-1. Geological	ciiai actei istics o	i resource areas am	u illilleralizeu zolles

Resource Areas	Zone	Dominant Host Lithology	Causative Intrusion	Dominant Alteration	Dominant Mineralization
	Lift 1 East	Diorite	Cherry Creek Monzonite	Oxidized - Calc- potassic	Supergene
	Lift 1 West	Nicola volcanic rocks	Cherry Creek Monzonite	Potassic	Chalcopyrite- Hypogene
Main Zone	В3	Nicola volcanic rocks	Cherry Creek Monzonite	Potassic	Chalcopyrite- Hypogene
	C-Zone	Nicola volcanic rocks	Cherry Creek Monzonite	Potassic	Chalcopyrite- Hypogene
	D-Zone	Nicola volcanic rocks	Cherry Creek Monzonite	Potassic	Chalcopyrite- Hypogene
Hangingwall	HW 1	Nicola volcanic rocks	Cherry Creek Monzonite	Calc-potassic	Chalcopyrite- Hypogene
Zones	HW 2	Nicola volcanic rocks	Cherry Creek Monzonite	Calc-potassic	Chalcopyrite- Hypogene
Eastern	East Extension	Diorite	Monzodiorite	Potassic	Bornite-Hypogene
Zones	K-Zone	Diorite and Monzodiorite	Monzodiorite	Potassic	Bornite-Hypogene

The mineralized zones at New Afton are grouped into three broad mineralization styles: hypogene, secondary hypogene (or mesogene), and supergene. Hypogene refers to primary sulphide mineralization which is characterized by the presence of chalcopyrite and bornite. Hypogene mineralization is defined for core logging purposes as containing more than 1% chalcopyrite or 0.5% bornite and is mainly associated with biotite alteration. Throughout the New Afton footprint, hypogene mineralization is subdivided in two distinctive styles:

- Chalcopyrite-dominant mineralization hosted in Nicola volcanic rocks along the margins of the monzonite stocks (Main Zone and HW zones).
- Bornite-dominant mineralization hosted in monzodiorite dykes, diorite, and volcanic rocks, located along the margins of the Pothook diorite. Monzodiorite is interpreted as causative intrusion phase for this style of mineralization (East Extension and K-Zone).

Secondary hypogene (sometimes called mesogene) mineralization is narrow, discontinuous, and commonly restricted to brittle faults. It is formed as a later overprint of tennantite-enargite + tetrahedrite, with bornite and chalcocite rimming primary sulphide mineralization.

Supergene mineralization consists of native copper and chalcocite that formed through oxidation of primary sulphides within the uppermost portions of the deposit that were exposed to weathering and erosion. It is defined for core logging purposes as containing 0.5% or more native copper, or, in the absence of native copper, intervals of

strong oxidation (hematite and clay) with a threshold assay of 0.2% Cu. The supergene domain is roughly conical in shape and centered below the historical Afton pit.

The alteration paragenesis at New Afton comprises a complex sequence of potassic to calc-potassic and propylitic alteration, in turn overprinted by fault-controlled phyllic assemblages, followed by localized argillic alteration. Copper-gold mineralization is directly related to biotite-dominant potassic/calc-potassic alteration in the central core of the system. Alteration assemblages are categorized and modelled into six principal alteration domains: calcic, biotite-dominant potassic/calc-potassic, potassium (K)-feldspar-dominant potassic/calc-potassic, propylitic, phyllic, and argillic. Alteration assemblages are described as follows according to their paragenetic sequence:

**Calcic:** The calcic alteration assemblage is characterized by early magnetite veins with epidote, and typically occurs within the Pothook diorite and Cherry Creek monzonite phases. Accessory minerals include apatite, actinolite, and traces of pyrite and chalcopyrite.

**Biotite-Dominant Potassic:** Biotite textures range from selective mafic mineral replacement to pervasive and texturally destructive. Biotite alteration contains accessory K-feldspar ± magnetite, and can be hosted in all rock types except for post mineral dykes. It is most commonly hosted within Nicola volcanic rocks, diorite and monzodiorite units and is intimately associated with hypogene mineralization. Biotite alteration is present in the monzonite but is strongest immediately adjacent to its contacts. Biotite is variably overprinted by chlorite or propylitic alteration.

**K-Feldspar-Dominant Potassic:** K-feldspar alteration occurs mainly in vein selvages as pervasive and texture-destructive alteration containing accessory biotite ± magnetite. It is hosted in all rock types except picrite and late dykes. Commonly seen along selvages of specularite ± epidote veins, potassium feldspar alteration intensity increases with proximity to the monzonite contacts and is strongest within the monzonite. Weakly anomalous copper grades are common but not always present within the K-feldspar alteration envelope. Bornite and elevated copper grades occur within patchy K-feldspar-altered Nicola volcanic rocks throughout the mineralized zones.

**Propylitic:** This alteration is characterized by pervasive and selective chlorite; patchy, selective to fracture-controlled epidote ± calcite replacing mafic crystals; and pyrite and magnetite throughout. It is common in fragmental and crystalline Nicola volcanic rocks where epidote selectively replaces fragments and crystals. Propylitic alteration forms the outer periphery of the potassic domain. The outer limit of this alteration is unknown.

**Phyllic:** The phyllic alteration assemblage consists of dominantly patchy to pervasive sericite ± dolomite ± ankerite ± anhydrite, pyrite, tourmaline, and quartz. Phyllic alteration overprints earlier potassic and propylitic alteration at the periphery of the mineralized zones and flares outward and upward.

**Argillic:** This alteration is characterized by narrow, discontinuous, buff-coloured lenses of kaolinite, dolomite, and sericite that occur along faults that cut the ore body. Secondary hypogene mineralization is associated with this post-mineral style of alteration.

The mine area is traversed by arc-related regional-scale fault zones which are interpreted as principal controls for the intrusion of the batholithic rocks and mineralization, as they host copper sulphide disseminations, fracture filling, and stringer veinlets along volcanic and intrusive contacts. The rheological and chemical contrast between

Signature Date: February 10, 2025



Technical Report New Afton Mine

the less competent picrite and more brittle Nicola volcanic rocks provided a conduit for hydrothermal fluids.

Narrow secondary structures were mineralized by an overprint of hypogene tennantite-tetrahedrite mineralization.

The faulting and associated fracturing also provided conduits for meteoric waters, which gave rise to weathering and produced the supergene alteration of the primary sulphide mineralization.



## 8 DEPOSIT TYPES

Porphyry deposits are subdivided into alkalic and calc-alkalic types based on the geochemical nature of the magma and the differences in rock chemistry and styles of alteration and mineralization. New Afton is an alkalic coppergold porphyry deposit. Geochemical characteristics of alkalic porphyry deposits may include the following features:

- High contents of alkali metal oxides, such as sodium and potassium, relative to silica content.
- Complex alteration paragenesis including sodic, potassic, and calc-potassic alteration.
- Association with highly oxidized hydrothermal fluids, a magnetite-rich core, and distal hematite.
- Locally enriched in gold and platinum-group elements.

Other differences between British Columbia alkalic and calc-alkalic porphyry deposits include the type of causative intrusion and their extent, as well as the hosts to mineralization:

- The New Afton causative intrusions are multi-staged and comprise narrow stocks, plugs, dykes, and dyke swarms associated with multiple hydrothermal events, that cover only a few hundred square metres. In contrast, calc-alkalic deposits are typically associated with large plutons that extend for several kilometres.
- Mineralization at New Afton and other alkalic porphyry deposits can be hosted within the
  intrusive rocks, at their periphery, and in the surrounding volcanic and sedimentary rocks, while
  mineralization in calc-alkalic deposits is most commonly hosted within the large intrusive
  porphyry body.

Copper-gold alkalic porphyry mineralization results from late-stage hydrothermal activity driven by remnant heat from the porphyry intrusion. Thermal gradients within these systems give rise to broadly concentric, although often complexly intermingled, zones of alteration and mineralization. The distribution of alteration and mineral facies are largely influenced by dykes, fault systems, veins, and lithological contacts which concentrate and control fluid flow. The alkalic porphyry geological model concepts are being applied for exploration targeting purposes.

Other notable alkalic porphyry deposits within the district include Mount Polley and Copper Mountain. Regional examples of Early Jurassic alkalic intrusive complexes associated with significant porphyry style copper-gold mineralization include Mount Milligan, Kwanika, and Lorraine. Descriptions of comparable examples of the alkalic porphyry deposit model are referenced in Lang et al. (1995), Chamberlain et al. (2007), and Cooke et al. (2007).

8- Deposit Types 51



## 9 EXPLORATION

The bulk of exploration work undertaken at New Afton by New Gold has been in diamond drilling of the New Afton underground deposit and, to a lesser extent, other targets on the New Afton land package; this work is described in Section 10 of this technical report. Additional exploration work, other than diamond drilling, is summarized in Table 9-1 and outlined in the following subsections.

Table 9-1: Summary of exploration work at New Afton

Year	Exploration Work Completed
2000	Surface mapping and sampling
2004	Exploration decline developed from Afton pit
2005	1,323 line-km of airborne electromagnetic surveying (DIGHEM)
2006	70-sample petrographic study
2007	44.73 line-km radiometric survey; 2,040 soil samples
2008	Titan-24 magnetotelluric geophysical survey
2011	1,905 line-km of DIGHEM, magnetometer, and radiometric surveys
2012	Surface mapping and sampling
2013	56-sample petrographic study; 51-sample feldspar staining
2014	Ar/K and U/Pb geochronology sampling
2016	Surface mapping; ground-based gravity and magnetic geophysics and Volterra 3D IP survey
2019	Completion of 112-sample sulphur isotope study
2022	Artificial intelligence study processed on geochemistry data; 85 m exploration drift
2023	Electromagnetic and induced polarity geophysics downhole survey; 407 m exploration drift
2024	22-sample petrographic study; 24-sample sulphur isotope study; geochron sampling

#### 9.1 GEOLOGICAL MAPPING

Exploration work commenced in 2000 with mapping and sampling of the pit and of available outcrops surrounding the pit. Surface mapping and re-logging of core were conducted in 2012 to 2013 in support of the new geological model developed for the Mineral Resource estimate. Detailed surface mapping in 2016 was also conducted to help inform updates to the geological model.

#### 9.2 GEOCHRONOLOGY SAMPLES

In addition to geochronological dating done by third parties in 2014 geochronology samples were submitted to Dr. Yakov Kaputsta of Actlabs in Ancaster, ON, for potassium-argon (K-Ar) dating of sericite from various lithological units affected by post-mineral faulting. Results returned values suggesting that hydrothermal fluid flow along post-mineral faults was much younger than the precipitation of porphyry-related mineralization.

Technical Report New Afton Mine

In 2023, four samples were chosen for uranium-lead (U-Pb) geochronology analysis to discern absolute ages of pre-, syn-, and post-mineral intrusive rocks in East Extension and K-Zone. The samples were taken by the British Columbia Geological Survey and results are pending.

#### 9.3 Underground Development Sampling

As mine development progressed to the C-Zone footprint, muck samples were collected for each round; this began in January of 2021 and samples are still being collected as of the date of this report. Samples were then logged for their geological attributes, processed by hyper-spectral scanner, and most samples were analyzed by ICP-MS. To date, 1,767 samples have been collected and processed, with assay data available for 1,300 of the samples.

#### 9.4 GEOPHYSICAL SURVEYS

In late-2005, New Gold contracted Fugro Airborne Surveys Corp. (Fugro) to complete 1,323 line-km of airborne electromagnetic surveying (DIGHEM) of the Afton and Ajax claims. In 2008, Quantec Geoscience Ltd. conducted Titan-24 Tensor Magnetotelluric (MT) and DC Resistivity and Induced Polarization (DC/IP) surveys totalling 34.5 line-km. Several chargeability anomalies coincident with and peripheral to the Pothook pit were identified as a result of the Titan-24 magnetotelluric survey.

A radiometric survey, consisting of 44.73 line-km, was carried out in 2007.

In 2011, New Gold completed an airborne geophysical survey of its mineral claim holdings extending northwest from the mine. The survey was carried out by Fugro and consisted of 1,905 line-km of DIGHEM, magnetometer, and radiometric surveys. The results of this work are being used to support ongoing exploration of the New Afton district.

Additional geophysical surveys were conducted in 2016 including a 50.5 line-km ground-based gravity and magnetics, along with a 22.5 line-km Volterra 3D IP survey.

In 2023, a downhole Volterra borehole EM and IP survey was completed on a 1,250 m drill hole located north of the Afton pit to test the geophysical response from voluminous hydrothermal pyrite occurring at various intervals in that drill hole. The induced polarization survey was unsuccessful due to a frequency interference from nearby infrastructure. The electromagnetic survey data suggest an electromagnetic response to the immediate northwest of the drill hole and it's uncertain if the anomaly is related to geology or to interference from nearby infrastructure.

#### 9.5 Petrographic Studies

In June 2006, a 70-sample petrographic study was carried out by Vancouver Petrographics Limited on samples representing various mineralization and alteration styles from the 2005 diamond drilling.

A 34-sample petrographic study was carried out in May 2013, followed by a 22-sample petrographic study carried out in December 2013. Both studies were carried out by Vancouver Petrographics. Samples were collected from the 2012 drilling program; most of them showed strong K-feldspar alteration.

Technical Report New Afton Mine

In December 2023 a 22-sample petrographic study was carried out by Vancouver Petrographics Ltd. The suite comprised samples collected from 2022 to 2023 diamond drilling at East Extension representing various lithological units, mineralization, and alteration styles.

#### 9.6 FELDSPAR STAINING

A 51-sample feldspar staining study was carried out during the 2013 drilling campaign. Samples selected for the study were stained by sodium cobalt nitrate and amaranth to determine if the samples had been altered by secondary potassium feldspar. Some samples were also submitted during the 2014 drilling program; most of them showed strong K-feldspar alteration.

#### 9.7 ISOTOPE STUDIES

Between 2016 and 2019, 112 samples were submitted to Actlabs for sulphur-isotope analysis on hand-picked sulphide-bearing minerals. Values for  $\delta^{34}$ S ranged from -26.3 to 33.3 per mil and demonstrated a general zonation from depleted values proximal to mineralization to higher values with increasing distance from known mineralization.

In 2024, 24 samples of disseminated pyrite and anhydrite from underground drill core were collected within the haloes of phyllic-altered domains around porphyry copper-gold mineralization; these samples were processed and analyzed for sulphur isotopes. Twenty-four handpicked sulphide and sulphate samples returned  $\delta^{34}$ S values consistent with other studies, showing a depletion towards mineralization. This feature is being used as an exploration vector.

#### 9.8 ARTIFICIAL INTELLIGENCE STUDIES

In 2020 an artificial intelligence study was completed by Minerva-Driver. It derived clustered solids to gain a better understanding of the New Afton deposit and to provide vectors for further underground exploration. This model, in combination with a geochemical principal component analysis, was used to identify three broad target zones: the West Zone, SE Zone, and North Zone.

#### 9.9 EXPLORATION DRIFTS

Starting in November 2004, an exploration decline was developed from the south wall of the Afton open pit to provide access for underground bulk sampling and infill drilling, and for further exploration drilling needed determine the full extent of the mineralization. Since that time, several other exploration drifts have been developed to provide access for diamond drilling.

In 2024, a 407 m exploration drift was developed from the 5,000 m elevation (mine grid or MG) to facilitate exploration drilling of K-Zone and Hangingwall (HW) Zone.



#### 9.10 EXPLORATION POTENTIAL

There is strong exploration potential down dip and down plunge of the known mineralization as well as along lithological contacts between the Nicola Group volcanic rocks and intrusive phases of the Iron Mask Batholith (IMB; Pothook diorite and Cherry Creek monzonite). Several of the targets proximal and laterally adjacent to the Main Zone mineralization (East Extension, K-Zone, etc.) are strongly structurally controlled by syn-mineral faults that are likely long-lived and have been reactivated with post-mineral fault displacement. More work is needed to unravel the structural architecture of the near-mine geological environment and post-mineral structural framework, to quantify the amount of vertical and horizontal displacement, and to follow up on mineralization offset and displacement by post-mineral faults.

The planned 2025 exploration drilling will test prospective areas focused along the IMB – Nicola Group contacts, focusing on the east side of the deposit footprint. The following three established target areas warrant follow-up drilling:

- K-Zone to better understand the extents, grade, and continuity of mineralization. The larger K-Zone footprint might require surface drilling and the development of an additional underground exploration drift to test the eastern extents and potential at depth with proper drill angles.
- Diorite Contacts underground drilling to test emerging targets with high-grade potential along the modelled northern and southern diorite contacts.
- Near-Mine Targets surface drilling to test the extension of New Afton's mineralized system towards the east and north.

New Afton exploration geologists have developed several porphyry targets via a wide array of techniques. Exploration work is ongoing, and the Qualified Person considers this to be an appropriate course of action.



## 10 DRILLING

New Gold has completed approximately 490 km of surface and underground drilling on the New Afton mining lease from 2000 to 2024, as summarized in Table 10-1 and illustrated in Figure 10-1 and Figure 10-2. However, the drilling database for resource estimation purposes only includes drill holes in the general vicinity of the New Afton deposit and excludes many of the distal exploration drill holes, geotechnical drill holes, and RC and Sonic drill holes that do not impact the Mineral Resource estimate. A total of 1,047 diamond drill holes with a cumulative length of 426,131 m were used for the Mineral Resources estimate.

Table 10-1: Summary of New Gold drilling at New Afton (2000-2024)

Year/ Program	Collar Location	Hole Type & Sample Size	No. of Holes	Total Metres	Targets
2000– 2003	Surface	Core (NQ, BQ)	117	53,814	Main Zone; three of these holes were for installation of piezometers
2005–	Surface	Core (HQ, NQ, NQ2)	71	23,777	Main Zone delineation and resource expansion. Piezometer installation and geotechnical purposes. Two
2006	Underground	Core (HQ, NQ2, BQ)	115	44,017	exploration holes targeting C- Zone.
2007–	Surface	Core (HQ, NQ)	50	24,656	Hangingwall zones, as well as depth extensions to the C-
2008	Underground	Core (NQ)	23	4,982	Zone. Geotechnical drilling was also conducted from both surface and underground.
2009–	Surface	Core (HQ, NQ2); RC	30	9,957	Drilling to test the Main Zone at ~5,050 m MG level. Holes also drilled along strike of what is now the HW1 Zone.
2011	Underground	Core (HQ, NQ2)	60	8,782	Extensive geotechnical drilling.
2012-	Surface	Core (HQ, NQ); RC; Sonic	83	13,196	Definition and expansion of the C-Zone; exploration drilling on Hangingwall Zone, A and B portions of the Main
2014	Underground	Core (HQ, NQ)	219	100,165	Zone, and East Extension. Geotechnical drilling on Tailing Storage Facility (TSF), and underground.
2015-	Surface	Core (HQ, NQ); RC; Sonic	155	19,726	Resource expansion drilling on C-Zone, Gold Zone, and HW
2018	Underground	Core (HQ, NQ)	68	25,029	Lens. Surface and underground geotechnical drilling.
2019–	Surface	Core (PQ, HQ, NQ); RC; Sonic	133	12,198	Preliminary drilling at East Extension. D-Zone and B3-West
2022	Underground	Core (PQ, HQ, NQ)	278	87,018	were also drill tested. Surface and underground geotechnical drilling.
2023–	Surface	Core (HQ, NQ); Sonic	18	10,600	Exploration focusing on resource expansion and testing down-plunge extension at D-Zone. K-Zone exploration
2024	Underground	Core (PQ, HQ, NQ)	162	52,138	drilling from underground development. Surface geotechnical drilling at the NATSF, and underground for C-Zone.

#### Notes:

1. Table includes all drilling within the mining lease except for water wells or service holes drilled for infrastructure

2. No drilling was conducted in 2004.

10- Drilling 56



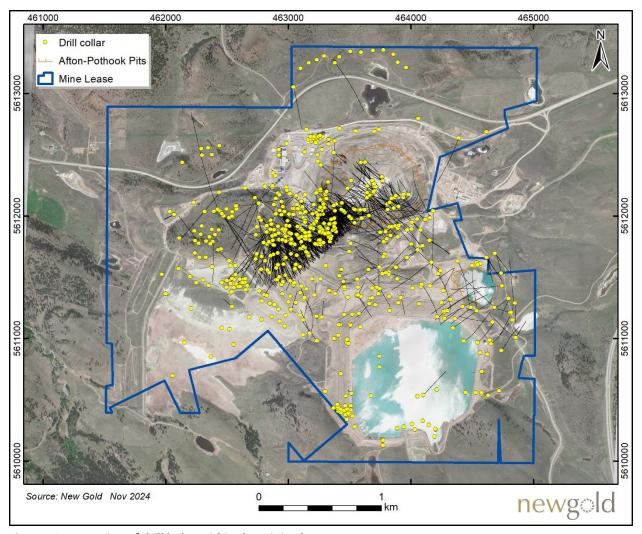
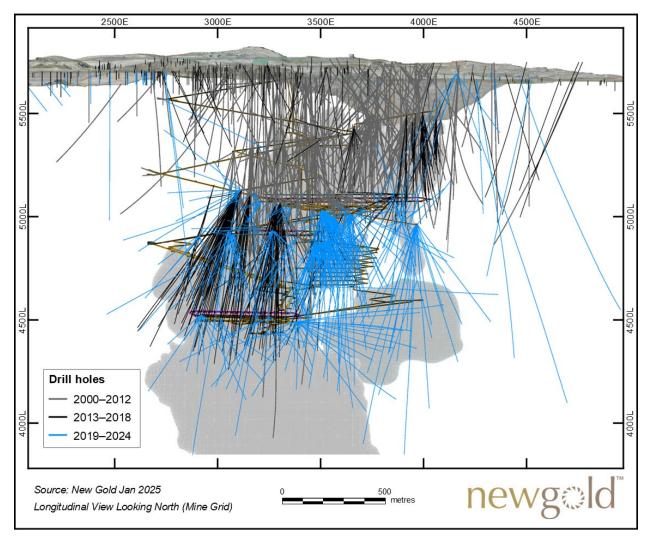


Figure 10-1: Location of drill holes within the mining lease





Note: Drilling portrayed herein includes any drill hole that was collared within the mining lease or any drilling that was drilled outside of the mining lease that has any part of the drill-string contained within the mining lease. Drill holes shown in the figure include geotechnical holes that are not included in the resource database.

Figure 10-2: Drill hole traces used to define the 0.2% AuEq grade shell and Resource estimate

## 10.1 2000–2018 New AFTON DRILLING

Most of the drilling completed between 2000 to 2018 consisted of exploration and resource definition diamond core drilling, either from surface or underground, mainly using core diameters of NA (4.76 cm dia.), NQ2 (5.06 cm dia.), BQ (3.64 cm dia.), and HQ (6.35 cm dia.) size. This drilling was carried out by contractors, mainly by Atlas Drilling Company (Atlas) of Kamloops, British Columbia. Other companies engaged in the past for exploration holes include Boisvenu Drilling Ltd. (Boisvenu) of Vancouver, British Columbia; Western Exploration Drilling Ltd. (Western) of Kamloops; FORACO Drilling Ltd. (FORACO) of Kamloops; and Connors Drilling Ltd. (Connors) of Kamloops. No drilling was conducted in 2004.



### 10.2 2019–2024 New Afton Drilling

Since 2019, drilling was mainly conducted underground and to a far lesser extent at surface. Most of the underground drilling was completed with HQ and NQ diamond drill core with a focus of increasing the confidence and resolution of the mineral resource (Table 10-1). During this period, 162,011 m were drilled in 591 drill holes, focusing mainly on characterizing underground resource targets at East Extension, HW, and D-Zone. Underground preliminary exploration drilling targeted Al-targets and K-Zone, while surface exploration drilling focused on nearmine targets on the mining lease.

### 10.2.1 DRILLING CONTRACTORS AND EQUIPMENT

Atlas Drilling Ltd. (Atlas), based out of Kamloops, BC, has been the primary diamond drilling contractor on the New Afton deposit since 2000. Atlas operates Zinex A10 rigs for surface drilling and U5 rigs for underground drilling. Diamond drill core rigs have been used for all surface and underground resource expansion drilling since the last technical report published in 2020.

Geotechnical and hydrogeological diamond, RC, and sonic drilling has been completed by both Geotech Drilling Services Ltd. (Geotech) and Foraco Drilling Ltd. (Foraco), both based out of Kamloops. Results from these holes have not contributed to resource definition drilling from 2019 to present; although these holes have been logged for geology and geotechnical purposes, these diamond drill holes are spatially separate from the Resources being updated herein.

### 10.2.2 Drill Hole Coordinates and Downhole Surveys

Drill hole survey procedures from 2019 to present have been consistent with those followed by previous operators (Normand et al., 2020).

Diamond drill hole collar locations were surveyed by New Gold's mine survey team prior to drilling and re-surveyed by collecting the easting, northing, elevation, azimuth, and dip after drill hole completion. The orientation of the drill head is measured using a Reflex TN14 gyrocompass operated by the drill operator. Downhole dip and azimuth data were also measured for diamond core drill holes by the drill contractor using a DeviGyro Overshot Xpress (OX) downhole tool. Survey data were inputted into the logging software as described in the next section.

### 10.2.3 DIAMOND DRILL CORE LOGGING PROCEDURES

Up until 2023, core logging was done directly into laptop computers using Maxwell Geoservices LogChief software, which linked directly into a maxgeo DataShed database. Logging computers were backed up daily to the New Afton server and synchronized to DataShed once hole logging was complete. Since 2023, core logging information is recorded into Seequents' MX Deposit software and the data are verified prior to being uploaded into DataShed.

Core logging procedures remain similar to those of past years: core was logged for lithology, alteration, mineralization, and geotechnical data, and was then sampled. Current practice is for the core boxes to be transported to the logging building, laid out on racks, and washed with water to remove drilling mud. The core is pieced together to consolidate it, and the footage markers are converted to metres. Core lengths are measured

forward and backward from each block to check for missing intervals. Boxes are then marked with hole ID, box number, and "from" and "to" depths.

Geotechnical logging includes magnetic susceptibility, rock quality designation (RQD), recovery, total number of joints, rock strength, joint filling, joint set angle, joint alteration, number of joint sets, joint aperture (gap separation), and joint roughness. Each characteristic has been assigned a range of valid entries which must be chosen by the logger for entry into the computer, allowing the geotechnical staff to calculate rock mass classification parameters. For oriented core, a Boart Longyear TruCore orientation system is used, and the core is assembled in a tray and aligned with the orientation marks. Structural orientation measurements are collected and fed into the logging software (currently Seequents' MX Deposit, formerly Maxwells' Logchief) along with corresponding depth and some descriptive comments. The exploration geologist planning the holes selects which holes are to be drilled using oriented core.

Magnetic susceptibility is read directly into MX Deposit via a hand-held sensor. Five measurements are taken every 30 cm to 50 cm along the core between the wooden depth markers. These values are then averaged for the block-to-block interval.

Once in every 50 m of core, a representative core specimen is taken for point load testing. The tests are conducted using a hand-operated PIL-7 point load tester. Pieces of broken core are collected after the test and returned to the core box.

The wet core is photographed while on the logging benches, with the boxes arranged in groups of four per image.

The core is then logged for lithology, texture, alteration, and mineralogy along with structural parameters. As with the geotechnical logging, MX Deposit (and formerly LogChief) has been configured with templates restricting the range of entries to improve consistency. Only certain codes are permitted as entries in some fields. This forces the logging to conform to the defined standards for the property. The various types of faults in the deposit have been characterized and codes have been defined to log these features. This provides the ability to collate intercepts and better interpret the fault orientations.

Hyperspectral analysis of drill core began in 2019, using an Spectral Evolution OreXpress portable spectrometer that operates in the wavelength ranges of 350-2500 nm. A white reflectance plate designed to be used as reference material is scanned every 10 samples, and at the beginning of the sample run. A hyperspectral sample is generally collected for every sample sent for assay (every 2 m); a total of 64,498 samples have been collected to date.

Specimens for bulk density measurements are collected every 10 m through the mineralized zones, starting at 50 m above the start of the zone. The samples consist of intact pieces of core measuring 10 cm to 15 cm in length. Beginning in 2023, specific gravity has been completed in-house every 50 m using a water bath and calculated according to Archimedes' Principle, by weighing the sample when dry and then weighing it in water.

Sample intervals are marked on the core using coloured pencils, with sample tags stapled in the box alongside. The sampling process is described in Section 11.



### 10.2.4 SUMMARY OF RESULTS

Much of the resource expansion drilling conducted from 2019 to present was designed to expand and upgrade the Mineral Resources at East Extension, HW, and D-Zone.

Based on more than 140,000 recorded drill runs at New Afton, core recovery averages 98.2%. This includes drilling results from 2019 to 2024 drilling that averaged 99.2% recovery.

Infill drilling for East Extension was drilled mainly from 4,880 m and 4,990 m MG elevations. Delineation drilling was conducted in 2019-2023 to test, expand, and upgrade Mineral Resources in the East Extension domain. The drilling confirmed the geological interpretation of mineralization along the northern contact of the Nicola Group volcanic rocks and the Pothook diorite. The mineralization is mainly contained within and immediately adjacent to tabular and subvertical monzonite-monzodiorite intrusive bodies.

Follow-up drilling completed at HW was completed from a newly developed exploration drift where holes were collared at 5,000 m MG elevation. Results confirmed the interpretation of mineralization being hosted on the immediate south side of the J-Fault within Nicola Group volcanic rocks. In this area, the J-Fault is a boundary fault between the Pothook diorite and Nicola Group Volcanics. Eastern HW notably contains voluminous post-mineral latite dikes that cross-cut mineralization and its host lithological units.

D-Zone delineation drilling was consistent with previous drilling; it defined mineralization between the HW and Footwall faults and demonstrated that mineralization was constrained to the south by the ultramafic picrite unit.

Exploration drilling below and to the east of East Extension was successful in intersecting porphyry-style alteration and strong bornite and chalcopyrite mineralization, thus defining the K-Zone.

## 10.3 COMMENTS ON DRILLING

The Qualified Person is of the opinion that the drilling, core logging, and sample handling procedures have been conducted using and exceeding industry best practices. The appropriate level of quality and accuracy has been recorded to provide sufficient confidence in the drill hole location for three-dimensional geological, geotechnical, and grade modelling of the New Afton deposit. It is the Qualified Person's opinion that there have been no apparent drilling or recovery factors that would materially impact the accuracy and reliability of the drilling results.

# 11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

The quality control measures at site and at the laboratories are discussed in section 11.4.

### 11.1 2000–2003

Core drilled and sampled by New Gold during the 2000 to 2003 programs was split in half with half retained on site and the other half sent for assay to Eco Tech Laboratories Limited (Eco Tech) in Kamloops, British Columbia. Eco Tech was independent of New Gold and its accreditation(s) at the time of the 2000 to 2003 programs, is not known.

At the lab, all samples were sorted, documented, dried (if necessary), roll crushed to -10 mesh, split into 250 g subsamples, and pulverized to 95% -140 mesh. When requested, samples for copper (Cu) metallics assay were split and pulverized into additional 250 g sub-samples of -10 mesh material. All equipment was flushed with barren material and blasted with compressed air between each sampling procedure. The entire pulp was screened to -140 mesh. Gold (Au) and palladium (Pd) were sub-sampled to 30 g aliquots and analyzed by conventional fire assay using Atomic Absorption (AA) and/or Inductively Coupled Plasma (ICP) finish. Minimum reported detection for gold and palladium was 0.005 g/t. Copper and silver (Ag) content was determined by AA using aqua regia digestion. Metallic copper (when required) included two copper assays per sample.

The New Afton property was fenced and gated, and reasonably secure. After the core was logged and sawed, tied sample bags were locked in New Gold's field office until picked up by personnel from Eco Tech for transport to their facilities. Drill core was stored in core racks at the secure core shack. Rejects were kept at Eco Tech's office and pulps were securely stored at New Gold's field office.

### 11.2 2005–2011

All analytical work continued to be performed by Eco Tech. Eco Tech was independent of New Gold and its accreditation(s) at the time of the 2005 to 2011 programs, is not known.

Sample preparation and analysis were carried out in the same manner as the 2000 to 2003 programs, with all samples analyzed for copper, gold, silver and palladium (Cu, Au, Ag, and Pd). If native copper was reported on the sample sheets, a metallic screen analysis was run in addition to the regular assay. Pulps for one-in-five samples over selected intervals were run using aqua regia digestion with ICP mass spectrometer finish (AR-ICPMS) for 29 elements in 2005, 30 elements in 2006, and 35 elements for 2007–2009 programs. In 2010 and 2011, 45-element AR-ICPMS was performed on all samples. Bulk density measurements were made at Eco Tech, using a water immersion method. Sample transport and handling protocols were described as being similar to those used in previous programs.

## 11.3 2012—PRESENT

Core samples were selected at two-metre intervals (and, starting in the spring of 2024, at lithology breaks) by New Gold geologists. Sample tags were stapled to the boxes at the start of every sample and the core was marked for core cutter reference. Trained core cutters cut the core samples in half using an Almonte automatic core saw. Half was retained in the core box and the other half was inserted into labelled clear poly bags along with the sample tag then zip tied. Samples were then bundled into clearly labelled larger rice bags, zip tied, and shipment paperwork completed for delivery to or pickup from personnel from the primary assay lab, which, in 2012, was changed to Activation Laboratories Limited (Actlabs) in Kamloops, British Columbia, and continues to be used today. The Kamloops Actlabs facility has ISO/IEC 17025:2017 accreditation and is independent of New Gold. The Actlabs facility moved to a new location in Kamloops in 2023 with construction continuing into 2024. During this time, all samples continued to be prepared in Kamloops and pulps were sent for assay to the Ancaster Actlabs facility in Ontario, which also holds ISO/IEC 17025:2017 accreditation. Pulps were packaged into boxes and securely sealed then shipped overnight to Ancaster using Fedex.

In 2024, a chain of custody document was implemented to record sample handover from New Gold staff to Actlabs staff. Transport of the samples from the site to the laboratory is done on a frequent basis and in a secure manner, either delivered to the lab by New Afton staff or picked up by Actlabs staff. Pulps and coarse rejects are returned to the New Afton Mine Site periodically and stored in secure storage containers and crates, respectively.

Once samples are received at the lab, they are sorted into sequence order according to the shipment form and checked for discrepancies in number, sequence, and sample type. Core and coarse blank samples are weighed for a received weight and then racked in order and placed into a 40°C drying oven until dry. Dried samples are removed from the drying ovens and weighed a second time to record the dried weight. Samples are transported to preparation stations where the entire sample is crushed to 80% passing 2mm, riffle split to ~1 kg and pulverized to 95% passing 105 µm. The reject is placed into a plastic bag and stored in sample storage and sent to New Afton mine site for long term storage at the end of the program. Between each sample, cleaning sand is used to clean the pulverizer bowls. The pulverized samples are bagged in pulp bags, stored in boxes, and logged into the Actlabs sample storage program. Samples given a suffix designation of R1 are preparation duplicates of the original sample. These are made by riffle splitting the reject again to ~1 kg and pulverized to 95% passing 105 µm. Samples given a suffix designation of R2 are pulp duplicates where the original pulp is split in half to create the R2 sample. Pulp standard and blank samples remain with the batch of samples in the corresponding sequence order. The unopened packet is placed in a pulp bag and stored with the batch of samples as any regular sample prior to analysis. Quality control of the preparation procedure is done by an internal procedure of performing sieve checks on the rejects and pulps of the first 2 samples of each batch and every subsequent 50th sample.

A 50 g pulp sample is analyzed for gold (Au), platinum (Pt), and palladium (Pd) by fire assay with ICP optical emission spectroscopy (OES) finish with a lower detection limit of 2 ppb for gold and of 5 ppb for platinum and palladium. When coarser gold is encountered and metallic screen is required, a representative 500 g split (from 1,000 g) is sieved at 100 mesh (149 microns). Fire assay with a gravimetric finish is performed on the entire +100 mesh and 2 splits on the -100-mesh fraction. The total amount of sample and the +100 mesh and -100 mesh fraction is weighed for assay reconciliation. Measured amounts of cleaner sand are used between samples and saved as gold may plate out on the mill. When native copper is observed and metallic screen requested, a

representative 100 g split is used following the same metallic screen preparation and analysis as described above for gold.

A 0.5 g sample is analyzed for 36 elements by four-acid digestion with ICP Optical Emission Spectroscopy (4A-ICPOES) finish. Mercury (Hg) was removed from the analysis suite and replaced by selenium (Se) in July 2021. If the copper assay value from 4A-ICPOES is greater than 5,000 ppm, the sample is rerun using four-acid digestion and ore grade ICPOES for a more accurate result. Since 2012, mercury (Hg) has been analyzed by cold vapour flow injection mercury system (FIMS).

Samples are properly identified and recorded in a secure DataShed relational database server. The samples are stored in a secure location on the New Afton mine site and always in the custody of New Gold personnel or their designates.

# 11.4 ASSAY QA/QC

### 11.4.1 2000-2003

From 2000 to 2003, one standard or certified reference material (for copper, gold, silver, and palladium) and one blank were inserted into the sample stream approximately every 22-23 samples by New Gold geologists. Details about these standards and blanks are not available and therefore the integrity of the QC samples cannot be verified. Internal standards for all elements assayed were routinely inserted by Eco Tech. One in nine pulp samples were re-assayed as repeats and one in 25 reject samples were re-split and re-assayed by Eco Tech. Pulp duplicate external check samples were randomly selected and sent to Cominco Assay Laboratories and Acme Analytical Laboratories of Vancouver (both laboratories are independent of New Gold and accreditation(s) at the time of the 2000 to 2003 programs are not known).

### 11.4.2 2005–2006

Starting in 2005, a blank, standard, and duplicate were inserted into the sample stream every 8 samples. Blanks were barren intersections of Nicola Group selected by the geologist and inserted in the sample preparation stream as whole core. Sample QA/QC data from the underground drilling program were analyzed by Ron Konst, P.Geo., an independent consultant retained by New Gold in 2006 (Konst, R.B., 2006). Konst noted that 53 blank assays and 18 standard assays had assay results outside of an acceptable error limit. These samples comprised 7% and 2% of the total blank and standard assays, respectively, although it was reported that several of the standard outliers were the result of improper labelling (i.e., standards sent as blanks, and vice versa). The Konst report recommended that the batches with failures be investigated and re-assayed, if appropriate. This work was carried out and no material changes to the assay database were needed. Several of the blank failures were found to be misidentified in the database and did not represent improper assay results. The internal duplicate data were analyzed using scatter diagrams and Thompson-Howarth plots to determine if any biases were present and to define the assay precision. The precision for copper at a 0.6% grade was ±9%, and for gold at a 0.5 g/t grade, ±20%. No biases were detected.

Internal Eco Tech lab checks consisted of at least two repeats, one blank, two re-splits, and two or three reference standards, one for copper, one for silver, or one combined copper/silver and one for gold/palladium. Assay results and internal check results were checked and batches reran if problems were observed.

In 2019, RPA reviewed the Konst report (RPA 2020) and the QA/QC data and no concerns were flagged following an independent analysis of the QA/QC assays. RPA concurred with the principal conclusion of the Konst report and considered the assay data suitable for use in mineral resource estimation.

### 11.4.3 2007-2011

Both internal (Eco Tech) and external QC sample insertion rates and types from 2005 to 2006 programs continued to be used through to 2011. In was previously reported that New Gold consultant, Bruce Davis, reviewed the QA/QC data in October 2008 and found that QA/QC results showed significant deficiencies and that remedial measures had not been taken. The recommendation was made to select approximately 300 sample pulps for re-assay of copper and gold, both at the principal laboratory—Eco Tech—as well as at another laboratory. The results of this re-assay program did not indicate any concerns with respect to bias; however, the data did display a somewhat high level of scatter for pulp duplicates possibly attributed to a nugget effect. No records of this assessment were found; however, database records shows that re-assays were performed in 2008 on splits of coarse reject material and original pulps.

### 11.4.4 2012—PRESENT

Assay QA/QC measures consisted of the insertion of certified standards for gold and copper and blanks into the sample stream at a rate of every 40 samples, along with duplicates of both pulp and coarse reject material every 20 samples. The decision was made in the spring of 2024 to change the QC insertion rate to every 30 samples to ensure at least one of each standard was included in each 35-sample fire assay batch. Every 50th pulp is sent to ISO accredited SGS Canada Incorporated, in Burnaby, British Columbia, for an external pulp duplicate check assay. SGS Canada Laboratory in Burnaby (British Columbia) is independent of New Gold. Actlabs inserted a cleaning blank every 10th sample and several certified standards to verify all elements analyzed. Since 2012, various standards were used; standards for gold were mainly supplied by Geostats (Australia) and standards for copper were supplied by both Geostats (historically) and CDN Laboratories (British Columbia) starting in 2016. Table 11-1 lists the statistics of all standards and blanks used since 2012. Currently, 11 certified standards and blanks are in use; they are included in Table 11-1.



Table 11-1: Standards and blanks for 2012-2024 programs

		No. of	Expected	Lower Value	Upper Value	Calculated	Calculated	Bias of	Years In
Standard	Element	Samples	Value (ppm)	(ppm)	(ppm)	std dev	Mean	Mean %	Use
GLG307-3	Au	495	0.003	0.00	0.008	0.005	0.002	-34.0%	2012-2013
G911-6	Au	193	0.17	0.14	0.20 0.01		0.16	-6.0%	2014
G316-3	Au	809	0.21	0.18	0.24	0.01	0.20	-5.7%	2019-2024
G316-4	Au	194	0.24	0.21	0.27	0.01	0.23	-4.6%	2017-2019
G303-8	Au	25	0.26	0.17	0.35	0.01	0.24	-6.9%	2016
G308-7	Au	100	0.27	0.21	0.33	0.01	0.25	-7.0%	2016
G909-7	Au	342	0.49	0.40	0.58	0.02	0.46	-5.4%	2012-2013
G398-4	Au	50	0.66	0.51	0.81	0.02	0.65	-1.8%	2014-2016
G907-1	Au	138	0.79	0.64	0.94	0.05	0.77	-2.5%	2017-2020
G318-8	Au	258	0.79	0.70	0.88	0.03	0.77	-2.2%	2020-2024
G999-1	Au	366	0.82	0.64	1.00	0.04	0.78	-4.4%	2012-2016
G909-1	Au	359	1.02	0.84	1.20	0.04	1.00	-1.6%	2012-2020
G318-1	Au	96	1.05	0.93	1.17	0.03	1.03	-1.9%	2020-2024
G901-7	Au	123	1.52	1.34	1.70	0.05	1.46	-3.9%	2012-2013
G997-6	Au	67	1.68	1.44	1.92	0.08	1.67	-0.8%	2014-2024
G311-2	Au	68	4.93	4.39	5.47	0.19	4.92	-0.1%	2012-2024
CDN Labs BL-10	Au	621	BDL	BDL	10*LDL	0.002	0.002	-	2013-2024
Cleaning Blank	Au	2136	BDL	BDL	10*LDL	0.002	0.002	-	2012-2024
Oyama Blank	Au	2585	BDL	BDL	10*LDL	0.006	0.002	-	2014-2024
CDN Labs CM-31	Cu	659	840	660	1020	29.85	810.66	-3.5%	2016-2023
CDN Labs CM-37	Cu	235	2120	1760	2480	79.42	2147.28	1.3%	2016-2022
CDN Labs CM-32	Cu	341	2340	2040	2640	78.39	2324.60	0.7%	2022-2024
CDN Labs CM-27	Cu	295	5920	5020	6820	149.94	5927.59	0.1%	2016-2024
GBM999-8	Cu	548	1852	1528	2176	72.19	1887.12	1.9%	2012-2016
GBM995-4	Cu	180	3497	2954	4040	146.01	3431.17	-1.9%	2013-2014
GBM312-7	Cu	47	6182	5432	6932	217.36	6062.34	-1.9%	2014-2016
GBM910-5	Cu	244	7952	7007	8897	212.14	7794.71	-2.0%	2012-2014
GBM910-6	Cu	79	10084	9157	11011	236.08	9869.62	-2.1%	2012-2013
GBM302-9	Cu	69	12720	11313	14127	343.47	12637.68	-0.7%	2014-2024
GBM396-6	Cu	43	13903	11743	16063	393.02	13548.84	-2.6%	2014
GBM311-10	Cu	124	17334	15252	19416	541.36	17183.87	-0.9%	2012-2014
GBM309-4	Cu	21	22334	19193	25475	635.61	22100.00	-1.1%	2014-2016
GBM308-14	Cu	43	37188	33537	40839	743.19	35934.88	-3.4%	2012-2014
CDN Labs BL-10	Cu	621	BDL	BDL	100*LDL	15.83	39.45	-	2013-2024
Cleaning Blank	Cu	2133	BDL	BDL	100*LDL	9.81	5.66	-	2012-2024
Oyama Blank	Cu	2584	BDL	BDL	100*LDL	39.93	10.05	-	2014-2024

Notes: Std Dev = Standard Deviation, BDL = Below Detection Limit, LDL = Lower Detection Limit.

QC is performed on every assay batch upon receipt using the QAQCR program, part of the Maxwell Geosciences (MaxGeo) suite of programs that works in conjunction with the DataShed database. The standard and blank results are plotted against the confidence limits which are defined as three standard deviations from the certified expected value. If one standard sample plots between 2 and 3 standard deviations, it is flagged and closely monitored moving forward. Should two standard samples plot between 2 and 3 standard deviations, this is considered a failure. Any values above 3 standard deviations are automatic failures. Failures are checked to confirm that there was no misidentification of QA/QC sample material. Once confirmed, failures are re-assayed along with five shoulder samples on either side in the sample stream until the standard is within the error limits. Should there be more than 2 failures in a batch, the entire batch is re-assayed. Failures and re-assays are always addressed immediately.

Standard G316-4 was closely monitored over several years and although it exhibited good accuracy, the standard continually plotted below one standard deviation from the expected mean. It was eventually replaced by G316-3 which performs slightly better, but still below the expected value. Both standards were sent to multiple labs as a check, and it was determined that low-grade Geostats standards run low for fire assay/ICP analysis.

Coarse blanks are labelled as Oyama Blank in Table 11-1; they are composed of barren rock that has been confirmed to be zero grade. The pulp blank is listed as the Cleaning Blank in Table 11-1; it is a certified blank from CDN Laboratories. Both pulp and coarse blanks are added to the sample stream immediately following a high-grade core interval. Where no high-grade intervals are noted, coarse blanks are added every 40 samples. Failures for blanks are defined as results greater than ten times the detection limit for gold and 100 times the detection limit for copper; these failures trigger the same protocols as those followed for failures of standards.

The current practice is for a QA/QC report to be generated at the conclusion of a drill program and for resource updates. Standards and blanks are plotted in chronological order on Performance Charts. For standards, lines are also plotted which represent the expected value, upper limit (+ three standard deviations), and lower limit (- three standard deviations). Pulp, coarse reject, and external check duplicate results are plotted on scatter diagrams to check for bias and on coefficient of variation diagrams to estimate the precision. Table 11-2 lists the duplicate summary results since 2012. There does not appear to be any persistent bias in the pulp and coarse reject duplicate results.

Table 11-2: Pulp and coarse duplicates for 2012-2024 programs

Duplicate Type	No. of Samples	Mean Original	Mean Check	Bias %	CV %	Intercept	Slope	Srma	95% CI	R2
R2 - Au	5240	0.171	0.172	0	20.64	0	1.01	0.12	0.23	0.97
R2 - Cu	5242	0.171	0.171	0	11.01	0	1	0.05	0.09	1
R1 - Au	5241	0.171	0.174	0	22.28	0	1.03	0.14	0.28	0.96
R1 - Cu	5243	0.171	0.171	0	12.73	0	1	0.06	0.12	0.99
E1 - Au	2206	0.191	0.196	0	29.31	0	1.05	0.17	0.33	0.95
E1 - Cu	2206	0.183	0.18	0	19.86	0	0.98	0.17	0.33	0.95

E1: External lab pulp duplicate; R1: Internal lab coarse reject duplicate; R2: Internal lab pulp duplicate; CV: Coefficient of variation; CI: Confidence interval; Srma: Standard reduced major axis regression; R2: Coefficient of determination.

Only eight standard/blank failures were returned in 2024; four were confirmed typing errors during data entry and did not require re-assay. These entries were immediately corrected in the database (and documented). The remaining four included one coarse blank and two gold standards which passed reassay. The 2024 duplicates for gold, both pulps and rejects, were well within acceptable levels. Production results to date appear to show that the block model is performing reasonably well, and as such, there are no critical concerns with the assay database.

# 11.5 COMMENTS ON SAMPLE PREPARATION, ANALYSES, AND SECURITY

In the opinion of the Qualified Person:

- Sample collection, preparation, analysis, and security for core drill programs are in line with industry-standard methods at the time the samples were collected.
- Drill programs included insertion of blank, duplicate, and certified reference material samples.
- QA/QC program results do not indicate any problems with the analytical programs; prompt appropriate steps are taken when failures occur.
- Data are subject to validation, which includes checks on surveys, collar co-ordinates, and assay data. The checks are appropriate, and consistent with industry standards (refer to discussion in Section 12).
- Retained core has been catalogued and is stored in designated core storage facilities.

The Qualified Person is of the opinion that the quality of the analytical data is sufficiently reliable to support Mineral Resource estimation without limitations on Mineral Resource confidence categories.

68



# 12 DATA VERIFICATION

## 12.1 HISTORICAL VERIFICATION PROGRAMS

### 12.1.1 2000-2003

Technical reports by consultants Behre Dolbear (2003, 2004) described the assay validation procedures for the surface drilling program. Behre Dolbear (2004) concluded that the assay and survey database used for the Afton Mineral Resource estimation was sufficiently free of error to be adequate for Resource estimation.

### 12.1.2 2005–2006

A technical report by RPA (2006) noted that in preparing a Mineral Resource estimate in this period, RPA found several database errors, which were brought to the attention of New Gold personnel and corrected. These errors were often observed to persist in subsequent versions of the database, indicating that the validation process was not robust. Eventually, these errors were expunged; however, concerns regarding the data handling remained. RPA carried out a check of approximately 10% of the drilling database against the original assay and survey records. Drill holes were selected on a random basis, spanning the entire life of the mine to date. No errors were found.

### 12.1.3 2007-2011

When validating data for a Mineral Resource estimate in 2009, RPA selected approximately 10% of the holes drilled since the 2006 Resource estimate. No errors were found. In addition, the entire database was checked using the Gemcom validation utility. One or two very minor discrepancies were found with respect to the header information; however, none that would impact resource estimation (RPA, 2009).

A proprietary database system, called DrillView, was established with automated functions for importing, validating, and exporting the drill data. Data handling protocols were introduced which provided for the establishment of a single master database, with one person responsible for its maintenance.

Assay data were sent from the laboratory via email and hard copy to the database manager at site, where it was converted to comma-delimited files and imported into the master database for validation. The validated data were then exported to various users for specific applications such as geological interpretation, plotting, and resource estimation.

RPA reported in 2011 that its review of the data handling protocols for data acquisition and management showed them to be reasonable and consistent with common industry standards.

### 12.1.4 2012-2019

In 2012, to bring New Afton's practices in line with corporate standards, New Gold personnel transferred the DrillView database to Maxwell Geosciences (MaxGeo) DataShed database, a commercial drill data management relational database system. During this process, the database was checked for errors and corrected where

necessary. The pre-2012 assay data were compared to the assay certificates, and it was found that 11 certificates from the 2006 drilling had been improperly imported. Columns of data in the assay spreadsheets had been misidentified resulting in these columns being imported to the wrong fields in the database. This resulted in minor underestimation of gold and copper grades in some blocks in the model. New Gold reviewed the resource model and found that these errors had little impact on the Mineral Reserve estimate. Other errors found included overlapping intervals in some areas where re-assays had been carried out, and inconsistencies in downhole survey data, particularly where there were changes from one instrument to another. These inconsistencies were corrected.

A significant error was discovered in 2014 in the conversion of azimuths of downhole surveys measured from magnetic north to true north. Declination, or the difference in direction between magnetic north and true north, varies due to a continual drift of the north magnetic pole. The declination correction applied to the surveys had been kept constant throughout the history of the mine which had resulted in some significant errors in the orientation of recent holes. These were corrected in the database.

Until 2019, the database was maintained and updated by a Database Administrator in Vancouver, BC. In 2019, database management was transferred to New Afton Exploration. The database itself was hosted in the Toronto corporate office, where it was backed up hourly and weekly backups were stored off-site at the corporate office. New Afton database administrators accessed the database through a secure remote desktop connection.

## 12.2 New Gold Verification

### 12.2.1 DATABASE

The exploration work carried out on the New Afton property is conducted by New Gold personnel. New Gold implements a series of routine verification procedures to ensure the reliable collection of exploration data. All work is conducted by appropriately qualified personnel under the supervision of qualified geologists.

New Afton staff carried out a data verification program for the assay tables included in the drill hole databases by spot-checking 10% of the assay data from a selection of drill holes that intersected the mineralized wireframe domains, thus relevant to the current Mineral Resource estimate. The validation was done by comparing the selected information entered in the digital database with that of the original laboratory certificates.

Additional checks included a comparison of the drill hole collar location data with the digital models of the surface topography and excavation models, as well as a visual inspection of the downhole survey information. The validation routines in Leapfrog Geo and Maptek Vulcan software, consisting of checking for overlapping samples and duplicate records, were also carried out.

The on-site database administrator, under the supervision of the New Afton Resource geology team, validated the QA/QC results when received from the laboratories. The pre-2018 QA/QC database has been validated by independent consultants, most recently by RPA (2020). The QA/QC database review for the drilling and underground channel sampling from 2018 to 2020 is described in Section 11 of this technical report.



In the fall of 2023, the database server was moved to New Afton and DataShed was upgraded to the newest version. This new version addressed and resolved recovery and RQD calculations issues which had persisted since a 2018 upgrade. Health check SQL scripts and recommendations were performed by MaxGeo complimentary to the DataShed upgrade. Minor issues were encountered during the health check and no issues with assays were observed. Minor issues included missing details in the Metadata table, missing end-of-hole records for down hole surveys, broken database triggers, and improper database permissions. These were addressed and fixed in the database in early-2024. A database maintenance plan was implemented in 2023 to execute integrity checks, rebuild indexes, clean up history, and backup the database daily and weekly.

Until early-2022, geologists logged core using MaxGeo LogChief logging software, which had templates to limit the input to appropriate entries. The data were synchronized directly to the database at end of hole. Due to persistent technical difficulties with a newer version of Log Chief, logging was migrated to cloud-based MX Deposit in 2022. Much like LogChief, templates in MX Deposit restrict inputs to ensure consistency and accuracy. This includes the use of code lists, gap checks, autofill sample IDs, and percentage checks. In 2023, a geologist was designated to perform final checks at the end of a hole according to a set checklist of items prior to export. The drill hole data tables are exported as an Excel file and imported into the database by the database administrator using a DataShed import template. When a hole is completed, DataShed validation routines are run to capture potential errors in data entry. DataShed checks for improper from-to depth intervals, overlaps, gaps in the data, depths past end of hole, invalid angular measurements, and percentage entries greater than 100%. The collar coordinates are compared to the planned and surveyed locations and the downhole surveys are checked for abrupt changes in direction.

Assay results are emailed from the lab to the database administrator as comma-delimited (CSV) files then imported directly into DataShed using a set import template. Stored procedures within the database process core and QC assay results into the appropriate tables and views. Once imported and processed, the database administrator validates the batch QC samples in QAQCR with re-assays requested as needed. When all assay data have been imported, including re-assays and final QA/QC results, the validated database is exported to comma-delimited files and saved to the New Afton exploration server. The files are then used for geological interpretation and wireframe modelling.

### 12.2.2 MINERAL RESOURCES AND MINERAL RESERVES CHECKLISTS

New Gold has prepared internal checklist templates for Mineral Resources, open-pit Mineral Reserves, and underground Mineral Reserves to ensure that all relevant aspects have been considered in the estimations. The checklists include a list of factors to consider, based on the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019) and are completed and signed every year by the Qualified Persons and peer reviewers.

### 12.3 EXTERNAL VERIFICATION

### 12.3.1 SLR CONSULTING

At New Gold's request, SLR Consulting Ltd. (SLR), previously Roscoe Postle Associates Inc. (RPA), has been reviewing the New Afton Mineral Reserve estimates annually since 2009. The 2023 Mineral Reserves review (SLR, 2024)

included a review of the mine designs and schedules, cut-off values, dilution estimates, cost estimates, and mine economics. SLR concluded that the 2023 Mineral Reserves were estimated using industry-accepted practices, and conform to the 2014 CIM Definition Standards, however, confirmation drilling and continued support, rehabilitation, and subsidence monitoring programs remain essential. As of the time of writing this technical report, the 2024 Mineral Reserves review from SLR is ongoing.

## 12.4 Verification Completed by the Qualified Persons

### 12.4.1 Verification Completed by Mr. Vincent Nadeau-Benoit

Mr. Nadeau-Benoit supervised the preparation of the Mineral Resource estimate, and the supporting data as summarized in this report. He completed site visits during the 2023 and 2024 drilling campaigns and discussed (on-site and remotely) the Mineral Resource estimation procedures, process and considerations of reasonable prospects of eventual economic extraction, and tabulated resource estimates with the on-site Chief Geologist, the Principal Mine Engineer, and the Resource Geologist. He has undertaken verification that included site visits, core review, review of geological data collection and checks that the QA/QC procedures used by New Gold are consistent with standard industry practices. A review of previous database audits and QA/QC reports and a validation of the current drill hole database; including a 10% cross validation checks for the 2023 and 2024 drill programs (database against raw data for assays, survey collars and downhole surveys) was completed by him.

Overall, the data verification completed by the Qualified Person responsible for this section of the technical report has demonstrated that data acquisition and protocols are acceptable. The Qualified Person responsible for this section of the technical report is of the opinion that the databases are valid and of sufficient quality to be used for the Mineral Resource and Mineral Reserve estimations described in Sections 14 and 15 of this technical report.

There were no limitations in the ability of the Qualified Person to verify the data. In the opinion of the Qualified Person responsible for this section of the technical report, the verification of the sampling data, including the data entry and verification procedures, and the analytical quality control data produced by New Gold for samples submitted to various laboratories, indicate that the analytical results delivered by the laboratories are sufficiently reliable for the purpose of Mineral Resource and Mineral Reserve estimation.

### 12.4.2 Verification Completed by Mr. Joshua Parsons

Mr. Parsons has been a full-time employee of the New Afton mine since 2014. In his role as Principal Mine Engineer, he is responsible for Mineral Reserve estimation, mine design, long-term and short-term mine planning, mine geomechanics, and drill-and-blast designs. There were no limitations in the ability of the Qualified Person to verify the data and Mr. Parsons considers that a reasonable level of verification has been completed and that no material issues have been left unidentified from the programs undertaken. The information reviewed is acceptable to be used in Mineral Reserve estimation, mine planning, and supports the economic analysis underlying the Mineral Reserves.

# 13 MINERAL PROCESSING AND METALLURGICAL TESTING

### 13.1 Previous Metallurgical Testing

Initial metallurgical testing was performed in 2008 and 2009 to evaluate the mineralogy of the deposit and contribute to the design of New Afton's processing plant and tailings facility. Several studies and tests were performed as part of the testing program; these consisted of mineralogical studies, modal analysis, grinding tests, flotation tests, gravity tests, variability tests and dewatering tests. It was determined that conventional crushing, grinding and concentration processes were appropriate given the mineralogy of the deposit.

A metallurgical test program was conducted in 2015 and 2016 to improve native copper recovery once processing of supergene ore commenced in 2018; this included a pilot plant at ALS Laboratories (ALS), in Kamloops. Based on the pilot study, and to mitigate the potential risk of low recoveries of native copper, gravity circuit capacity was added to the ball mill circuit and increased in each of the tertiary and regrind circuits. The flowsheet changes were made primarily to recover native copper but the inline pressure jigs also recovered native gold associated with the supergene ore. With mining of supergene ore being completed during the third quarter of 2022, the gravity circuit operation was adjusted in 2023 to focus on recovering gold rather than native copper. No mining of supergene ore is forecast with the processing of B3 or C-Zone ore, which both consist primarily of hypogene ore with minor amounts of mesogene ore.

# 13.2 HISTORICAL PROCESSING PERFORMANCE

From 2012 to 2024, the New Afton processing plant recoveries averaged 84% for copper and 83% for gold. Recoveries have increased over the past two years, averaging 90% and 88% for copper and gold, respectively, mainly due to a finer grind size, lower throughput, the absence of supergene ore, and a lesser proportion of mesogene ore. Concentrate grades from 2012 to 2024 ranged from 20.0% to 33.8% Cu, 13.6 g/t to 26.1 g/t Au, and 36.7 g/t to 98.5 g/t Ag. The New Afton concentrate is quite clean, with mercury and arsenic grades ranging from 5 ppm to 108 ppm Hg and 0.12% to 0.98% As, peaking during the tail end of Lift 1 mining due to increased proportions of secondary mineralization (supergene & mesogene) located closer to surface. Over the past two years, the concentrate has been very clean with mercury and arsenic grades have averaged 7 ppm and 0.18%, respectively.

### 13.3 C-ZONE METALLURGICAL TESTING

In 2014, ALS carried out metallurgical testing to determine the amenability of C-Zone mineralization to the New Afton processing flowsheet. Quarter- and half-core samples of C-Zone mineralization, totalling 875 kg, were used to construct nine sub-composites and one master composite. The objectives of the laboratory testwork were to assess the chemical and mineralogical characteristics, comminution performance, and metallurgical performance of C-Zone mineralization.

13- Mineral Processing and Metallurgical Testing

Using standard chemical assaying techniques, the chemical compositions of the master composite and sub-composite samples were determined. The master composite graded approximately 0.86% Cu, 1.6% S, 0.015% As, 0.9 g/t Au, and 1.7 g/t Ag. Sub-composites ranged in grade from approximately 0.2% to 2.0% Cu, 0.87% to 3.0% S, 0.005% to 0.049% As, 0.2 g/t to 1.6 g/Au, and 0.4 g/t to 3.7 g/t Ag.

The mineral content data was generated by conducting a particle mineral analysis on the master composite and a bulk mineral analysis with liberation estimate on the sub-composites, with both techniques using quantitative evaluation of minerals by scanning electron microscopy (QEMSCAN).

ALS made the following comments regarding the chemical and mineralogical properties of the samples:

- Chalcopyrite was the dominant sulphide mineral in most of the samples, followed by pyrite.
   Bornite was also present in some samples in minor amounts.
- Tennantite/enargite was present in most of the samples. No arsenopyrite was identified,
   suggesting that most of the arsenic in the samples may be associated with the copper sulphide minerals tennantite/enargite.
- The majority of the non-sulphide gangue in all of the samples occurred as feldspars, representing approximately 23% to 52% by weight of the feed in the composites.

The comminution test results are summarized as follows:

- The semi-autogenous mill comminution (SMC) tests derived A × b values ranging from 29 to 41, giving an average of approximately 36, indicating medium to hard feed material for semiautogenous grinding (SAG).
- Bond rod and ball mill work indices ranged from approximately 17 kWh/t to 20 kWh/t, and 17 kWh/t to 19 kWh/t, respectively. The Bond work indices indicate a moderately hard to hard feed material for rod or ball milling.

Recovery for the sub-composite samples was generally excellent, averaging approximately 94% for copper and 95% for gold. Gold recovery for the sub-composites samples generally tended to follow copper recovery trends. Copper recoveries of approximately 94% and 95% were achieved in repeat rougher testing. Gold recovery to the copper rougher concentrate ranged from 90% to 94% for the two repeat tests. A higher mass recovery corresponded to a higher gold recovery of approximately 4% in the rougher concentrate.

Kinetic cleaner tests were carried out on the master and sub-composites, with the following conclusions:

- Master composite: the three-stage dilution cleaning test measured a copper recovery of approximately 85% at a copper grade of approximately 23%. Gold recovery in the copper concentrate was approximately 76% with the concentrate grading approximately 17.8 g/t Au.
- **Sub-composite:** the three-stage dilution cleaning tests measured an average copper recovery of approximately 87% at an average copper grade of 23%. Similar to the kinetic cleaner tests, samples with the lower copper grades performed poorly, while samples with higher copper grades performed relatively better. Gold performance generally mirrored copper performance.

Technical Report New Afton Mine

A single locked cycle flotation test was performed on the master composite sample, with the following results:

- Regrind size was slightly finer, at approximately K80 31 μm.
- Copper recovery measured approximately 90%, while the concentrate graded 25% copper.
- Gold recovery measured 86%, while the gold grade in the copper concentrate measured approximately 19 g/t Au.

The arsenic in the copper concentrate graded approximately 0.4%.

The above flotation testing was conducted under standard New Afton milling conditions and show that the ore is amenable to processing using the current New Afton flowsheet.

### 13.4 EAST EXTENSION METALLURGICAL TESTING

ALS carried out a metallurgical testing program on East Extension mineralization in 2022, with similar objectives and tests to the C-Zone testing program. Crushed drill core samples from East Extension, totalling 282 kg, were used to construct four sub-composites and one master composite.

The master composite graded 2.00% copper, slightly higher than the average grade of the East Extension mineralization. The gold grade of the master composite was 1.21 g/t, slightly below the average gold grade for the same zone. The average grade for silver, palladium, and arsenic were 9.8 g/t, 0.3 g/t, and 0.008%, respectively.

Sub-composites were constructed to test recovery characteristics of the four observed types of copper mineralization: secondary hypogene, low-grade hypogene, bornite-dominant, and chalcopyrite-dominant.

The comminution test results for the four sub-composites were as summarized below:

- Bond ball mill work indices ranged from 18.0 kWh/t to 20.5 kWh/t, indicating a hard to very hard feed material for ball milling.
- A 20 kg composite of the four sub-composites was constructed and sent to SGS Canada Inc. in Burnaby, BC, for SAG Power Index (SPI) with CEET (Comminution Economic Evaluation Tool) Crusher index determination which measures amenability to crushing on minimum 20mm particles. The SPI was 90.4 minutes, which represents the time required to grind from P80 12.5mm to P80 1.7 mm, at the 62<sup>nd</sup> percentile of the SGS database. The A × b value derived from the SMC test was approximately 47. The composite would be considered moderately hard in terms of SAG milling based on both SMC and SPI tests. The CEET Crusher Index was 27.5, indicating a high hardness in terms of crushing.

Recovery for the sub-composites was generally excellent, with rougher concentrate recoveries averaging 93.5% for copper and 90.5% for gold across the five composites.

A single locked cycle test was performed on the master composite. From the test, 92% of copper, 91% of gold and 62% of the palladium were recovered, producing a concentrate grade of 32.5% Cu, 16.5 g/t Au and 2.95 g/t Pd. Arsenic was also present in the concentrate, grading 0.13%.

ALS concluded that the 2022 testing of the East extension mineralization indicated that the material is amenable to processing using the current New Afton flowsheet.

### 13.5 D-ZONE METALLURGICAL TESTING

In 2024, ALS carried out a metallurgical testing program on 420 kg of mineralized D-Zone drill core to evaluate comminution, flotation, and gravity recovery characteristics. One master composite and four sub-composites were tested. The sub-composites consisted of low-, medium- and high-grade hypogene mineralization and one secondary hypogene mineralization. The grade of the master composite was 0.78% Cu, 0.59 g/t Au and 1.3 g/t Ag.

- Copper mineralization consisted primarily of chalcopyrite (more than 95%), with tennantite, enargite and bornite.
- SMC tests were completed on the master and secondary hypogene composites and resulted in A × b values of 30.7 and 32.7, respectively, indicating high hardness in terms of SAG milling. SPI results for the four sub-composites ranged from 52 to 74 minutes, indicating medium to moderately high hardness in terms of SAG milling.
- Bond ball mill work indices on the four sub-composites ranged from 18.0 kWh/t to 21.0 kWh/t, indicating a hard to very hard feed material for ball milling.

Recovery for the master and sub-composites was generally high, with combined recoveries from gravity and rougher concentrates averaging approximately 92.2% for copper and 92.9% for gold for the master and hypogene composites, and averaging 90.2% for copper and 90.8% for gold for the secondary hypogene sub-composite.

### 13.6 CLEANER CIRCUIT UPGRADE METALLURGICAL TESTING

To improve cleaner recoveries at a given rougher flotation mass pull, alternative flotation technologies were evaluated for use in the cleaner flotation circuit. The goal was to increase recovery of liberated copper sulphide minerals, which are a high proportion of cleaner losses, and improve the efficiency of upgrading compared to the current tank cells. Hatch Ltd. acted as the consulting engineer for the study. Six flotation technologies from four different vendors were evaluated in the first phase which compared potential layouts, costs and estimated metallurgical performance. Two of these flotation technologies were selected for pilot testing at the New Afton concentrator. Pilot versions of each unit were tested with assistance from their respective vendors on four streams in December 2023: Cleaner SFR Feed (Regrind Cyclone Overflow), 1st Cleaner Feed, 1st Cleaner-Scavenger Feed and 2nd Cleaner Feed. Based on the results of this testwork, layout considerations and its extensive use in similar applications, the Glencore Jameson cell was chosen for the cleaner upgrade project. Both full and partial tank cell replacement flowsheets were considered. The selected flowsheet replaces the third cleaner Outotec tank cells with a single Jameson cell. The Jameson cell will produce a final concentrate to be combined with the Cleaner SFR and gravity concentrates in a bulk concentrate. The current second cleaner tank cells will be repurposed to act as scavengers for the Jameson tailings stream.

### 13.7 Predictive Copper and Gold Recovery Formulas

Based on testwork results, predictive recovery formulas were developed (based on feed grades, grind size, and throughput rate) to forecast copper and gold recoveries for the New Afton life of mine (LOM) plan and financial models.

New Afton Mineral Reserves consist of two main ore types for the purpose of metallurgical forecasting: hypogene ore (including background material that is not classified as either hypogene, mesogene, or supergene) and mesogene ore (also referred to as secondary hypogene). Hypogene ore and background material are estimated to make up approximately 92% of current Mineral Reserves while mesogene ore makes up the remaining 8%.

The copper and gold recovery formulas are shown in Table 13-1, where *Cu* is the process plant copper head grade in percent, *Au* is the process plant gold head grade in g/t, *P80* is the tertiary hydrocyclone overflow P80 in microns, and *tpod* is the processing rate in tonnes per operating day. Based on operating experience, hypogene recovery is capped at 92%. For copper grades greater than 2%, copper recovery is constant at 85%. For gold grades greater than 1.9 g/t, gold recovery is constant at 80%.

#### Table 13-1: Predictive copper and gold recovery formulas

#### **Copper Recovery Formulas**

Hypogene Ore and Background Material:

$$Recovery = -1069.725745 \times Cu^2 + 28.082358 \times Cu + 0.71954 + (160 - P80) \times 0.0008$$

Mesogene Ore:

$$Recovery = (-2.12308 \times 10^{-9} \times tpod^2 + 4.1 \times 10^{-5} \times tpod + 0.7218) + (-0.8 \times (-0.051 - Cu) \times 0.979)$$

#### **Gold Recovery Formulas**

Hypogene and Background Material:

$$Recovery = -0.14117 \times Au^2 + 0.34802 \times Au + 0.65006 + (160 - P80) \times 0.0008$$

Mesogene Ore:

$$Recovery = (-3.22077 \times 10^{-9} \times tpod^2 + 5.84 \times 10^{-5} \times tpod + 0.6886285) + (-0.0308635 \times Au^2 + 0.092243 \times Au - 0.033668312)$$

The copper and gold grade-recovery curves are shown in Figure 13-1 and Figure 13-2, respectively, based on the processing rate and expected grind size at peak processing capacity.

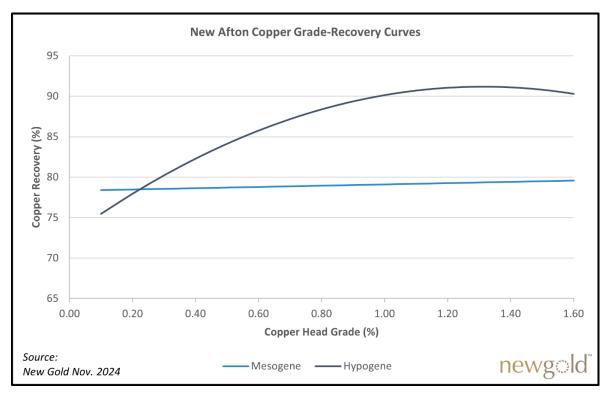


Figure 13-1: Copper recovery curves at a processing rate of 16,000 tpd

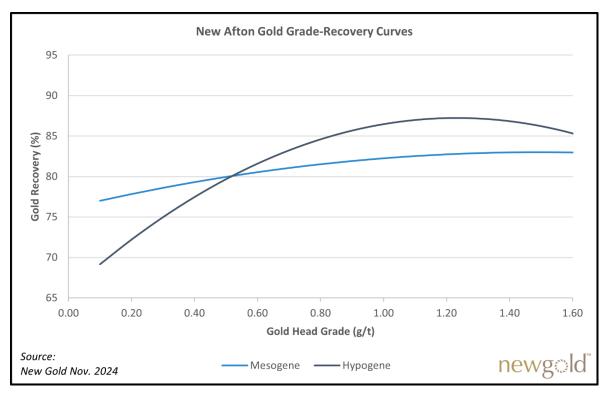


Figure 13-2: Gold recovery curves at a processing rate of 16,000 tpd

# 13.8 COMMENTS ON MINERAL PROCESSING AND METALLURGICAL TESTING

The Qualified Person provides the following comments:

- The testwork undertaken is of an adequate level to ensure an appropriate representation of metallurgical characterization and the derivation of corresponding metallurgical recovery factors for B3, C-Zone, and East Extension.
- Metallurgical assumptions are supported by multiple years of production data.
- Recovery improvements resulting from the cleaner circuit upgrade are expected to partly offset the impact of a coarser grind size, as the processing rate returns to approximately 16,000 tpd.
- Grade-recovery models for the various ore types were developed using processing throughput rates to inform the forecasting copper and gold recoveries for the LOM plan.
- LOM copper and gold recovery rates are estimated to be approximately 88.6% and 84.5%, respectively. There are no known processing factors that could have a significant effect on economic extraction.
- The New Afton concentrate has historically been very clean and marketable. There are no known deleterious elements that could have a significant effect on economic extraction.



# 14 MINERAL RESOURCE ESTIMATES

## 14.1 INTRODUCTION

Two block models were generated to estimate Mineral Resources at New Afton. The two models cover the same extent but have different block sizes to provide more flexibility with choice of mining methods. A " $10 \times 10 \times 10 \text{ m}$ " model was generated to estimate Mineral Resources for zones considered suitable for mining through block caving; these include B3, C-Zone, D-Zone, and HW Zone. A " $5 \times 5 \times 5 \text{ m}$  sub-blocked" model was generated to test potential applicability of more selective underground mining methods. The recently discovered K-Zone was estimated but is not reported in the Mineral Resource Statement given its early exploration stage, local geological uncertainty that results from low angles of drilling, and ongoing preliminary engineering studies on potential mining methods.

The Mineral Resource models are prepared using Seequent's Leapfrog Geo software (Leapfrog) and its Edge extension (Edge). Three-dimensional litho-structural, alteration, and mineralization models are generated using surface and underground diamond drill hole assays, lithology data, and structural data collected by New Gold from 2000 to 2024. The resulting geological objects are used to guide the interpretation of the resource estimation domains. Grade estimation and block modelling are carried out in Edge software. Basic statistics, capping, and validations are established using a combination of Edge and Microsoft Excel.

Mineral Resources are reported exclusive of Mineral Reserves. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources will be converted into Mineral Reserves.

The database close-out date for the Mineral Resource estimate was November 4, 2024. The Mineral Resource estimate has an effective date of 31 December, 2024, the date used for mining depletion.

This section outlines the estimation process for estimating copper, gold, and silver, all included in the New Afton Mineral Resource Statement. Arsenic, palladium, antimony, and mercury were also estimated, following a similar approach to the principal economic elements. Mineral Resource cut-off grades and grade thresholds used to model resource domains are based on copper-equivalent grade values (CuEq), calculated using the following equation and the parameters shown in Table 14-1.

Table 14-1: Copper-equivalent calculation parameters

	Copper	Gold	Silver
Price	4.20 US\$/lb	1,980 US\$/oz	24 US\$/oz
Recovery	86.40%	87.7%	73.50%
Payable	96.40%	97.00%	90.00%
Refining Charge	0.074 US\$/lb	6.00 US\$/oz	0.50 US\$/oz



## 14.2 DATABASE

The " $10 \times 10 \times 10$  m" and " $5 \times 5 \times 5$  m sub-blocked" models are based on the same drilling database which contains 1,047 diamond drill holes, drilled from surface and underground, for a cumulative length of 426,131 m. The drilling database only includes drill holes located in the general vicinity of the New Afton Mine and excludes exploration drill holes that do not impact the estimation of Mineral Resources. Drill holes included in the database were drilled between 2000 and 2024, inclusively.

Unsampled intervals are all located outside mineralized zones, or in wedged holes intervals that have been redrilled. No steps were taken to assign a default value to the unsampled drill core intervals.

The database, and all resulting models, are in mine grid coordinate system (defined in Section 2.21.2). The database was verified and approved by New Afton exploration staff and validated by the Qualified Person. The database close-out date for the Mineral Resource estimate was November 4, 2024.

### 14.3 GEOLOGICAL MODELS AND ESTIMATION DOMAINS

New Afton is a copper-gold alkalic porphyry deposit associated with sulphides that occur as disseminations, stringers, and fracture fillings and that are hosted in volcanic and intrusive rocks. Three-dimensional models for lithology, structures, alteration assemblages, and mineralization styles have been created in Leapfrog. Of importance are specific lithological units that host mineralization (Pothook diorite, monzodiorite dykes, and Nicola Group volcanic rocks), versus others that are generally barren (picrite unit) or not significantly mineralized (monzonite dykes). Only the picrite unit is assigned a grade of zero for all metals contained within.

New Afton resource domains are grade shells modelled at specific grade thresholds. The geometry of these grade shells follows other geological elements modelled independently of grade; these include lithological contacts, structures, and alteration and mineralization styles. The high density of drilling information commonly limits the degree of freedom in the interpretation of the grade shells.

Low-grade domains are generated for all mineralized zones at a grade threshold of 0.2% CuEq. In addition, subdomains are modelled for East Extension, K-Zone, and HW1 Zone to constrain higher-grade mineralization associated with bornite mineralization. Subdomains grade thresholds are 5.0% CuEq for East Extension, and 1.0% CuEq for K-Zone and HW1 Zone. Estimation was also carried out in complementing lithological domains including monzonite dykes, diorite, and Nicola Group volcanic rocks. All domains are used as hard boundaries during the estimation process. They are summarized in Table 14-2.



**Table 14-2: Estimation domains** 

Group	Grade Threshold	Domain	Description			
		Main	Grade shell covering the extent of Lift1, B3, C-Zone, D-Zone			
		HW1	Hangingwall 1 Zone domain			
Low-Grade Domains	0.2% CuEq	HW2	Hangingwall 2 Zone domain			
20		EE	East Extension domain			
		K-Zone	K-Zone domain			
	0.2% CuEq	HW1_LG	HW1 Zone low-grade domain with high-grade subdomains removed			
HW1 Refined	1.0% CuEq	HW1_HG (1)	HW1 Zone high-grade subdomain (bornite mineralization)			
Domains		HW1_HG (2)	HW1 Zone high-grade subdomain (bornite mineralization)			
		HW1_HG (3)	HW1 Zone high-grade subdomain (bornite mineralization)			
	0.2% CuEq	EE_LG	East Extension low-grade domain with high-grade subdomains removed			
East		EE_HG (1)	East Extension high-grade subdomain (bornite mineralization)			
Extension		EE_HG (2)	East Extension high-grade subdomain (bornite mineralization)			
Refined	5.0% CuEq	EE_HG (3)	East Extension high-grade subdomain (bornite mineralization)			
Domains		EE_HG (4)	East Extension high-grade subdomain (bornite mineralization)			
		EE_HG (5)	East Extension high-grade subdomain (bornite mineralization)			
	0.2% CuEq	KZ_LG	K-Zone low-grade domain with high-grade subdomains removed			
K-Zone Refined		KZ_HG (1)	K-Zone high-grade subdomain (bornite mineralization)			
Domains	1.0% CuEq	KZ_HG (2)	K-Zone high-grade subdomain (bornite mineralization)			
		KZ_HG (3)	K-Zone high-grade subdomain (bornite mineralization)			
Intrusive		Monzonite	Weakly mineralized monzonite dykes			
rocks		Picrite	Barren picrite unit – not estimated			
Other		Other	Remaining volume not included in the other domains			

HG: high grade; LG: low grade

The extents of the low-grade domains are illustrated in Figure 14-1, which are labelled in blue font. For context, the domains are shown relative to the mining zones.

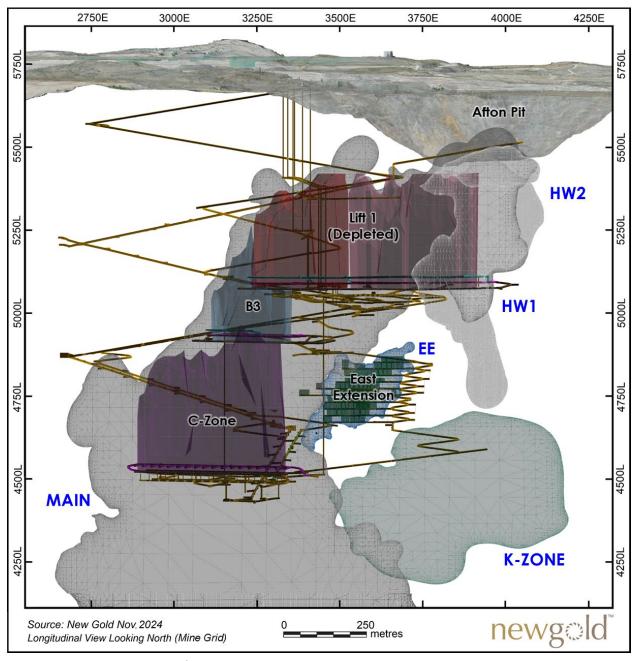


Figure 14-1: Longitudinal view of low-grade estimation domains

## 14.4 COMPOSITING

Sample interval lengths are relatively consistent in the database; 96% of samples in the vicinity of the New Afton deposit measure exactly 2 metres long. Drill hole composites are length-weighted and were generated as 2-metres-long, *down-the-hole*, with estimation domains acting as a hard boundary.

## 14.5 SEGREGATION BY ELEVATION

Drilling programs at New Afton have tested the mineralized zone to depths approaching 1,900 m below surface. Although the general nature of the mineralization stays relatively consistent independently of depth, there are subtle differences in the distributions of metals and other elements. To account for this variation, data were segregated above and below 4,900 m elevation (approximately the elevation of the B3 cave footprint) during the variography analysis and the treatment of outlier samples for the broader resource domains (Main Zone, Monzonite, and Other domains). This artificial boundary at 4,900 m is considered a *soft* boundary as data are mixed across during block grade interpolation.

### 14.6 Treatment of Outliers

Outlier samples were identified using histograms and probability plots of the distribution of copper, gold, and silver; a visual review of their location relative to the surrounding data was also conducted. Outlier samples were controlled by using traditional capping directly in the composite database and by limiting the influence of outlier samples in the grade interpolation. The capped composites above the outlier threshold grade are restricted to a maximum distance of influence of 10% of the search ellipsoid above an elevation of 4,900 m MG, and 17% below an elevation of 4,900 m MG.

Table 14-3 shows capping limits and outlier thresholds for copper, gold, and silver for each group of estimation domains.



Table 14-3: Capping and outlier thresholds per estimation domains

		Сарр	oing Threshol	d	Outlier Limit Threshold			
Group	Domain	Cu (%)	Au (g/t)	Ag (g/t)	Cu (%)	Au (g/t)	Ag (g/t)	
	Main (above 4,900 m)	10	15	80	7	8	30	
Low-	Main (below 4,900 m)	-	-	30	5	6	14	
Grade	HW1	6	8	50	3	4	15	
Domains	HW2	2.5	5	20	1.5	2	10	
	EE	-	-	90	7	9	50	
	K-Zone	-	-	35	4	4.5	22	
	HW1_LG	3	-	20	2	2.5	10	
HW1 Refined	HW1_HG (1)	-	7	-	3	4.5	15	
Domains	HW1_HG (2)	-	-	-	3	4.5	15	
20	HW1_HG (3)	-	7	-	4.5	3.5	22	
	EE_LG	-	-	-	4.5	5	50	
East	EE_HG (1)	-	-	-	-	-	-	
Extension	EE_HG (2)	-	10	-	-	-	-	
Refined	EE_HG (3)	-	-	-	4.5	-	-	
Domains	EE_HG (4)	-	-	70	4.5	7	40	
	EE_HG (5)	-	-	-	4.5	5	25	
	KZ_LG	3	5	7	2	3	5	
K-Zone Refined	KZ_HG (1)	9	10	70	7	7.5	40	
Domains	KZ_HG (2)	-	-	20	3	1.5	15	
	KZ_HG (3)	-	-	15	1.5	3	12	
Intrusive	Monzonite (above 4,900 m)	-	-	20	2.5	3	10	
Rocks	Monzonite (below 4,900 m)	-	-	7	1.5	1.5	-	
Other	Other (above 4,900 m)	4	8	50	2	4	15	
Other	Other (below 4,900 m)	-	7	15	1	4	8	

# 14.7 BULK DENSITY

Bulk density measurements were conducted on a total of 2,784 drill core samples. All density measurements were conducted by approved laboratories using industry-accepted methods.

Analysis of the measurements indicates that density tends to increase with depth. As such, density values in the block models, attributed as "SG", are applied by elevation, as shown in Table 14-4. The exception is for supergene mineralization, which is given a slightly lower density of 2.55 t/m<sup>3</sup>.



Table 14-4: Mean density by elevation

Elevation (m)	Bulk Density (t/m³)
Above 5,050	2.60
4,950–5,050	2.65
4,850–4,950	2.70
4,750–4,850	2.74
4,650–4,750	2.75
4,450–4,650	2.76
Below 4,450	2.78

Note: Supergene ore density is set at 2.55 t/m³, regardless of elevation

## 14.8 VARIOGRAPHY

Continuity analysis was completed separately for copper, gold, and silver on a domain-by-domain basis using the capped 2-metre composites in Leapfrog Edge. The spatial models were aligned in the general plane of the domains and refined using 2D radial continuity plots to fine-tune the orientation of dip, dip azimuth, and pitch. The nugget was determined using a combination of the downhole variogram and the major axis correlogram. Two spherical structures were used to fit the spatial models.

The correlograms had a significant nugget with an average of 20% for copper, 35% for gold, and 30% for silver. The broader domains (Main Zone and 'Other') had higher interpreted nugget than the other domains. The anisotropy was well-defined, with greater continuity oriented down-dip within a steep east-west plane. The average interpreted range for the main axis of the spatial models is 270 m; the average anisotropy is 5:3:1 (major: semi-major: minor axis).

Table 14-5 shows the resulting correlograms for copper, gold, and silver per mineral estimation domains.

Table 14-6 shows the resulting correlograms for copper, gold, and silver for the refined interpretations of the mineral estimation domains of HW1, East Extension, and K-Zone used in the " $5 \times 5 \times 5$  m sub-blocked" model.

As an example, the 2D radial continuity used to the determine the pitch, the experimental correlograms, and the fitted model are shown for Main Zone (for copper), above 4,900 m elevation, in Figure 14-2.



Table 14-5: Correlograms for copper, gold, and silver per mineral estimation domains

General		Orientation					Structure 1						Structure 2				
Element	Domain	Dip	Dip Azi.	Pitch	Nugget	Sill	Structure	Major	S-major	Minor	Sill	Structure	Major	S-major	Minor		
	Main > 4,900 m	85	160	100	0.25	0.40	Spherical	50.00	40.00	23.00	0.35	Spherical	250.00	174.00	70.00		
	Main < 4,900 m	75	195	100	0.25	0.50	Spherical	40.00	23.00	18.00	0.25	Spherical	280.00	160.00	40.00		
	HW1	70	205	125	0.20	0.61	Spherical	11.00	28.00	10.00	0.19	Spherical	300.00	150.00	85.00		
Cu	HW2	70	255	85	0.20	0.72	Spherical	10.00	35.00	15.00	0.08	Spherical	200.00	150.00	55.00		
Cu	East Extension	80	155	110	0.25	0.55	Spherical	35.00	25.00	15.00	0.20	Spherical	180.00	100.00	20.00		
	K-Zone	75	190	100	0.10	0.55	Spherical	10.00	60.00	15.00	0.35	Spherical	205.00	120.00	24.00		
	Other	70	340	70	0.30	0.63	Spherical	35.00	25.00	34.00	0.07	Spherical	340.00	175.00	85.00		
	Monzonite	78	335	110	0.10	0.80	Spherical	25.00	15.00	11.00	0.10	Spherical	400.00	265.00	35.00		
	Main > 4,900 m	75	340	75	0.45	0.37	Spherical	52.00	34.00	20.00	0.18	Spherical	275.00	208.00	83.00		
	Main < 4,900 m	85	200	110	0.40	0.46	Spherical	50.00	23.00	19.00	0.14	Spherical	354.00	196.00	42.00		
	HW1	75	200	110	0.30	0.52	Spherical	50.00	34.00	20.00	0.18	Spherical	250.00	124.00	45.00		
۸	HW2	75	15	105	0.30	0.67	Spherical	9.00	13.00	3.00	0.03	Spherical	175.00	70.00	20.00		
Au	East Extension	85	160	113	0.25	0.70	Spherical	36.00	27.00	19.00	0.05	Spherical	260.00	75.00	32.00		
	K-Zone	85	15	70	0.25	0.60	Spherical	11.00	23.00	13.00	0.15	Spherical	110.00	110.00	20.00		
	Other	70	200	110	0.50	0.40	Spherical	30.00	11.00	7.00	0.10	Spherical	480.00	280.00	120.00		
	Monzonite	75	230	110	0.20	0.75	Spherical	40.00	28.00	3.00	0.05	Spherical	265.00	110.00	40.00		
	Main > 4,900 m	80	350	75	0.30	0.50	Spherical	45.00	35.00	35.00	0.20	Spherical	370.00	155.00	75.00		
	Main < 4,900 m	89	355	70	0.30	0.50	Spherical	50.00	35.00	35.00	0.20	Spherical	200.00	150.00	75.00		
	HW1	85	195	110	0.30	0.59	Spherical	29.00	45.00	5.00	0.11	Spherical	225.00	150.00	60.00		
۸	HW2	20	355	105	0.25	0.54	Spherical	29.00	35.00	11.00	0.21	Spherical	160.00	100.00	60.00		
Ag	East Extension	90	160	130	0.20	0.75	Spherical	60.00	45.00	16.00	0.05	Spherical	300.00	200.00	32.00		
	K-Zone	85	15	70	0.25	0.64	Spherical	14.00	110.00	9.00	0.11	Spherical	200.00	140.00	15.00		
	Other	80	208	108	0.35	0.60	Spherical	51.00	30.00	19.00	0.05	Spherical	285.00	190.00	80.00		
	Monzonite	75	342	112	0.20	0.75	Spherical	20.00	12.00	12.00	0.05	Spherical	335.00	150.00	40.00		



Table 14-6: Correlograms for copper, gold, and silver per refined mineral estimation domains

G	General		Orientation		Nugget		Structure 1				Structure 2				
Element	Domain	Dip	Dip Azi.	Pitch		Sill	Structure	Major	S-major	Minor	Sill	Structure	Major	S-major	Minor
	EE (LG)	75	153	111	0.2	0.65	Spherical	25	20	15	0.15	Spherical	110	75	20
	EE (HG)	89	330	90	0.25	0.57	Spherical	12	8	7	0.18	Spherical	60	68	11
C	HW1 (LG)	70	205	115	0.2	0.75	Spherical	35	28	8	0.05	Spherical	300	150	85
Cu	HW1 (HG)	70	205	97	0.1	0.65	Spherical	40	15	10	0.25	Spherical	175	105	20
	K-Zone (LG)	79	175	100	0.2	0.65	Spherical	25	20	8.5	0.15	Spherical	175	125	40
	K-Zone (HG)	87	179	110	0.1	0.6	Spherical	35	40	8	0.3	Spherical	110	80	20
	EE (LG)	85	177	110	0.25	0.62	Spherical	15	22	10	0.13	Spherical	112	80	22
	EE (HG)	84	317	148	0.2	0.5	Spherical	20	17	4	0.3	Spherical	25	38	6
۸.,	HW1 (LG)	75	200	110	0.3	0.65	Spherical	25	20	10	0.05	Spherical	250	124	45
Au	HW1 (HG)	83	187	91	0.2	0.6	Spherical	45	15	7	0.2	Spherical	175	120	20
	K-Zone (LG)	85	175	100	0.3	0.6	Spherical	16	17	7	0.1	Spherical	175	125	45
	K-Zone (HG)	87	179	110	0.25	0.53	Spherical	18	15	8	0.22	Spherical	80	55	20
	EE (LG)	89	338	70	0.1	0.6	Spherical	22	17	12	0.3	Spherical	100	65	20
	EE (HG)	89	325	99	0.2	0.44	Spherical	11	10	5	0.36	Spherical	40	65	8
۸	HW1 (LG)	85	195	110	0.3	0.6	Spherical	10	10	5	0.1	Spherical	225	150	60
Ag	HW1 (HG)	89	195	99	0.2	0.55	Spherical	35	15	8	0.25	Spherical	175	135	20
	K-Zone (LG)	78	175	85	0.3	0.55	Spherical	18	15	9	0.15	Spherical	150	100	45
	K-Zone (HG)	87	173	110	0.1	0.68	Spherical	20	15	10	0.22	Spherical	100	80	20

Note: These correlograms for the refined domains are used in the " $5 \times 5 \times 5$  m sub-blocked model" only.

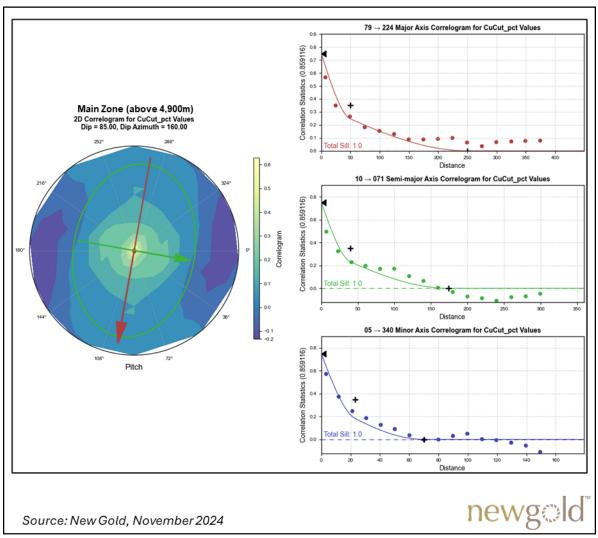


Figure 14-2: Experimental correlograms and fitted models for copper - Main Zone (above 4,900 m)

## 14.9 BLOCK MODEL PARAMETERS

As previously mentioned, the 2024 Mineral Resource estimate consists of two block models both covering the same extent. One is a " $10 \times 10 \times 10$  m model" generated to accommodate current block caving operations at New Afton and to estimate Mineral Resources for zones considered suitable for block caving. The other one is a " $5 \times 5 \times 5$  m sub-blocked model" used to test the applicability of more selective underground mining methods.

The "10 × 10 m model" uses a nominal block size measuring  $10 \times 10 \times 10$  metres. The "5 × 5 × 5 m sub-blocked model" is an octree-type model with a parent block size measuring  $5 \times 5 \times 5$  metres which can be subdivided into a minimum block size measuring  $0.625 \times 0.625 \times 0.625$  metres: the estimation domains act as sub-blocking triggers. Both models were constructed using Edge and are unrotated.

The block sizes of each model are considered appropriate with respect to the current drill hole spacing, the size and thickness of the estimation domains, and the mining method. The dimensions of the block models are presented in Table 14-7.

Table 14-7: Block model dimensions

Direction	Minimum	Maximum
Х	2600 m	4300 m
Υ	1500 m	2350 m
Z	3800 m	5750 m

### 14.10 Interpolation Parameters

The block model grades for copper, gold, and silver are estimated using ordinary kriging (OK). All grade estimations use length-weighted composited drill hole assay data.

The copper, gold, and silver estimates were conducted in a single pass using a search ellipsoid measuring  $150 \times 150 \times 40$  m for the " $10 \times 10 \times 10$  m model" and a search ellipsoid measuring  $150 \times 150 \times 20$  m for the " $5 \times 5 \times 5$  m sub-blocked model". The search ellipsoids used to estimate the blocks assigned to the monzonite or the 'other' domain are oriented subparallel to their general trend, with a dip of  $85^{\circ}$  and a dip azimuth of  $167^{\circ}$  relative to mine grid. The other domains used variable orientation to align the variograms and the search ellipsoids. Midplanes specific to each domain were used to guide the search ellipsoids.

The interpolation parameters, summarized in Table 14-8, include the search ellipsoids' axes, and the minimum and maximum number of composites used per blocks. The maximum composites per hole were adjusted to accommodate the change of block size between the two models.

Table 14-8: Interpolation parameters for gold, copper, and silver

Model	Domain	Search	n Ellipse R (m)	ange		Number of C	Composites	es				
		х	Υ	Z	Min/block	Max/block	Max/hole	Max/Octant				
	Main > 4,900 m	150	150	40	5	54 (36 for Ag)	9	9				
10 × 10 × 10 m	Main < 4,900 m	150	150	40	5	36 (45 for Au)	9	9				
10 × 10 × 10 111	All other domains	150	150	40	5	36	9	9				
5 × 5 × 5 m sub-blocked	All domains	150	150	20	3	15	3	3				

### 14.11 BLOCK MODEL VALIDATION

The results of the modelling process were validated using several methods. These include a thorough visual review of the model grades in relation to the underlying drill hole sample and composite grades, comparisons with previous resource estimates, and comparisons with other estimation methods using statistics and swath plots.

### 14.11.1 VISUAL INSPECTION

A detailed visual inspection of the block model was conducted at different grade thresholds in cross-section view, plan view, and in 3D to ensure proper results following the interpolation. This also confirmed the proper coding of blocks within the various domains. The distribution of block grades was compared relative to the grade distribution in drill holes and composites to ensure the proper representation in the model.

### 14.11.2 STATISTICS AND SWATH PLOTS

For comparison purposes, additional grade models were generated using both the inverse distance squared weighted (ID<sup>2</sup>) and nearest neighbour (NN) interpolation methods. The NN model was created using data composited to 10 or 5 m intervals depending on the model, reflecting the size of the blocks. Swath plots were generated in three orthogonal directions for the distribution of all modelled elements.

The comparison shows a good overall agreement between modelled elements and grade models. The OK model appears smoother and tend to generate lower grades than NN and slightly lower grades than ID<sup>2</sup>, although still within 10% of the mean grade. These differences are mainly explained by the 'outlier limit threshold' function that is not used in a NN estimation and that has a limited impact in the ID<sup>2</sup> estimation since in the ID<sup>2</sup> estimation nugget is not considered and the weighting is higher on the closest composite(s). Examples of the copper model in north-south-oriented swaths (X) and horizontally oriented swaths are shown in Figure 14-3 and Figure 14-4.

Final grades were compared statistically against the other grade models and composites were compared on a domain-by-domain basis. Mean composite grade for all estimates were similar, supporting the choice of the OK model. Overall, the modelled blocks using OK displayed the best continuity of grades along all directions and a proper degree of smoothing deemed fitting for the type of deposit.

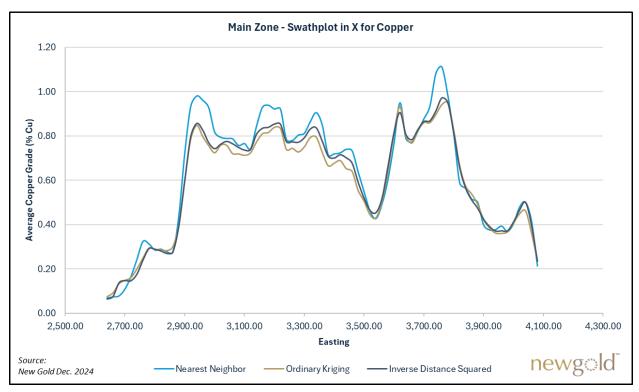


Figure 14-3: Swathplot (X-axis slices) for copper – Main Zone

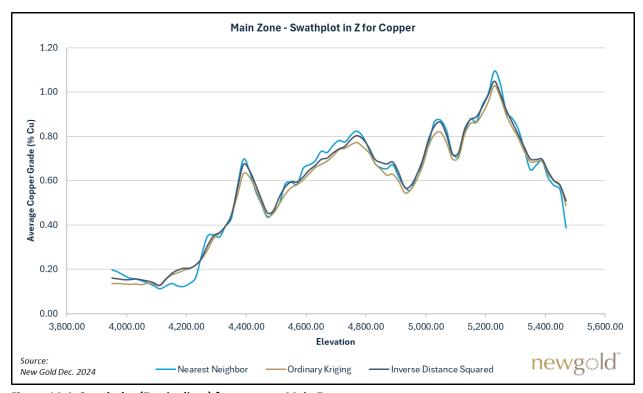


Figure 14-4: Swathplot (Z-axis slices) for copper – Main Zone

# 14.12 CLASSIFICATION

Mineral Resources were classified in accordance with the CIM *Definition Standards for Mineral Resources & Mineral Reserves* (May 2014) and considered the continuity of the mineralization at the expected mining cut-off grades. Individual blocks were assigned a category attribute (Measured, Indicated, or Inferred) based on the number of drill holes used to estimate a given block and the minimum distance from the nearest composite using the following criteria:

- Measured: blocks with copper, gold, and silver grades estimated by a minimum of three drill
  holes located within a distance of 30 m or less. This is achieved with drill holes at a nominal
  spacing (drill spacing) of approximately 50 m.
- Indicated: blocks with copper, gold, and silver grades estimated by a minimum of three drill holes and located within a distance of 50 m or less. This is achieved with drill holes at a nominal spacing (drill spacing) of approximately 80 m.
- Inferred: blocks that do not meet the criteria for Measured or Indicated Mineral Resources but are within a maximum distance of 50 m from a single drill hole.

The resulting block classification was reviewed visually in 3D. Isolated outlier blocks were locally upgraded or downgraded depending on the classification of surrounding blocks. The " $10 \times 10 \times 10$  m" and " $5 \times 5 \times 5$  m subblocked" models were classified using the same approach.

East Extension is classified using the same criteria as the other zones even though it is reported through a stope mining method and is drilled with a tighter spacing of approximately 20 m between drill holes. Because grade continuity is lower when applying the stope mining cut-off grade, optimized stopes for East Extension that were classified as Measured were downgraded to Indicated.

# 14.13 REASONABLE PROSPECTS FOR EVENTUAL ECONOMIC EXTRACTION

The New Afton Mineral Resource estimate is reported assuming underground stope mining methods for East Extension and underground bulk mining methods, likely block caving, for all other zones.

To meet the requirements that Mineral Resources have "reasonable prospect for eventual economic extraction", cut-off grades were first established for each extraction scenario. These cut-off grades are based on the input parameters and assumptions detailed in Table 14-9, but with metal prices increased by 20% to \$4.20/lb copper, \$1,980/oz gold, and \$24/oz silver. Underground bulk mining resources are reported using a cut-off grade of 0.33% CuEq and underground stope mining resources are reported using a cut-off grade of 0.98% CuEq.

Furthermore, constraining volumes were created to demonstrate the spatial continuity of the mineralization within a potentially mineable shape, as outlined below:

For Mineral Resources reported using a bulk-mining method, conceptual resource caves were modelled by determining a cave footprint using a cut-off grade of 0.33% CuEq, and projecting it to the top of the cave column. The cave shapes do not extend below the extraction level footprint. Mineral Resources are reported within the constraining cave shapes using a cut-off

- grade of 0.15% CuEq, which corresponds to the cut-off grade that covers processing and General and Administration costs.
- For Mineral Resources reported with a stope mining method, stope optimization of underground Mineral Resources was carried out using Deswik Stope Optimizer at a cut-off grade of 0.98% CuEq. The stopes were constrained to a minimum mining shape of 20 m along the strike, height of 20 m, and 5 m width. Mineral Reserves were subtracted from the Mineral Resource optimized stope shapes. Mineral Resources are reported within the optimized stope shapes using a cut-off grade of 0.98% CuEq, and include the must-take material below cut-off.

Table 14-9: Parameters for Mineral Resource cut-off grade

	Parameter	Units	Value
	Gold price	US\$/oz	1,980
	Copper price	US\$/lb	4.20
	Silver price	US\$/oz	24
	Exchange rate	C\$:US\$	1.30
	Gold recovery	%	variable
	Copper recovery	%	variable
	Silver recovery	%	variable
NSR Assumptions	Gold payable	%	97.4
	Copper payable	%	95.8
	Silver payable	%	90.0
	Gold refining charge	US\$/oz	5.05
	Copper refining charge	US\$/lb	0.061
	Silver refining charge	US\$/oz	0.454
	Total treatment cost	US\$/dmt concentrate	61
	Total transport cost	US\$/wmt concentrate	141
	Mining cost – block caving	US\$/t processed	11.50
	Mining cost – stoping	US\$/t processed	87.50
Cut-off Grade Parameters	Processing cost	US\$/t processed	9.00
Cut-on Graue Parameters	G&A cost	US\$/t processed	3.50
	Block caving cut-off grade	% CuEq	0.15
	Stoping cut-off grade	% CuEq	0.98

# 14.14 MINERAL RESOURCES STATEMENT

The Mineral Resource estimate for New Afton Mine as of December 31, 2024, is presented in Table 14-10. Mineral Resources are reported exclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Table 14-10: New Afton Mineral Resource Estimate as of December 31, 2024

Mining		Tonnes		Grade		Contained Metal			
Method	Category	(000s)	Gold (g/t)	Silver (g/t)	Copper (%)	Gold (koz)	Silver (koz)	Copper (Mlb)	
	Measured	51,195	0.58	1.81	0.67	958	2,976	758	
Underground	Indicated	29,101	0.37	1.33	0.48	349	1,242	308	
Bulk	Measured & Indicated	80,297	0.51	1.63	0.60	1,307	4,217	1,066	
	Inferred	132	0.19	0.54	0.19	1	2	1	
lle devenered	Measured	-	-	-	-	-	-	-	
Underground Stope	Indicated	1,346	1.02	4.93	1.14	44	213	34	
(East	Measured & Indicated	1,346	1.02	4.93	1.14	44	213	34	
Extension)	Inferred	-	-	-	-	-	-	-	
	Measured	51,195	0.58	1.81	0.67	958	2,976	758	
Takal	Indicated	30,448	0.40	1.49	0.51	393	1,455	342	
Total	Measured & Indicated	81,643	0.51	1.69	0.61	1,352	4,431	1,100	
	Inferred	132	0.19	0.54	0.19	1	2	1	

#### Notes:

- Mineral Resources have been estimated by Vincent Nadeau-Benoit, P.Geo. and Joshua Parsons, P.Eng., both full-time employees of New Gold, and Qualified Persons as defined by National Instrument 43-101. The estimate conforms to the CIM Definition Standards for Mineral Resources & Mineral Reserves.
- 2. Mineral Resources are reported exclusive of Mineral Reserves.
- 3. Mineral Resources are estimated using metal price assumptions of US\$4.20 per pound of copper, US\$1,980 per ounce of gold, and US\$24 per ounce of silver, and a foreign exchange rate assumption of 1.30 C\$/1.00US\$.
- 4. For underground bulk mining, Mineral Resources are reported within mineable shapes created using a cutoff grade of 0.33% CuEq; due to the selectivity of the bulk mining method, blocks below 0.15% CuEq within
  the mineable shapes are not reported. For stope mining, Mineral Resources are reported within mineable
  shapes created using a cut-off grade of 0.98% CuEq and include must-take material.
- 5. Numbers may not add up due to rounding.

### 14.15 FACTORS THAT MAY AFFECT THE MINERAL RESOURCES ESTIMATES

Factors that may affect the Mineral Resource estimates include changes to the following parameters:

- Metal price and exchange rate assumptions.
- Assumptions used to generate the estimation domains.
- Local interpretations of mineralization geometry and continuity of mineralized zones.
- Geological and mineralization shape and geological and grade continuity assumptions.
- Treatment of high-grade gold values.
- Density assignments.

- Geotechnical, including locations of historically mined-out voids, as well as mining and metallurgical recovery assumptions.
- Input and design parameter assumptions that pertain to the assumptions for underground mining constraining the estimates.
- Assumptions as to the continued ability to access the site, retain mineral and surface rights titles, maintain environment and other regulatory permits, and maintain the social licence to operate.

# 14.16 COMMENTS ON MINERAL RESOURCE ESTIMATES

The Qualified Persons are of the opinion that Mineral Resources have been estimated using industry-accepted practices and Mineral Resources are reported using the 2014 CIM Definition Standards.

There are no other environmental, permitting, legal, title, taxation, socioeconomic, marketing, political or other relevant factors known to the Qualified Person that would materially affect the estimation of Mineral Resources that are not discussed in this Report.

The Qualified Persons are of the opinion that the use of constraining volumes and cut-off grades to report the Mineral Resources demonstrate that there are "reasonable prospects for eventual economic extraction", as defined in the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019).

# 15 MINERAL RESERVE ESTIMATES

# 15.1 Introduction

Mineral Reserves are reported for the B3, C-Zone, and East Extension mining zones. B3 is an operating block cave. C-Zone is a block cave in the production ramp-up phase, with commercial production achieved in the fourth quarter of 2024. East Extension is planned as a stoping zone and is not yet in production.

B3 and C-Zone Mineral Reserves are estimated using the 2024 " $10 \times 10 \times 10$  m model". Measured and Indicated Mineral Resources were converted to Probable Mineral Reserves. Due to the uncertainty associated with estimating movement of material within the block caves, no Proven Mineral Reserves are reported for B3 and C-Zone.

East Extension Mineral Reserves are estimated using the 2024 " $5 \times 5 \times 5$  m sub-blocked model". Indicated Mineral Resources were converted to Probable Mineral Reserves.

Mineral Reserves tonnes and grades are stated at a mill feed reference point, allowing for dilution and mining recovery, and are reported accounting for depletion as of December 31, 2024. Cut-off net smelter return (NSR) values of US\$24 and US\$100 are applied to block caving and stoping Mineral Reserves, respectively. Mineral Reserves are supported by mine designs, development and production schedules, and cost estimates completed as part of New Afton's 2025 life of mine (LOM) planning process.

# 15.2 MINERAL RESERVE ESTIMATION METHODOLOGY

Mineral Reserve block models are generated by adding an NSR attribute, in US\$ per tonne, to each block in the Resource block models. Blocks classified as Inferred Mineral Resources, or without a Resource classification, are set to zero grade and zero NSR.

B3 and C-Zone block cave Mineral Reserves are estimated using GEOVIA PCBC software (PCBC) from Dassault Systèmes, designed specifically for the planning and scheduling of block cave mines. PCBC generates vertical or inclined draw columns above each drawpoint (referred to as slice files) for which properties are derived from the block model. In block caving, the height of draw (HOD) refers to the vertical height above the drawpoint from which material is extracted. At New Afton, a minimum HOD of 50 m is applied for block cave Mineral Reserves and the maximum HOD parameter for B3 and C-Zone is set at 350 m and 450 m, respectively.

Through the application of the cut-off NSR and caving parameters—which include minimum and maximum HOD, fragmentation assumptions, drawpoint geometry, and mixing characteristics—the PCBC model estimates the tonnes and properties of material to be extracted from each drawpoint. The model incorporates dilution from the top of the columns and the side walls of the cave, depending on the assumed mixing characteristics. PCBC mixing parameters and options have been refined over 12 years of experience at New Afton operating the Lift 1 and B3 block caves. Several PCBC models are generated using a range of parameters to assess the level of confidence in the model outputs. PCBC then uses historical production, the applied maximum HOD, and the mixing parameters to predict the production tonnage and grade.

Technical Report New Afton Mine

Mineral Reserves for East Extension, planned as a stoping zone, are estimated using Deswik mine planning software. Deswik Stope Optimizer is first used to define potential stoping zones, based on a cut-off NSR of US\$100/t and stope dimensions of 20 m high × 14 m long. Stope width is variable, ranging from 5 m to 20 m. Overbreak of 0.58 m and 0.29 m was applied to the hanging wall and footwall, respectively. Next, Deswik CAD is used to design mining drifts to access the stoping areas and other mine infrastructure. Stopes are then analyzed for inclusion into the Mineral Reserve inventory by analyzing capital costs, considering the development required to enable mining of the designed stopes and other mining infrastructure requirements. Deswik Scheduler is used to generate the development and production schedules.

# 15.3 DILUTION AND MINING RECOVERY

Block cave dilution is simulated dynamically within PCBC, based on the geometry of the cave, mixing parameters, and mining sequence. The remaining Mineral Reserves at B3 block cave are assumed to have a dilution factor of 12%, as the top of the draw columns are mined in the final year of production. Total dilution over the life of the C-Zone block cave is estimated at 28.6%, which includes 4.6% internal dilution. A key objective for the C-Zone mine design and draw sequence is to minimize dilution from the picrite zones. As such, early cave growth is prioritized on the north side of the footprint, away from the picrite contact. The cave back will be brought back to a more even height at mid-HOD. Ore recovery in the block caves is assumed to be 100% of the mixed/diluted block model.

Dilution assumptions for East Extension stopes are based on the outputs of Matthew's empirical stope stability model, considering the rock mass quality and planned stope dimensions. Dilution is currently estimated at 10.8%, with 5.8% from hanging-wall and footwall overbreak at the block model grade and 5% backfill dilution at zero grade. Longitudinal stopes are planned for the extraction of the high-grade core of the deposit, within a lower-grade halo. Therefore, hanging wall and footwall overbreak dilution is expected to be low grade. The mine design allows for 3 m wide rib pillars between the backfilled stopes to minimize backfill dilution. An additional 93% mining recovery factor is applied to stope tonnes to account for unblasted ore in the shoulders of the stopes and unmucked ore remaining on the floor of the stopes.

# 15.4 NSR CUT-OFF VALUE

The NSR is the estimated value per tonne from the sale of mineral products after the application of metallurgical recoveries and deductions for transport, smelting, refining, and marketing charges, as well as royalty payments. NSR is calculated for each block in the block model using the parameters listed in Table 15-1. Metallurgical recoveries are variable based on the grade-recovery curves for each ore type, and concentrate costs and refining charges are variable depending on the smelter. The values shown in Table 15-1 are LOM averages. Mineral Reserves are reported above a break-even NSR cut-off value equal to the total site operating cost per tonne, which includes mining, processing, and G&A costs, as shown in Table 15-1. The NSR cut-off value for block caving and stoping is US\$24/t and US\$100/t, respectively.

Table 15-1: Parameters for Mineral Reserve cut-off NSR

	Parameter	Units	Value
	Gold price	US\$/oz	1,650
	Copper price	US\$/lb	3.50
	Silver price	US\$/oz	20
	Exchange rate	C\$:US\$	1.30
	Gold recovery	%	variable
	Copper recovery	%	variable
	Silver recovery	%	variable
NSR Assumptions	Gold payable	%	97.4
	Copper payable	%	95.8
	Silver payable	%	90.0
	Gold refining charge	US\$/oz	5.05
	Copper refining charge	US\$/lb	0.061
	Silver refining charge	US\$/oz	0.454
	Total treatment cost	US\$/dmt concentrate	61
	Total transport cost	US\$/wmt concentrate	141
	Mining cost – block caving	US\$/t processed	11.50
	Mining cost – stoping	US\$/t processed	87.50
Cut-off Value Parameters	Processing cost	US\$/t processed	9.00
cut-on value Parameters	G&A cost	US\$/t processed	3.50
	Total block caving cost	US\$/t processed	24.00
	Total stoping cost	US\$/t processed	100.00

Because block cave drawpoints on the extraction level are positioned in a single plane, material below the cut-off NSR must sometimes be mined from the draw column to access higher-grade ore located higher in the draw column, or to maintain a cave shape and size suitable for caving. However, New Afton is capable of segregating waste from the drawpoints by removing it using a belt plow on surface before it reaches the crushed ore stockpile. The C-Zone LOM plan includes 369 kt of waste mined from the drawpoints but not processed, and is excluded from reserves. Intermediate-grade C-Zone Mineral Reserves can also be segregated and stockpiled on surface.

# 15.5 RECONCILIATION

Following completion of the Lift 1 block caves, final mined tonnes and grades were compared to an early Mineral Reserve estimate from 2013. Overall, the Lift 1 produced more tonnes at slightly lower average grades, resulting in 3% more contained gold and 2% more copper, as shown in Table 15-2.

Table 15-2: Lift 1 reconciliation

	Tonnes	Gr	ades	Conta	ained Metal
	(000s)	Gold (g/t) Copper (%)		Gold (koz)	Copper (Mlb)
2013 Mineral Reserves	45,591	0.59	0.86	865	864
Actual ore mined	48,018	0.58	0.83	894	878
Difference	5%	-2%	-3%	3%	2%

For B3 block cave, New Gold carries out monthly and quarterly reconciliation of mined gold and copper grades by comparing grades from drawpoint samples to the PCBC modelled grade estimates for each drawpoint. To the end of 2024, actual B3 gold and copper grades are on average 2.1% below and 8.6% below PCBC modelled grades, respectively. Reconciliation of mined grades to milled head grades is generally good, with gold and copper mill head grades 4.5% and 3.5% above mine grades, respectively, over the past two years.

# 15.6 MINERAL RESERVE STATEMENT

The Mineral Reserve estimate for New Afton Mine as of December 31, 2024, is presented in Table 15-3.

Table 15-3: New Afton Mineral Reserve estimate as of December 31, 2024

_		Tonnes		Grade		Contained Metal			
Zone	Category	(000s)	Gold (g/t)	Silver (g/t)	Copper (%)	Gold (koz)	Silver (koz)	Copper (Mlb)	
	Proven	-	-	-	-	-	-	-	
В3	Probable	941	0.49	1.1	0.57	15	33	12	
	Proven & Probable	941	0.49	1.1	0.57	15	33	12	
	Proven	-	-	-	-	-	-	-	
C-Zone	Probable	37,664	0.64	1.6	0.70	772	1,957	585	
	Proven & Probable	37,664	0.64	1.6	0.70	772	1,957	585	
	Proven	-	-	-	-	-	-	-	
East Extension	Probable	962	1.31	8.5	1.63	41	263	35	
	Proven & Probable	962	1.31	8.5	1.63	41	263	35	
	Proven	-	-	-	-	-	-	-	
Total	Probable	39,567	0.65	1.8	0.72	828	2,253	631	
	Proven & Probable	39,567	0.65	1.8	0.72	828	2,253	631	

#### Notes:

- Mineral Reserves have been estimated by the New Afton mine planning team under the supervision of Joshua Parsons, P.Eng, a full-time employee of New Gold, and a Qualified Person as defined by National Instrument 43-101. The estimate conforms to the CIM Definition Standards for Mineral Resources & Mineral Reserves.
- Mineral Reserves are estimated using metal price assumptions of US\$3.50 per pound of copper, US\$1,650
  per ounce of gold, and US\$20 per ounce of silver, and a foreign exchange rate assumption of C\$1.30:
  US\$1.00.
- 3. B3 and C-Zone block cave Mineral Reserves are reported at a cut-off NSR of US\$24/t and East Extension Mineral Reserves are reported at a cut-off NSR of US\$100/t, based on processing costs of US\$9.00/t processed, G&A costs of US\$3.50/t processed, block caving costs of US\$11.50/t ore mined, and stoping costs of US\$87.50/t ore mined. Metallurgical recoveries vary depending on ore type and grades.
- 4. Numbers may not add up due to rounding.

# 15.7 FACTORS THAT MAY AFFECT THE MINERAL RESERVES

Factors that may affect the Mineral Reserve estimates include the following:

- Changes to the long-term copper and gold price and exchange rate assumptions
- Changes to the parameters used to derive the cave outlines and stope shapes and determine the cut-off values
- Changes to geotechnical and hydrogeological assumptions
- Changes to the cave mixing model and dilution estimates
- Changes to metallurgical recovery assumptions
- Changes to inputs to capital and operating cost estimates
- Ability to maintain social and environmental licence to operate

# 15.8 COMMENTS ON MINERAL RESERVE ESTIMATES

The Qualified Person is of the opinion that Mineral Reserves were estimated using industry-accepted practices, and conform to the *2014 CIM Definition Standards*. Mineral Reserves are based on underground block caving and stoping mining assumptions.

The Mineral Reserves are acceptable to support mine planning.

There are no other mining, metallurgical, infrastructure, permitting, or other relevant factors known to the Qualified Person that would materially affect the estimation of Mineral Reserves that are not discussed in this report.

# **16 MINING METHODS**

# 16.1 Introduction

The New Afton underground mine consists of three zones, each at different stages of development:

- B3 is a fully operational block cave that has been in production since 2021.
- C-Zone is a block cave that transitioned from production ramp-up phase to commercial production in the fourth quarter of 2024.
- East Extension is planned as a long-hole stoping zone and is not yet in production.

The East Cave and West Cave, together referred to as Lift 1, were mined from 2011 to 2022 and are now depleted. A longitudinal view of the mining zones is shown in Figure 16-1.

# 16.2 MINING METHODS

The New Afton Mineral Reserves are based on block caving and long-hole stoping underground mining methods, as discussed below. Mining parameters and dilution factors are discussed in Section 15.3.

The block cave mining method involves development of a footprint at the base of the cave that includes an undercut level for initiating the cave and an extraction level from which ore will be mucked from drawpoints for the duration of the cave. Block caving initially requires up-front capital investment in development and footprint construction; however, the subsequent production period requires minimal capital investment which is why block caving is considered the underground mining method with the lowest unit mining costs. Other benefits of block caving include high production rates and low environmental impacts.

The mining plan for East Extension, located east of C-Zone, is to use a longitudinal long-hole stoping method. The method involves the development of drifts along the strike of the ore body at regular level intervals, followed by drilling and blasting of stopes between levels, and mucking the broken ore from the lower level using load-hauldumps (LHDs). After completion of ore extraction, stopes are backfilled using a combination of rockfill and cemented rockfill (CRF).

# 16.3 MINE DESIGN AND MINING SEQUENCE

#### 16.3.1 UNDERGROUND ACCESS

The underground mine is accessed by decline from a portal on surface located to the south of the processing plant. From surface to a depth of 650 m below surface, a single 5.5 m wide  $\times$  6.0 m high decline is used for both vehicle access and the conveyor, which is suspended from the back of the decline. From this elevation to the bottom of C-Zone at 1,150 m below surface, the mine has two declines: a 5.5 m wide  $\times$  5.8 m high access decline and a 5.5 m wide  $\times$  6.0 m high conveyor decline.

An exploration ramp was developed from the New Afton pit to provide early access for Lift 1 development and construction but is no longer accessible since the East Cave breakthrough to surface. Emergency egress is available through a fresh-air raise equipped with an Alimak elevator and a staging area.

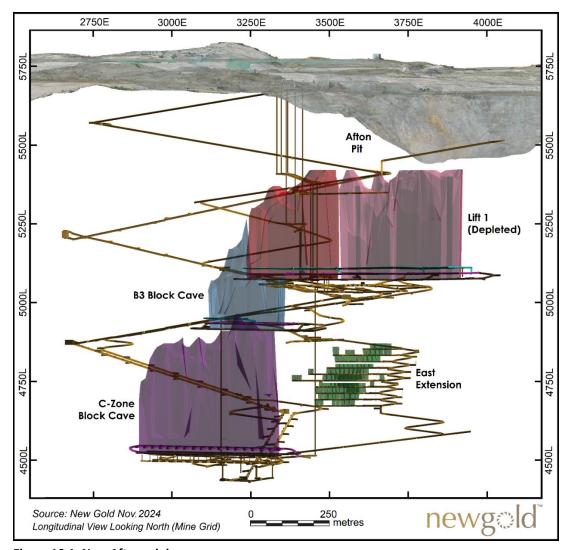


Figure 16-1: New Afton mining zones

#### 16.3.2 B3 BLOCK CAVE

The B3 block cave extraction level is approximately 160 m below the mined-out Lift 1 and 760 m below surface. The B3 footprint measures approximately  $250 \times 125$  m for a footprint area of approximately 31,000 m<sup>2</sup>; this is smaller than the Lift 1 and C-Zone block cave footprints. B3 has a total of 65 drawbells.

Ramp development from Lift 1 to B3 began in 2015. The advanced-style method of undercutting commenced in the western footprint extent in December 2020, with drawbell development beginning in June 2021. The initial interaction of the B3 caved zone with the Lift 1 extraction level is interpreted to have occurred in August 2022 and construction of B3 was completed in the fourth quarter of 2022. From 2023 to 2024, the ore extraction rate from B3

averaged approximately 8,455 tpd. At the end of 2024, 8.2 Mt of ore have been mined from B3, leaving an additional 0.94 Mt of Mineral Reserves remaining.

The B3 extraction level is designed with four longitudinal strike drives and 111 drawpoints arranged in a straight-through (El Teniente-style) pattern, as shown in Figure 16-2. Drawbell spacing is 16.5 × 27.0 m. Orepasses are located on the level's east side.

The undercut level was designed 18 m above the extraction level (floor-to-floor) with five undercut strike drives. An apex level was developed in the expected critical hydraulic radius (the expected hydraulic radius required for the cave to self propagate, HR<sub>CR</sub>) to de-risk initial caving; it was successfully omitted from the remainder of the footprint to reduce development costs. A haulage level is located 20 m below the B3 extraction level where haul trucks are loaded from chutes at the bottom of the orepasses.

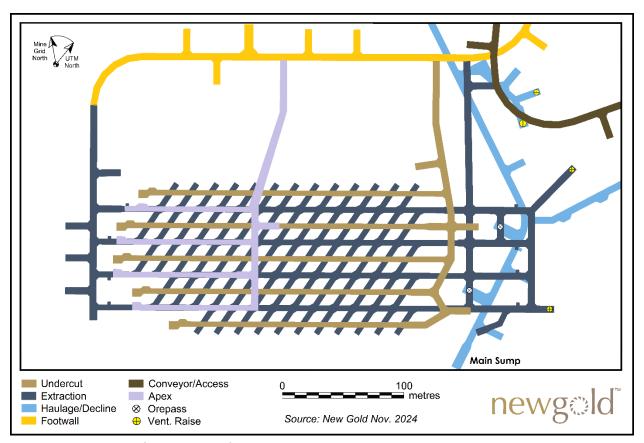


Figure 16-2: Plan view of B3 block cave footprint design

## 16.3.3 C-ZONE BLOCK CAVE

The C-Zone extraction level is located approximately 390 m below the B3 extraction level and 1,150 m below surface. The footprint of C-Zone measures approximately  $460 \times 120$  m for an area of approximately 55,000 m<sup>2</sup>. C-Zone has a total of 91 drawbells, of which 26 have been blasted as of the end of 2024. The C-Zone footprint development design is shown in Figure 16-3.

Development of the dual decline from B3 to C-Zone commenced in 2019 and reached the C-Zone footprint in the second quarter of 2022. Undercut blasting commenced in mid-2023 and the first C-Zone drawbell was blasted in

Technical Report New Afton Mine

October 2023. New Afton achieved commercial production at C-Zone in the fourth quarter of 2024, with the materials handling system coming online and the cave footprint reaching the targeted empirical hydraulic radius for self-cave propagation.

In 2020, New Gold completed a redesign of the C-Zone footprint, resulting in improved stress management and increased operational flexibility. The C-Zone footprint includes a footwall access and conveyor decline; it is designed in five levels, listed from top to bottom:

- Undercut level.
- Extraction level.
- Haulage level.
- Ventilation level.
- Dewatering level.

Following the success of the reduced apex level at B3, the apex level is omitted from the C-Zone design, eliminating approximately 2,000 m of development originally planned in the Feasibility Study design.

The undercut level is 20 m above the extraction level; it includes 18 undercutting drives that are designed to sit directly above the 18 lines of the drawbells on the extraction level. The southern end of each undercut drive includes a wider section for the purpose of slot blasting. The undercut level features two orepasses connecting down to the haulage level and one temporary vent raise to the extraction level.

The extraction level has 7 transverse crosscuts, 91 drawbells, and a total of 177 drawpoints arranged in a herringbone layout with a drawbell spacing of  $18.0 \times 27.0$  m. The north-south alignment of the strike drives allows for targeting of the ore contact on the south border of the cave, and provides increased flexibility and improved automation capability. The extraction level has four access drives that connect the extraction footwall drive to the main C-Zone footwall drive, itself located to the north of the footprint. The extraction footwall drive features seven orepasses and one vent raise that each connect to the haulage level below.

The haulage level is located north of the cave footprint and 25 m below the extraction level. The haulage level contains the gyratory crusher in the centre of the level, multiple large muck storage areas, battery bays on either side of the level, and a motor room access drive. The level has three accesses to the main C-Zone footwall drive as well as seven orepasses and two ventilation raises connecting to levels above and below.

The ventilation level lies 20 m below the extraction level and runs east-west across the footprint, with 17 vent raises connecting up to the southern ends of the 17 extraction crosscuts.

The dewatering level is located at the lowest elevation of the C-Zone level, and connects to the bottom of the conveyor declines. This level includes a ventilation raise up to the haulage level, the C-Zone conical sumps, and the main dewatering infrastructure.

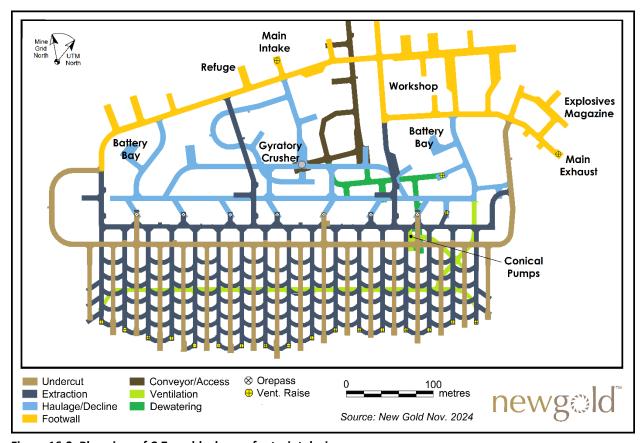


Figure 16-3: Plan view of C-Zone block cave footprint design

## 16.3.4 EAST EXTENSION MINING ZONE

East Extension is a new zone that was added to Mineral Reserves in 2024. Located 120 m east of the C-Zone block cave, and 150 m above the C-Zone extraction level, the East Extension Mineral Reserves extend approximately 200 m vertically and 140 m along strike. East Extension will be mined longitudinally using the long-hole open stoping mining method. The current design has ten levels, spaced at 20 m vertical intervals, with ramp access from the east. Each level has a single or second parallel ore drive running east-west, with dimensions of 5.0 m wide × 5.0 m high. A typical level layout is shown in Figure 16-4.

There are 114 stopes designed in three panels to optimize scoop productivity; the panels are separated by 5 m thick sill pillars. Based on geotechnical core data and stope stability analysis, stopes were designed with dimensions of 14 m long × 20 m high and a variable stope width up to 20 m. Stoping is sequenced bottom-up within each panel and retreats eastward to the ramp access on each level. After the ore is mucked out, stopes will be backfilled using a combination of rockfill and cemented rockfill (CRF). CRF will be mixed within designated mixing sumps at a target cement content of 7%. Other potential options for CRF mixing are being investigated utilizing a mobile mixer. Material testing of the CRF may allow for adjustments to the cement content.

Development of the East Extension ramp is scheduled to commence in the second half of 2025 and ore production is planned to take place concurrently with production from the C-Zone block cave from 2026 to 2031.

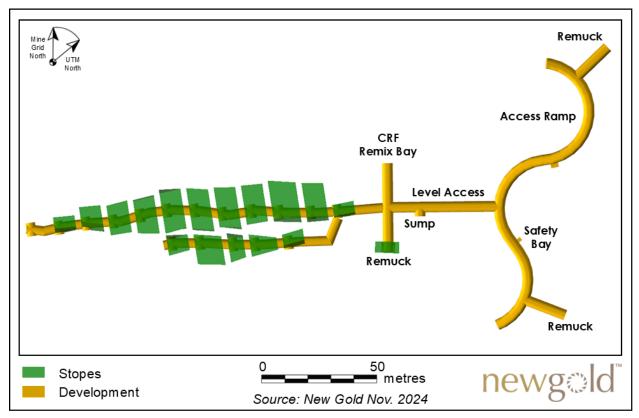


Figure 16-4: East Extension typical level layout (4,730 Level)

# 16.4 GEOMECHANICS

# 16.4.1 GEOTECHNICAL PROPERTIES

Geotechnical properties used for underground design are collected using laboratory testing, geotechnical core logging, and face mapping of the development rounds. The rock mass quality at New Afton is classified using the following scales:

- Rock quality designation (RQD).
- Q', after Barton et al. (1974).
- Rock mass rating (RMR89), after Bieniawski (1989).
- R Grade, after the International Society of Rock Mechanics (ISRM), utilizing a dataset of unconfined compression strengths and point load testing.

Typical rock mass properties are shown with Q1 (25<sup>th</sup> percentile), Q3 (75<sup>th</sup> percentile) and median values per mining zone in Table 16-1 and per lithology in Table 16-2. Median RMR89 values within the mineralized zones range from 61 to 63, indicating "good" rock quality. Q' and RMR89 values are relatively consistent across the three mining zones included in the 2024 Mineral Reserve estimate. R Grade values of 3 to 4 indicate intact rock strengths of 25 to 100 MPa.



Table 16-1: Geotechnical	properties by mining zone
Table 10 1. Geoteeninear	properties by mining zone

Mining Zone		RQD (%	6)	Q'		RMR89			R Grade (Intact Strength Estimates)			
	Q1	Q3	Median	Q1	Q3	Median	Q1	Q3	Median	Q1	Q3	Median
B3 Cave	54	85	72	3.9	40.7	13.7	54	65	63	R3	R4	R3
C-Zone Cave	68	94	85	6.2	27.0	14.0	58	69	63	R3	R4	R3
East Extension	65	89	79	7.7	33.4	16.4	56	66	61	R3	R4	R3

The Ashcroft Sedimentary and Picrite units are classified as "Poor" and "Fair" quality, respectively. They are located on the southern boundaries of the ore body, with rare occurrences of minor picrite rafts within the Nicola volcanic rock unit. The lithology of these units is of importance for cave growth and subsidence modelling due to their weaker rock mass properties and risk for ore dilution and changes to subsidence trends.

Table 16-2: Geotechnical properties by lithology

Lithology	RQD (%)			Q' RMR89		(Intact	R Grade Strength E					
	Q1	Q3	Median	Q1	Q3	Median	Q1	Q3	Median	Q1	Q3	Median
Nicola Volcanic Rocks	61.8	90.8	83.2	6.3	24.9	12.6	57	71	65	R3	R4	R3
Diorite	57.9	87.5	75.4	6.2	32.6	14.0	55	69	63	R3	R4	R3
Fault	30.5	78.3	58.9	2.3	11.7	5.45	38	59	50	R1	R3	R2
Monzonite	53.8	84.9	71.1	4.6	16.6	8.2	55	68	62	R3	R4	R3
Picrite	55.6	89.2	76.7	4.8	23.3	11.25	48	68	59	R2	R3	R3
Ashcroft Sedimentary	15.2	65.1	45.4	0.05	5.0	2.0	21	51	40	R1	R3	R2

# 16.4.2 IN SITU ROCK MASS STRESS

The in situ rock mass stresses have been determined using two methods: the Hollow Inclusions Cells (HI-Cells) from the Commonwealth Scientific and Industrial Research Organization (CSIRO) and In situ Stress Testing (IST) rock stress borehole testing from Sigra Pty. Ltd. The stress data are used for underground and surface numerical modelling work. Stress values, SH (horizontal stress on the NE-SW axis), Sh (horizontal stress on the NW-SE axis), and Sv (vertical stress), are modelled using the following formulas, using the mine grid and depth as the depth below surface in metres:

- SH = 12.8 + 0.029 × depth
- Sh =  $7.5 + 0.017 \times depth$
- Sv = 0.0265 × depth

## 16.4.3 GROUND SUPPORT

The primary ground support system for standard development comprises fibre-reinforced shotcrete, tendon reinforcements (such as rebar bolts or MD bolts), and welded wire screen, as outlined in New Afton's ground support standards for fair to good ground conditions.

All major long-term infrastructure, such as conveyor transfer chambers and crusher stations, have been located outside of the mining footprint to minimize their exposure to the induced strain and stress changes caused by the caving process. Given the significant span (greater than 6 m) and long service life anticipated for these excavations, secondary support systems such as long tendon support (cable bolts) and straps have been used to reinforce the rock mass in addition to the primary support system.

Ground support for the extraction level includes a primary support system, consisting of fibre-reinforced shotcrete, MD Bolts or dynamic rebar bolts, and screen; followed by secondary support comprising long tendon support (cable bolts and self-drilling anchors) and reinforced strapping (OSRO straps and pillar wrapping), with an additional layer of mid- to low-wall shotcrete cover to protect equipment from damage.

Ground support for the development of East Extension will be based on New Afton's existing ground support standards for fair to good ground conditions. On the ore drives, cable bolts have been planned for the brows of all stopes and for all permanent intersections; they will also be placed in selected areas of hanging wall, footwall, and backs of stopes.

Ground movement monitors, known as multi-point borehole extensometers (MPBX), are used to measure the in situ displacement of the rock mass near an opening and to assess the performance of the installed ground support. They are typically installed in the back and sidewalls in a cable-bolted intersection or area of larger span. Handheld LiDAR scanning is also completed to provide a background dataset that can be used for comparative purposes for determining how much deformation has occurred due to regional mine closure over time. An area can be chosen for monitoring based on the importance, excavation quality, geology type, structural complexity, and/or anticipated stress conditions.

#### 16.4.4 CAVABILITY

The cavability of a deposit is the ability of the ore body to cave freely and spontaneously under its own gravitational load. This is achieved once the ore body is sufficiently undercut to achieve an undercut of critical hydraulic radius  $(HR_{CR})$  favourable for caving. New Afton's experience aligns with established industry empirical relationships between rock mass competence and the required dimensions of the undercut for initiating and sustaining caving.

The cave monitoring systems indicated that the transition from cave construction into sustainable caving occurred when the drawbell hydraulic radius was 23 m for West Cave, 21 m for East Cave and 23 m for B3. In general, C-Zone geology is similar to that of West Cave and B3 Cave. Empirically, its HR<sub>CR</sub> has been estimated to be between 21 and 23 m. Numerical modelling work by Itasca and Beck Engineering Ltd. has also been completed and produced similar estimates. Review of the Lift 1 and B3 cave monitoring system indicates that the transition to sustainable caving was indicated by an increase in microseismic events vertically above the drawpoints and by the observation of cumulative breaks over production intervals on the time-domain reflectometry (TDR) systems.

## 16.4.5 Fragmentation

For fragmentation purposes, the rock mass within the ore body is classified into three types:

- Highly fractured rock: shows a variable level of microfracturing and tight joint spacing. This is the
  most commonly observed type.
- Moderately fractured rock: a high-strength, more massive rock mass with wider joint spacing.
- Fault zones: low-strength rock mass with intense microfracturing and closely spaced joints.
   These are located throughout the deposit.

There are three plus random (Q-Index classification) joint sets within the footprint; their spacing range between < 0.1 m and 0.8 m.

When a drawbell is initially developed and blasted rock is mined out, fragmentation from the caving process is generally coarse. As the draw column matures, the rock fragmentation becomes finer due to secondary fragmentation. Hang-ups occur when broken rock, either single or multiple large rocks, within the drawbell fails to flow out of the drawpoint as intended, causing a blockage. However, most hang-ups typically occur on the cave boundaries along the footprint perimeter. They can also occur in early draw column height within the moderately fractured rock. As anticipated, random hang-ups also occur over the life of extraction within the regular highly fractured rock and mature drawbells. New Afton tracks hangups each shift and has a mobile rock breaker and blasting practice developed for hangup occurrences.

## 16.4.6 STOPE DESIGN

Stope stability analysis for East Extension is based on results from geotechnical mapping of diamond drill core. Data collection is conducted using Q-Index and then processed by the empirical modified stability-graph method (after Potvin, 1988; Nickson, 1992; and Hadjigeorgiou et al., 1995). During development, geotechnical mapping will be conducted in the access drives to validate the stope design criteria and ground support requirements. Stopes are scheduled to be backfilled with CRF shortly after they are mined to reduce stand-up time and overbreak.

Stope locations in East Extension have been numerically modelled to evaluate their proximity to the C-Zone cave influence area. Geotechnical offsets were applied to ensure that stress impacts on the Resources remain outside the anticipated C-Zone caving zones.

To further mitigate potential risks, the mine design incorporates a longitudinal mining method. This method involves retreating eastward, away from the C-Zone cave area, during resource extraction. By adopting this approach, this design safeguards critical ramps and stope access against any unforeseen cave deviations within the C-Zone, enhancing operational reliability and safety.

#### 16.4.7 SURFACE SUBSIDENCE

Surface subsidence was initially observed in 2011 as the West Cave progressively migrated and broke through to the surface, creating a depression in the topography. This was followed by the breakthrough of the East Cave into the open pit. Mining within West and East caves was completed in April 2021 and February 2022, respectively. Observed subsidence rates decreased following closure of Lift 1 and prior to the onset of influence from B3. Mining of B3, New Afton's second lift, commenced mid-2021.

The timing and extent of B3 cave progression and initial subsidence expression are attributed to the pre-existing broken and mobilized material within the West Cave muckpile and its associated subsidence zone. Initial subsidence deformations were observed across the existing West Cave subsidence zone as the B3 cave propagated into the intact ore body portion located adjacent to the West Cave in mid-2022. The progression of the B3 cave triggered the limited mobilization of the overlying Lift 1 extraction level and associated muckpile, and was accompanied by increasing surface subsidence, particularly along its westernmost boundary.

The influence of subsidence is recorded by a very robust automated instrumentation program and is also monitored using visual observations, aerial photography, and amplitude-based satellite InSAR. This extensive fully automated monitoring dataset is available to on-site staff, external consultants, and to the tailings storage facility (TSF) Engineers of Record (EORs) for routine interpretation of subsidence trends and monitoring of several key areas of New Afton mine infrastructure. TSF monitoring is further discussed in Section 18.3.5.

Numerical modelling is also used to help forecast underground performance and progression of subsidence for long-range planning and to assess and mitigate potential impacts to mine infrastructure. Beck Engineering Ltd. (Beck) provides a subsidence forecast model based on input from New Gold and their consultants. Beck updated the latest New Afton subsidence model in August, 2023. New Afton uses the numerical model solely for planning purposes and continues to rely on the observational method, instrumentation data, and remote sensing data to monitor the progression of subsidence at the mine site.

Mining subsidence from C-Zone, which is located approximately 1,150 m below surface, has been numerically modelled and forecasted using existing geotechnical and geology datasets. C-Zone is expected to initially breakthrough into the pre-existing B3 and Lift 1 West Cave subsidence influence areas; monitoring will continue using the existing programs in place for B3 mining, with additional monitoring installations as required by the site or TSF EORs.

East Extension is not expected to cause additional subsidence as the longitudinal stopes are to be backfilled with CRF and geotechnical spans will be minimized to reduce the occurrence of caving stopes.

#### 16.4.8 STRUCTURAL MODEL

The structural model is generated as a three-dimensional (3D) wireframe model containing the major structures that impact the mine. The model is updated regularly for exploration and geotechnical purposes by reviewing the structural data obtained from core logging, underground mapping, and light detection and ranging (LiDAR) scans. The structural model, along with the lithological model, is utilized in numerical models to refine the status of underground and surface geotechnical stability, cave growth, and subsidence.

#### 16.4.9 Underground Cave Monitoring

A large array of instrumentation has been installed for all caves at New Afton. In the current operating caves, B3 and C-Zone, a microseismic system is used to capture mining-induced seismicity. The system used for B3 was expanded with the development of the C-Zone mine, allowing for the source-location of microseismic events caused by ongoing caving activity. Seismic tomography is also utilized with the seismic system to assist with cave profile interpretation.

Metallic and fibre optical time-domain reflectometry (TDR) systems are co-axial or fibre-optic cables, grouted in a drill hole, that can be used to determine rock-mass response to mining. Reflections in the cable are generated by

Technical Report New Afton Mine

cable deformation, abrasions, water, or severing caused by ground movement. They are used to track and monitor the cave profile as the mining front advances to surface and along the footprint.

A wireless battery-powered system for cave monitoring (Geo4Sight from Elexon Mining) is also utilized where the use of cabled monitoring systems is not possible, or where cables are at high risk of being damaged by moving ground. The system provides a more robust and versatile alternative to wired cave-monitoring systems, as the data are transmitted wirelessly through rock, and thus is not vulnerable to hole shearing/dislocation.

Cave tracker and beacons provide real-time insight into cave flow and cave propagation. This technology uses magnetic beacons which are embedded in the ore body. They emit a magnetic field pulse on a set time period. The beacons that are embedded can be tracked in 3D as they move with the fragmented rock of the ore body. The ability to track beacon movement allows mine engineers to determine which parts of the cave are moving. These beacons are built to withstand the rigours of the underground cave environment.

#### 16.4.10 MUDRUSH MANAGEMENT

The *Mudrush Risk Management Procedure* at New Afton ensures safe working conditions in the event of potential mudrush events caused by cave-groundwater interactions. These safe working conditions are achieved by implementing a drawpoint classification matrix and a *Standard Operations Procedure* (SOP). Routine drawpoint inspections are conducted by draw control, geotechnical, and geology personnel to monitor moisture content and fragmentation. Observed changes in drawpoint moisture during active production are reported by the operators. A mudrush risk-status board is maintained underground to communicate immediate changes in risk to those working on the level, and a weekly mudrush risk map is published to the underground and technical teams, summarizing data from inspections over the previous week. Regular priority meetings with underground personnel ensure clear communication of the mudrush status and associated risk categories. In cases where a drawpoint is classified as high risk, automated or remote production scoops are utilized to prevent personnel exposure to potential mudrush material flow. In C-Zone, production will primarily be carried out using a fleet of automated scoops. No mudrush occurrences have been observed during the mining of the B3 cave.

## 16.4.11 AIR BLAST MANAGEMENT

An air gap is the void space between the intact rock at the cave back and the top of the broken rock muckpile. This void forms as production begins and material is extracted through the drawpoints. During the caving process, stress changes cause the intact rock at the cave back to break onto the muckpile, gradually filling the void. However, if the stress changes are insufficient to break the intact rock at the cave back, the air gap can grow larger as production continues to pull the muckpile down. A larger air gap increases the risk of instability, as it allows larger blocks or volume of intact rock to fall over an increased air gap height. The larger blocks or volume of falling material can compress the trapped air, causing it to escape at high velocities through connected workings and potentially result in an airblast, which may pose a significant risk to both personnel and equipment.

New Afton actively interprets and manages the risk of air blasts through the application of its *Cave Management Plan* (CMP), by inputting production numbers and monitoring data from geotechnical instrumentation. To mitigate potential risks, air blast bulkheads have been installed at existing and anticipated connections that may develop during the caving process. Once the cave has broken through to the surface, the risk of an air blast is eliminated, as material from the caving process has filled any significant void space.

Technical Report New Afton Mine

At New Afton, the East and West Caves from Lift 1, as well as the B3 Cave, have broken through to the surface and no longer pose an air gap risk. Air gap analysis and monitoring are ongoing as caving progresses in C-Zone.

# 16.5 LIFE OF MINE PLAN

The New Afton LOM Plan considers block cave mining from B3 and C-Zone and longitudinal stoping from East Extension, with ore processed at the New Afton processing plant to produce a copper concentrate with saleable gold and silver. Based on the 2024 Mineral Reserves, New Afton has a Reserve mine life to 2031, with total production of 696.6 koz of gold, 554.9 Mlb of copper, and 1,670.3 koz of silver after considering metallurgical recoveries.

Mining of the B3 block cave is expected to be completed in 2025. C-Zone mining production is expected to ramp up to approximately 4.4 Mt of ore in 2025 and 5.7 to 6.0 Mt per year from 2026 to 2030. In periods when the mining rate exceeds the processing rate, intermediate-grade ore will be stockpiled on surface until it can be processed at a later time.

Development of the East Extension access ramp is scheduled to start from the top and bottom in 2025, and the first ore from East Extension is expected in 2026. In 2025, lateral development also includes 675 m of exploration drift. From 2026 to 2031, East Extension is expected to provide approximately 500 tpd of high-grade supplementary mill feed.

With the ramping up of C-Zone block cave, the processing rate is planned to increase from an average of 13,750 tpod in the fourth quarter of 2024 to full capacity of approximately 16,000 tpd by the end of 2026. New Afton has achieved these processing rates in the past during mining of the Lift 1 block caves. Feed grades are planned to increase as C-Zone caving advances into the core of the deposit, peaking in 2027 and 2028, and as higher-grade ore from East Extension is fed to the plant. Gold and copper production are expected to increase by 38% and 35%, respectively, from 2024 to 2027 because of the increased processing rates and higher feed grades.

The New Afton LOM plan is shown in Table 16-3.



Table 16-3: LOM production schedule

	2025	2026	2027	2028	2029	2030	2031	Total
Underground Mining	'							
B3 ore tonnes mined (kt)	941	-	-	-	-	-	-	941
C-Zone ore tonnes mined (kt)	4,359	5,707	5,998	6,036	5,734	5,474	4,355	37,664
East Extension ore tonnes mined (kt)	-	180	211	159	159	198	56	962
Total ore tonnes mined (kt)	5,300	5,887	6,208	6,195	5,893	5,673	4,411	39,567
Lateral development (m)	4,512	4,227	797	-	-	-	-	9,536
Vertical development (m)	320	249	-	-	-	-	-	569
Processing								
Ore processed (kt)	5,102	5,633	5,778	5,721	5,788	5,830	5,715	39,567
Gold feed grade (g/t)	0.48	0.77	0.90	0.84	0.66	0.50	0.36	0.65
Copper feed grade (%)	0.56	0.87	0.97	0.91	0.72	0.56	0.42	0.72
Silver feed grade (g/t)	1.4	2.2	2.5	2.1	1.6	1.4	1.0	1.8
Gold recovery (%)	83.3	85.3	86.1	86.1	84.4	82.4	79.6	84.5
Copper recovery (%)	87.5	88.8	89.8	90.0	88.5	87.4	85.3	88.6
Silver recovery (%)	72.6	76.0	77.1	77.2	74.3	72.2	67.9	74.7
Gold production (koz)	66.2	119.1	143.5	132.9	104.4	77.0	53.5	696.6
Copper production (Mlb)	55.6	96.2	111.0	103.0	80.9	63.3	44.8	554.9
Silver production (koz)	166.2	299.2	355.8	304.8	225.4	193.6	125.3	1,670.3

# 16.6 MINE INFRASTRUCTURE AND SERVICES

#### 16.6.1 Integrated Operations Centre

The Integrated Operations Centre (IOC) is a two-story facility situated adjacent to the Mine Operations and Technical Services office building. It functions as a centralized hub for key operational, technical, and maintenance personnel, supporting the following activities:

- Integrated planning and scheduling.
- Maintenance of automation, battery-electric vehicles (BEV), and communications infrastructure.
- Innovation and technology-related project management.
- Automated production operations.
- Mine monitoring, control, reporting, and analytics.

The IOC building is equipped with a dedicated server room that houses critical information technology (IT), operational technology (OT), and communications infrastructure.

The ground floor features the Integrated Operations Room, which includes the following:

 Seven Sandvik AutoMine operator stations for managing the production fleet of Sandvik loadhaul-dump (LHD) machines and mobile rockbreakers.

- Seven Mine Control workstations for shift scheduling, monitoring shift execution, overseeing underground assets, and controlling underground fixed infrastructure systems.
- A video wall for real-time CCTV monitoring and visual operational management.

## 16.6.2 MATERIALS HANDLING SYSTEM

The New Afton materials handling system consists of orepasses, underground crushers, a conveyor system to surface, and underground truck haulage.

At B3 block cave, LHDs muck and tram the ore from the drawpoints to orepasses on the extraction level. B3 orepasses are 34.5 m high with a storage capacity of approximately 950 t. Ore is then hauled up-ramp to the Lift 1 gyratory crusher using 45 and 50 t articulated dump trucks, for a one-way haulage distance of approximately 1,400 m. The B3 block cave can produce approximately 10,000 tpd in this arrangement.

At C-Zone block cave, orepasses transfer broken ore from both undercut and extraction levels to the haulage level. Extraction-level orepasses are spaced such that the maximum tram distance from any drawpoint is not greater than 150 m; grizzlies are installed on the orepasses to size material prior to crushing, oversized material is either handled at the drawpoint or in a remuck with a mobile rock breaker. At C-Zone, orepasses link the undercut level and extraction level to the haulage level. C-Zone development waste is handled through the same production orepasses but separately, using strict procedures and communication between extraction- and haulage-level workers. A waste storage bay on the haulage level is used to stockpile waste for batch crushing and conveying.

All ore and waste are transported to surface via the crushing and conveying system. The system consists of two FLSmidth 1100 × 1800 mm gyratory crushers, located on the Lift 1 and C-Zone haulage levels. The C-Zone crusher is located outside of the anticipated cave-induced abutment stress zone. Trucks and LHDs dump directly into the gyratory crushers; both crushers have two dump points to increase dumping efficiency and shorten cycle times. Each crusher is equipped with a remotely controlled rock breaker. Below the crushers are 800 t surge bins that feed crushed material onto the conveyor belt system.

The two gyratory crushers can feed the conveyor system simultaneously by adjusting their respective apron feeder speeds at the bottom of the ore bins. The Lift 1 conveyor system consists of five conveyors and transfer stations to surface. The C-Zone conveyor system consists of four conveyors and transfer stations, tying into the Lift 1 conveyor system at its first transfer station. Conveyors are suspended from the back of the conveyor declines to allow vehicle traffic underneath. The entire materials handling system is controlled by one operator from a control cab at the crusher and two employees who perform system checks and empty the tramp steel bin. The system is also equipped to run remotely on surface from the Integrated Operations Centre.

A jaw crusher installed during Lift 1 mine development is available as a back-up crusher and has a capacity of 6,700 tpd. Additionally, an MMD GPHC Ltd. 625 mineral sizer was installed as a temporary crusher in the C-Zone conveyor decline to improve material handling efficiency during development and construction of C-Zone. The sizer will be moved to its permanent location, downstream of the gyratory crusher, in 2025 to provide secondary crushing; this will improve mill grinding efficiency and metal recovery at full production from C-Zone.

The peak conveyor capacity is 1,200 tonnes per hour (tph), although an average operating rate of 1,000 tph is typical. Through shift change, the conveyor system is operated remotely from the Integrated Operations Center providing an extra hour of conveying. Once the belts are emptied, the system is shut down to conserve energy.

## 16.6.3 EXPLOSIVES HANDLING AND STORAGE

Three explosives magazines are located on site: two on surface, and one underground. The surface magazines hold ammonium nitrate fuel oil (ANFO), bulk emulsion, and caps and boosters. Development mining explosives and production explosives are held in separate areas. The underground magazine has four separate bays, capable of holding all types of explosives. Deliveries are received weekly and placed in the appropriate storage area.

An additional explosives magazine in C-Zone will be constructed to provide efficient access to the explosives.

# 16.6.4 Underground Maintenance Shops

All maintenance work can be performed underground in the 2,500 m<sup>2</sup> maintenance shop. The main shop consists of one high-bay equipped with a 40 t overhead crane, three smaller bays, one welding bay, one parts storage bay, and an access drift. Up to six underground haul trucks can be worked on simultaneously in the large high bay. Oil and grease are stored in an adjacent bay equipped with a fire door and pumped throughout the shop to dispensing racks.

A second underground maintenance shop is under development for C-Zone, with construction scheduled for completion in 2025. It will consist of one high bay equipped with a 20 t overhead crane, three smaller maintenance bays, a lunch/office room, a warehouse, an electrical room, tool and storage rooms, and a lube room.

Battery charging bays are in select locations across Lift 1, B3 and C-Zone to support the battery electric fleet.

Battery charging bays are typically equipped with 2 t back-mounted monorails and can hold 4 batteries at a time for charging. Small auxiliary service bays on the B3 and C-Zone levels currently accommodate minor equipment repairs.

#### 16.6.5 FUEL BAY

A single underground fuel bay is located adjacent to the lift 1 haulage level, with two satellite fuel bays located on the B3 footwall and C-Zone decline. The fuel bay contains two 5,000 L fuel tanks each mounted on a cassette-style mobile platform. The fuel tanks are placed inside a containment area equipped with an automatic fire door. Once per day, the fuel cassette is loaded onto a multi-purpose cassette carrier and driven to surface to be filled. In addition to fuel, the fuel bay stores grease, washer fluid, and other supplies needed for equipment maintenance.

#### 16.6.6 BATCH PLANT

All concrete and shotcrete products used underground at New Afton are produced at the on-site batch plant. The truck-mix-style plant can produce over 80 m³ of product per shift. Control of the plant is through a dedicated system that has pre-programmed recipes for each product required. Shotcrete and concrete products are delivered via 4 m³ or 6 m³ underground transmixers.

## 16.6.7 UTILITY AND FIRE WATER

Fresh water from Kamloops Lake is provided to the underground mine for both utility and fire water use (see 20.6.1 for permit). Underground water supply is via a 6" steel pipeline suspended from the back of the main conveyor declines and distributed throughout the mine. The crushers and conveyor systems and primary underground maintenance shops are outfitted with fire detection and sprinkler suppression systems.

## 16.6.8 COMPRESSED AIR AND ELECTRICITY

Compressed air is run throughout the mine and is supplied by compressors located near the portal. Smaller auxiliary compressors installed underground provide additional compressed air locally for high-use applications. Electrical power is reticulated through the mine at 13.8 kV via a ring main system. Permanent and portable underground substations step power down to 600 V for service equipment.

#### 16.6.9 COMMUNICATIONS

The mine site runs an extensive communication system that comprises a Fibre-Optic Network, two-way Tetra radio system and Wi-Fi. This configuration enables services such as process control, automated LHD operations, business data, seismic monitoring, closed circuit television (CCTV), security access, and fire alarm network, and two-way voice communication to each person on the mine site.

The mine is in the process of upgrading the site communications system to a private long-term evolution (LTE) network on surface and underground, with the first phase expected to be operational early-2025.

# 16.6.10 VENTILATION SYSTEMS

The current ventilation layout at New Afton is a push-pull system with six ventilation raises to surface: three intake raises and three exhaust raises. The intake raises (VR5, VR6, and VR7) are fitted with 800 hp axial fans. The exhaust shafts (VR2, VR3, and VR4) are fitted with 600 hp axial fans. The main conveyor portal also exhausts air from the mine.

The three intake raises supply approximately 1,150,000 cfm of fresh air to the top of the access decline, where air is split into two sections, with approximately 600,000 cfm directed down the access decline and 550,000 cfm directed down the fresh air intake. The conveyor decline exhausts approximately 250,000 cfm from the mine with the remainder flowing through the exhaust raises. Primary air flows are monitored and tracked via the on-site distributed control system.

Development faces and temporary access areas (such as the undercut level) are ventilated using auxiliary fans with ventilation ducting, while major production areas (such as the extraction levels) are ventilated using either flow-through ventilation or via a fan in a bulkhead design.

The B3 ventilation circuit feeds from and exhausts into the existing mine ventilation circuit. B3 has fresh air delivered to the working area via the B3 access ramp. The lower portion of the haulage ramp where trucks are loaded will be fed from a fan and ducting. The air then flows into the footwall drive. Flow continues to the west side of the B3 footprint where it then flows east across the extraction strike drives. The air from the B3 extraction then exhausts up two vertical raises on the eastern side of the footprint to the existing mine return air circuit.

Ventilation to the C-Zone is supplied through a push-pull system, using the same main surface fans currently supplying air to Lift 1 and B3, as well as booster fans in the C-Zone exhaust air path.

Fresh air enters the footwall drive from the Lift 1 access decline via a 4.0 m diameter vertical raise from the top of the C-Zone decline. It then flows through the extraction crosscut drives before entering the return air circuit. Fresh air is provided to the undercut level using auxiliary fans and flexible ducting from the footwall drive. Fresh air to the haulage level flows through each haulage leg from the footwall drive and travel to the extraction level to be

exhausted into the return air circuit. The conveyor drives and a second 4.0 m diameter raise exhausts all the air up to the Lift 1 return air circuit, which exhausts the air out of the mine (Figure 16-5).

East Extension is estimated to require 275 kcfm of airflow. During development, 135 kcfm will be provided to the upper and lower ramp by two 200 hp fans in parallel. Once the main access ramp is connected, 275 kcfm will be redirected from C-Zone to flow through East Extension.

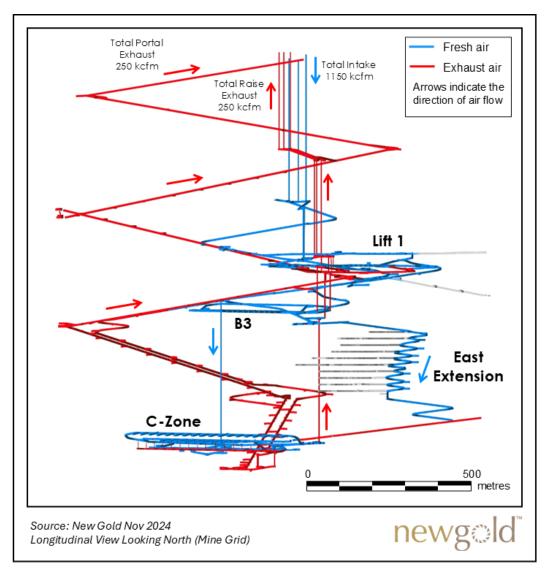


Figure 16-5: Schematic representation of LOM ventilation circuit

# 16.6.11 Underground Dewatering System

The Lift 1 underground dewatering system at New Afton consists of two vertical sumps located at the bottom of the Lift 1 development. Each sump has a capacity of approximately 240 m³ and its outflow is connected to a single dewatering system of three booster stations arranged along a 200 mm dewatering line. The dewatering system is fully automated. One of the two sumps is kept empty as reserve capacity. The maximum design pumping rate of the system is 184 m³/h and the system currently operates at approximately 110 m³/h.

Technical Report New Afton Mine

The B3 underground dewatering system consists of a single settlement sump which collects all water from the B3 level. Water from the clean side of the sump is pumped using a single 150 hp pump through a dedicated line into the Lift 1 vertical sumps.

The C-Zone underground dewatering system utilizes a similar setup to the Lift 1 system, with the same design capacity of 184 m<sup>3</sup>/h. It uses two 240 m<sup>3</sup> vertical sump tanks, pumps, 200 mm steel dewatering line, and booster stations. The C-Zone dewatering line drains into the Lift 1 sump tanks for pumping to surface. Temporary dewatering sumps in C-Zone are in use until construction of the permanent system is complete in 2025.

#### 16.6.12 Refuge Stations

Underground refuge stations are provided throughout the mine to safeguard personnel during emergencies. New Afton uses a combination of permanent constructed refuge chambers within each block cave production footprint, and semi-portable containerized refuge stations elsewhere. The refuge stations meet and exceed the *Health*, *Safety, and Reclamation Code for Mines in British Columbia*.

# 16.7 MINE EQUIPMENT

The New Afton underground mine has all the required mobile mining equipment to support current block cave production and C-Zone development. Mining activities are carried out by New Gold personnel and equipment, utilizing mining contractors where required, mostly to support C-Zone cave construction. The purchase of additional mining equipment is considered in the LOM plan to facilitate the C-Zone production ramp up and mining of the East Extension zone, as summarized below.

When C-Zone block cave will be in full production, eight diesel Sandvik LH410 LHDs will operate on the extraction level to muck and tram ore from the drawpoints to the orepasses. These LHDs are automated, allowing operation from the IOC on surface, improving utilization and reducing operator exposure to potential hazards. As of the end of 2024, six of the Sandvik LH410 LHDs are on site and two LHDs are scheduled for delivery in 2025.

On the C-Zone haulage level, four large battery-electric LHDs (Sandvik LH518iB) and one large diesel LHD (LH517i) will be used for tramming the ore from the bottom of the orepasses to the C-Zone gyratory crusher. As of the end of 2024, three of these large LHDs are in operation and two Sandvik LH518iB LHDs are scheduled for delivery in 2025 to coincide with the C-Zone production ramp-up.

East Extension mining will utilize three LHDs and two trucks during production. The levels will have two remucks located within 40 m of the main access ramp to be used as mixing bays and truck loading areas. Along the main access ramp, remucks will be spaced every 150 m to facilitate development. The development fleet for East Extension will utilize four jumbos, five bolters, four scissor lifts, two ANFO loaders, four LHDs, and three trucks.

Following completion of B3 mining, C-Zone development, and C-Zone undercutting in 2025, existing mining equipment will be transferred to East Extension. This includes haul trucks, drill jumbos, bolters, shotcrete sprayers, production drills, an ANFO loader, and transmixers. The LOM plan includes the purchase of four LHDs, an additional haul truck, and an additional ANFO loader. A list of the major mobile mining equipment, showing the current fleet and additional requirements to achieve the LOM plan, is shown in Table 16-4.



Table 16-4: List of major mine equipment

Туре	Model	Current Quantity (Dec 2024)	Additional LOM Requirements
Drill jumbo	Sandvik two boom	4	
Rock bolter	Sandvik bolters	8	
LHD	Sandvik LH410	8	2
LHD	Sandvik LH518iB	2	2
LHD	CAT R1600	6	
LHD	Large diesel LHDs (15t +)	5	4
Truck	CAT AD45	8	1
Long hole drill	Sandvik DL 420 & 430	4	
Explosives	Emulsion & ANFO loaders	2	1
Concrete mixer	Transmixers	8	
Shotcrete	Normet & Macleansprayers	4	
Utility	Scissor deck, boom truck & other	15	
Utility	Maclean Blockholer	1	
Utility	CAT skid steer	5	
Utility	CAT 120/140 M grader	2	
Utility	CAT TH407 / TL943 telehandler	7	
Utility	CAT 930G IT loader	4	
Utility	MineMaster tractor	3	

# 16.8 COMMENTS ON MINING METHODS

The Qualified Person provides the following comments:

- Current operations use the block caving mining method. New Gold has successfully constructed and operated multiple block caves at New Afton for more than 12 years.
- C-Zone achieved commercial production in 2024 and New Afton is scheduled to complete the transition from B3 block cave to C-Zone block cave production in 2025.
- East Extension is a new mining zone; mine planning considers long-hole stoping methods.
- The construction of the C-Zone materials handling system, completed in 2024, included the
  addition of a second gyratory crusher, modelled after the successful Lift 1 gyratory crusher, as
  well as an extension of the conveyor system. The East Extension mining zone will also utilize this
  materials handling system. Mine designs incorporate underground infrastructure and ventilation
  requirements.
- The planned mobile equipment fleets are suitable for the selected mining methods.
- Based on current Mineral Reserves, New Afton has a projected mine life of seven years (2025– 2031).

# 17 RECOVERY METHODS

# 17.1 PROCESS DESCRIPTION

The New Afton process plant has been in operation since mid-2012. The processing flowsheet consists of conventional crushing and grinding circuits, a flotation circuit, and a gravity circuit to produce a copper-gold concentrate. Run-of-mine ore is crushed at the two underground gyratory crushers and transported via conveyor belts to the crushed ore stockpile on surface. A simplified flowsheet of the New Afton processing plant is shown in Figure 17-1.

The process plant has undergone several major updates since initial commissioning to increase processing capacity, maintain metallurgical recoveries, facilitate the processing of different ore types, and produce thickened and amended tailings (TAT). Major plant updates are listed as follows:

- 2015: A mill expansion was completed to add a tertiary stage of grinding and additional flotation cleaning capacity. This allowed throughput to increase to approximately 16,000 tpd.
- 2017: Additional rougher flotation capacity was added.
- 2018: To facilitate the processing of supergene ore and produce a separate native copper
  concentrate, gravity recovery capacity was added to the ball mill circuit and was increased in
  each of the tertiary and regrind circuits. In the ball mill circuit, two inline pressure jigs (one
  rougher and one cleaner) were installed along with a magnetic separator for removal of
  magnetite from the cleaner jig concentrate.
- 2021-2022: The TAT plant was commissioned in two stages, with thickened tailings in 2021 and
  thickened tailings amended with cement in 2022. Prior to this, the cleaner-scavenger and
  rougher flotation tailings were combined at the final tailings pump-box and pumped to the sands
  plant at the NATSF (New Afton tailings storage facility). The coarse and fine fractions were
  separated by hydrocycloning to meet dam construction requirements. The TAT processing facility
  replaced this hydrocycloning stage.
- 2023: With processing of supergene ore being completed during the third quarter of 2022, the
  gravity circuit operation was adjusted to focus on recovery of gold rather than of native copper.
  The concentrates from the flotation and gravity circuits were combined to produce the final bulk
  copper-gold-silver concentrate for dewatering.

In 2024, the New Afton Mine processed 4,219,328 tonnes with average metallurgical recoveries of 87.2% for gold, 88.9% for copper, and 75.2% for silver. The processing plant throughput is currently limited by mine production and, with C-Zone ramping up in the next few years, the New Afton Mine intends to take advantage of the existing processing capacity at the mill to process up to 16,000 tpd.

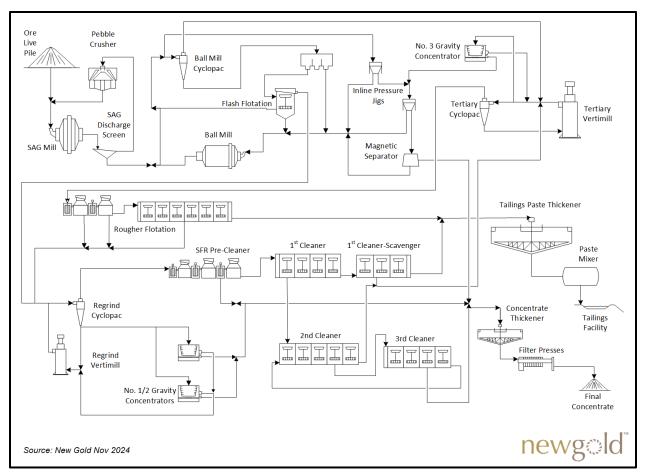


Figure 17-1: Simplified process flowsheet

## 17.1.1 **CRUSHING**

Run-of-mine ore is crushed to minus 150 mm through one of two 1,100 mm  $\times$  1,800 mm FLSmidth gyratory crushers located underground at the Lift 1 and C-Zone cave haulage levels. The ore is then transported to surface via conveyor belts. Ore is discharged onto a 120,000 wet metric tonne (wmt) crushed ore stockpile. Waste and low-grade ore are diverted from the mill feed.

The underground crushing and conveying systems are described in greater detail in section 16 of this technical report.

# 17.1.2 GRINDING

Located beneath the crushed ore stockpile, two  $1.8 \text{ m} \times 11 \text{ m}$  apron feeders regulate the flow of ore onto the SAG mill feed conveyor. The SAG mill is an 8.5 m diameter  $\times 4 \text{ m}$  long Farnell-Thompson mill, driven by a 5,220 kW GE motor with a variable speed drive. The SAG mill discharge is screened over a  $2.4 \text{ m} \times 6.1 \text{ m}$  Deister double-deck screen with  $8 \text{ mm} \times 34 \text{ mm}$  apertures on the lower deck. The screen-deck was upgraded from single to double deck as part of the 2015 expansion to allow for an increased milling rate. Both the upper and lower deck oversize are recycled to the SAG mill-feed conveyor, with the option of crushing this recycle stream using an FLSmidth XL600 Raptor cone crusher.

Secondary grinding is accomplished using a 5.5 m diameter × 9.8 m long Farnell-Thompson fixed-speed ball mill driven by a 5,220 kW motor, in closed circuit with seven (five operating) Krebs GMax-26 hydrocyclones. Approximately 7% of the cyclone feed is diverted to a Gekko inline pressure jig and magnetic separation circuit for native copper and gold recovery and magnetite rejection, with concentrate reporting to the concentrate thickener. In addition to the feed diverted to the jig circuit, approximately 8% of the cyclone feed reports to an Outotec Skim-Air 500 flash flotation cell with concentrate reporting to the regrind circuit, and the tails reporting to the ball mill feed. The cyclone overflow reports to the tertiary circuit.

The tertiary grinding circuit was added as part of the 2015 mill expansion project. Prior to this, the ball mill cyclone overflow reported directly to rougher flotation. Tertiary grinding is accomplished using a Metso Vertimill 3000 in closed circuit with seven (five or six operating) Krebs GMax-26 hydrocyclones. The tertiary cyclone overflow reports to the rougher flotation cells. Approximately 15% of the tertiary cyclone underflow reports to a continuous CVD42 Knelson concentrator for native copper and gold recovery with concentrate reporting to the cleaner inline pressure jig feed. Both the SAG and ball mill circuit control is supported with an expert control system.

## 17.1.3 FLOTATION

The tertiary grinding cyclone overflow flows by gravity into the rougher flotation circuit, which consists of two staged flotation reactor (SFR) cells in series followed by six 100 m<sup>3</sup> flotation tank cells in series. The two SFRs were commissioned in Q2 2017. The concentrate from the rougher flotation cells is collected in launders and flows by gravity to the regrind circuit; the tailings from the final rougher cell is discharged into the tailings pumpbox.

The regrind circuit grinds the flash and rougher flotation concentrates, decreasing the particle size to 80% passing 35 µm to 40 µm prior to processing in the cleaner flotation cells. The regrind circuit consists of a 932 kW Vertimill in closed circuit with the regrind cyclopac. The regrind cyclopac consists of six (five operating) Krebs GMax-15 hydrocyclones. The underflow stream from two of the operating regrind cyclones is processed through two XD-40 Knelson concentrators to recover liberated gold and native copper from the regrind circuit. The Knelson concentrate discharges to the 3<sup>rd</sup> cleaner concentrate pumpbox, where it is pumped to the concentrate thickener. The Knelson concentrator tailings are discharged back to the regrind cyclone feed pumpbox. The regrind cyclone overflow discharges into the cleaner flotation circuit and the tailings flow to cleaner scavenger flotation. Cleaner scavenger tailings report to the tailings pumpbox. Three SFR cells were added to the head of cleaner flotation as part of the mill expansion project in 2015 to increase cleaner flotation capacity. The concentrate from these three cells is combined with the inline pressure jig final concentrate, 3<sup>rd</sup> cleaner concentrate, and regrind Knelson concentrates to produce the final bulk copper-gold-silver concentrate for dewatering.

#### 17.1.4 DEWATERING

The final concentrate is pumped to the concentrate thickener, where the solids achieve an underflow slurry density of approximately 55% solids. The slurry is pumped to an agitated tank and subsequently pumped into one of the two filter presses, where it is dewatered to approximately 8% moisture. The dewatered concentrate is discharged from the filter presses directly into the concentrate storage shed, before truck transportation to either the DP World Fraser Surrey Docks container port for ocean shipment to a smelter, or to the Ashcroft terminal for transportation by rail to a smelter in Quebec. In the case of DP World, concentrate is loaded into containers (two per truck) at the New Afton shed. These containers are stored at the port then emptied into the bulk hold of the ship. Empty containers are returned to site for reloading. In the case of Ashcroft, the concentrate is loaded into

side-dump trucks at the New Afton shed then stored in stockpiles at the Ashcroft terminal before loading into railcars.

# 17.1.5 THICKENED AND AMENDED TAILINGS (TAT)

The rougher and cleaner scavenger flotation tailings are combined in the mill and pumped to the 45m Outotec paste thickener. The slurry discharges to the thickener feed tank. Flocculant is added at the feed tank and/or the thickener feedwell. The slurry exits the bottom of the feedwell into the thickener and is separated into two streams: supernatant thickener overflow and sedimented thickener underflow. The thickener underflow solids concentration is typically maintained in the 61–65 wt% solids range with an average of 63 wt% solids in 2024.

The thickener underflow is pumped out from the bottom of the thickener using a centrifugal pump. The pump discharges to a distribution header which splits the flow equally between the operating cement mixing and tailings pump trains. There are two operating pump trains and one on standby. Each pump train consists of a paste mixer, a pumpbox, a centrifugal charge pump and a high-pressure positive displacement pump. The positive displacement pumps discharge into a combined line, with the deposition location controlled at a valve yard close to the TAT facility. TAT can be discharged to the NATSF or at one of four spigot points along the APTSF (Afton Pit Tailings Storage Facility).

The thickener overflow exits at the top of the thickener via a weir into a collection launder. The launder discharges to a pipe which feeds the thickener overflow pumpbox. The water is returned to the mill process water system to maintain the mill operational water balance. Anti-scalant is added to control calcium carbonate buildup resulting from lime addition in the mill and the relatively high temperature of the recirculating process water.

An overview of the tailings storage facilities is provided in Section 18 of this technical report.

# 17.2 PROCESSING IMPROVEMENT PROJECTS

Two processing improvement projects are planned for 2025 with the objective of maintaining or improving metallurgical recoveries at the higher throughput rates as C-Zone ramps up to full production:

- Secondary crushing.
- Cleaner circuit upgrade.

#### 17.2.1 SECONDARY CRUSHING

An MMD 625 mineral sizer was installed as a temporary crusher in the C-Zone conveyor decline to improve material handling efficiency during development and construction of C-Zone. The sizer will be moved to its permanent location, downstream of the gyratory crusher, in 2025 to provide secondary crushing which will improve mill grinding efficiency, mill throughput stability and thus metal recovery at full production from C-Zone.

# 17.2.2 CLEANER CIRCUIT UPGRADE

In the second half of 2025, the existing  $3^{rd}$  cleaner flotation bank (4 × 5 m<sup>3</sup> Outotec Tank Cells) will be replaced by a Glencore Jameson E1732/4 cell. The existing  $2^{nd}$  cleaner flotation bank (5 × 5 m<sup>3</sup> Tank Cells) will be repurposed to operate as a recleaner-scavenger bank. The purpose of the upgrade is to increase overall copper and gold recoveries in C-Zone at a given final concentrate grade by improving the recovery of ultrafine particles in the

cleaner circuit while maintaining cleaner recoveries at a higher rougher mass pull. The Jameson cell provides increased cleaning efficiency for a given footprint with lower energy consumption. The technology and flowsheet were selected based on a Hatch Ltd. study of alternative cleaner flotation technologies and on site pilot testing in 2023 and 2024.

# 17.3 PROCESSING REQUIREMENTS

#### 17.3.1 Processing Plant Consumables

Table 17-1 lists the main reagent and consumables consumption for New Afton's processing plant for 2024.

Table 17-1: Consumption of reagents and consumables

Item	Consumption
Cement (for tailings amendment)	26,000 t
Grinding Media	2,500 t
Lime	3,000 t
Collector (Potassium Amyl Xanthate)	70 t
Frother	70 t

#### 17.3.2 WATER CIRCULATION AND CONSUMPTION

The New Afton processing facility uses one source of fresh water and multiple sources of reclaimed water. Water drawn from Kamloops Lake is used for applications requiring fresh rather than reclaimed water, as well as to make up any deficit in the site water balance. Water is reclaimed from the pond generated by consolidating tailings in the NATSF and transported via the PHTSF (Pothook Tailings Storage Facility) for use as mill process water. The dewatering system for the underground mine is also used as mill process water. The majority of mill process water is currently reclaimed from the tailings thickener overflow. Minor sources of process water include the HATSF (Historical Afton Tailings Storage Facility) wells and the dewatering system for the APTSF.

#### 17.3.3 ENERGY REQUIREMENTS

Most of the power consumption at the mill occurs in the grinding circuit. With a SAG mill that requires an average of 4.5 MW, a ball mill requiring an average of 5.45 MW, a tertiary mill requiring an average of 2.1 MW and a regrind mill requiring an average of 0.45 MW, an average consumption of 105,000 MWh per annum is needed to grind the ore to the optimal grind size for flotation and gravity separation.

# 17.4 COMMENTS ON RECOVERY METHODS

The Qualified Person provides the following comments:

 The New Afton processing plant uses conventional processes and equipment to enable economic recovery over a wide range of mill throughputs, particle sizes and copper-gold mineralogies. The plant has been in operation since 2012.

Technical Report New Afton Mine

- New Afton has previously achieved the planned processing rates of approximately 16,000 tpd, during mining of the Lift 1 block caves.
- Processing plant performance is expected to improve with the relocation of the material sizer
  downstream of the C-Zone gyratory crusher and upgrade of the cleaner circuit. Both projects are
  scheduled for completion in 2025.
- The operation has access to an adequate supply of process water and power to support the LOM plan.

# 18 PROJECT INFRASTRUCTURE

The New Afton Mine is in operation and has all the required infrastructure to support the operation. A plan of the mine site is shown in Figure 18-1. The mine is immediately adjacent to Highway 1, approximately 10 km from the City of Kamloops. A paved road staffed with a security gate connects the highway to the mine offices. A network of roads on the site service the various mine facilities.

Coordinates in this section of the technical report use a local mine grid coordinate system, in which mine grid north is rotated 50 degrees west of UTM north (NAD83 Zone 10) and mine grid elevation (denoted by the abbreviation "MG") is obtained by adding 5,000 m to the elevation as measured above mean sea level, unless otherwise stated.

# 18.1 SURFACE BUILDINGS AND FACILITIES

The following administration and technical offices, as well as operations and maintenance facilities support the New Afton operations:

- Security and First Aid buildings equipped with an ambulance. First aid personnel are available full-time at the mine.
- Emergency Services Building, equipped with two fire engines and mine rescue equipment. Mine
   Rescue personnel are available full-time at the mine.
- Ore concentrator (mill) building.
- Assay lab.
- Thickened and amended tailings plant.
- Millwright shop, mobile maintenance shop, and tire shop.
- Warehouse buildings and laydowns.
- Integrated Operations Centre (IOC) which centralizes key mine planning, operations, and maintenance personnel (section 16.5.1 of this technical report outlines the IOC in more detail).
- Office buildings house the Administration, Mine Operations and Technical Services, Capital Projects and I.T., Safety/Training, and Environment/Permitting departments.
- Mine dry and contractor dry buildings.
- Batch plant near the mine portal that produces the concrete and shotcrete required for mining operations.
- Explosives magazines for ANFO, bulk emulsion, caps and boosters.
- Exploration and core cutting buildings.
- Twinned 138kV site transformers and substations.
- Main surface ventilation fans and heaters.
- Kamloops Lake pumphouse and pipeline.

18 – Project Infrastructure 127

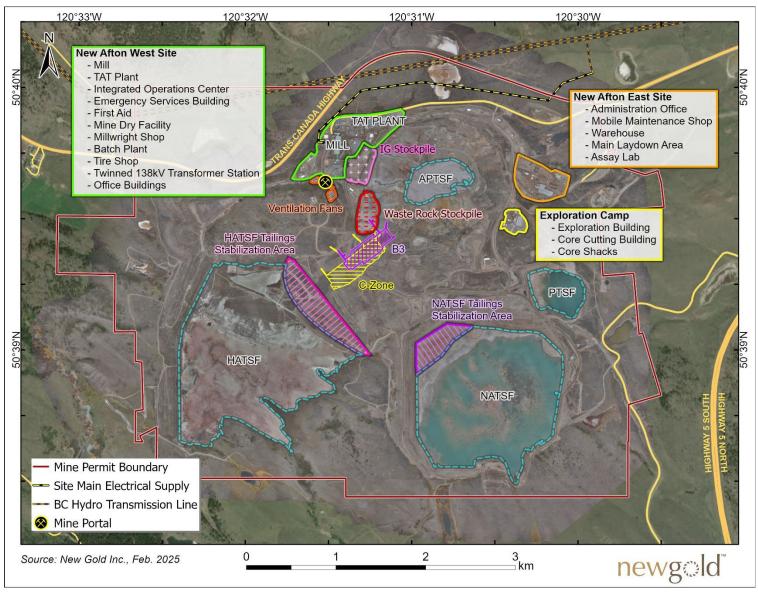


Figure 18-1 Surface layout of New Afton Mine

18 – Project Infrastructure 128

#### 18.2 ELECTRICAL POWER

Currently, BC Hydro supplies the mine with 49.5 MW of electrical power via a connection located between the Savona Substation and the Douglas Substation. This connection consists of a 138 kV overhead line terminal and approximately 1.1 km of 138 kV transmission line to the site's substation.

A BC Hydro transmission upgrade was completed in 2024 to increase the site demand capacity from 34.5 MW to 49.5 MW to support C-Zone production, in addition to operation of the B3 block cave, new tailings thickener systems, water evaporators, and potential C-Zone fleet electrification. A new 40/53 MVA transformer and substation were installed at the mine in mid-2024, twinning the existing site substation to provide site power supply redundancy, energize the underground, and to provide capacity for battery electric equipment and future expansions.

#### 18.3 TAILINGS STORAGE FACILITIES

There are four Tailings Storage Facilities (TSFs) on the New Afton mine site:

- The Afton Pit TSF (APTSF), which is the primary facility for LOM tailings deposition.
- The New Afton TSF (NATSF), which holds all of the Lift 1 and majority of B3 tailings and can be
  used for further deposition as required.
- The Historical Afton TSF (HATSF), which holds the tailings from the original Afton operation and has since been inactive.
- The Pothook TSF (PHTSF), which acts as a site water reservoir, doesn't currently receive any tailings.

#### 18.3.1 AFTON PIT TSF

The Afton Pit TSF (APTSF) is a historical open pit that was mined from 1977 to 1997 and is now used for storage of thickened and cement amended tailings (TAT). An overview of the TAT plant is provided in Section 17 of this technical report. Tailings have been deposited into the APTSF since late-2022; commencing after Lift 1 caving activities were ceased. No active caving is occurring vertically underneath areas of TAT deposition to reduce the risks of fines and dilution entering the cave. The current LOM plan is to deposit 43.9 Mt (33.8 Mm³) in the APTSF, which will utilize approximately 55% of the Total APTSF storage capacity.

The APTSF is situated above the east end of the exhausted Lift 1 cave, and to the east of the B3 and C-Zone mining footprints. A thickened and cement amended tailings process was developed to control hazards associated with the APTSF being hydraulicly connected to the underground mine. Thickening the tailings reduces the amount of water placed in the APTSF and ultimately reduces the amount of water that will percolate into the underground workings. The cement amendment process transitions the tailings from a fluid-like state to a soft-soil-like state within seven days of placement. This control guards against tailings exfiltration through the broken cave-material associated with the Lift 1 Block cave.

TAT is currently discharged into the APTSF from three discharge points along the west side of the pit rim, and from a fourth deposition point on the southeast side of the pit rim. The overall deposition objective is to form a tailings

surface that slopes to the northeast to maintain potential surface ponding away from the B3 and C-Zone cave footprints and to direct the surface drainage towards the water reclaim infrastructure situated along the APTSF access road.

Since the TAT plant was commissioned, the thickened and amended tailings placed in the APTSF has met design specifications. Table 18-1 shows the design and actual properties of thickened and amended tailings deposited to the APTSF (excludes periods when depositing to NATSF). As planned, the grind size P80 in 2024 was smaller than design specification because the processing plant was not operating at full capacity. Density and strength targets are both readily achieved despite the finer particle size and lower cement addition rates.

Table 18-1 Thickened and amended tailings properties

TAT Property	Design	Actual (2024 Average)
Particle size, P80 (μm)	120-155	78
Cement addition (wt%)	1.5% (nominal)	0.80%
Underflow solids concentration (wt%)	58-64%	63.20%
7-day Remoulded Shear Stress (Pa)	500 (min.)	1,345

#### 18.3.2 New Afton TSF

The New Afton TSF (NATSF) is located approximately 1 km south of the APTSF. The NATSF dams were initially constructed in 2011 and the facility has a remaining capacity of approximately 2.6 Mm³ (3.3 Mt at an average dry density of 1.25 t/m³), although tailings deposition to this facility has largely ceased with the commissioning of the APTSF. Containment is provided by natural topography and five dams (A, B, C, South, and West dams) that have been constructed to an elevation of 5,776 m MG. The facility partially overlies a historical waste rock dump that is up to 70 m thick and covered by a geomembrane liner. Seepage through the dams and runoff from the downstream shells is collected using ditches and water management ponds located downstream of each dam. A spillway will be constructed as part of the facility's transition to closure. Block cave induced subsidence is expected to affect a portion of the NATSF. To control the risk of tailings release, a stabilization program has been developed and is described further in Section18.3.6.

In 2023 and 2024, thickened tailings and TAT have been intermittently deposited into the NATSF to facilitate beach development and pond offset from the stabilization area. Future surface contouring may be completed utilizing the same deposition style to achieve closure objectives. Additionally, the NATSF requires a localized crest raise along portions of Dam C and Dam B to maintain freeboard requirements as subsidence affects these areas.

#### 18.3.3 HISTORICAL AFTON TSF

The Historical Afton TSF (HATSF) has been in care and maintenance since completion of open pit mining in 1997 and New Gold actively manages the facility as part of New Afton site operations. Containment at the HATSF is provided by two rockfill dams constructed with till cores (the East and West dams) and by natural topography formed of glacial sediments and bedrock. The HATSF dams were originally designed with a crest elevation of 5,731.5 m MG; however, they were constructed to an elevation of only 5,706 m MG. Portions of the downstream slope of the East Dam are partially buried under waste rock placed during historical operations.

Technical Report New Afton Mine

The impoundment contains an estimated 37 Mt of tailings that were hydraulically deposited from spigots on the north side of the impoundment. The estimated volume of tailings and interstitial water is 27 Mm<sup>3</sup> corresponding to a dry density of 1.4 t/m<sup>3</sup>.

#### 18.3.4 Ротноок TSF

The Pothook TSF (PHTSF) is located approximately 200 m northeast of the NATSF. This facility has the remaining capacity to store 0.2 Mm³ (0.4 Mt at an average dry density of 1.83 t/m³) of tailings in its impoundment. However, no tailings have been deposited into the PHTSF since 2022. Dam construction was completed to an elevation of 5,730 m MG during the New Afton construction phase. Storage containment is provided by one dam (PHTSF Dam) and by natural topography that was modified by historical mining (the Pothook Pit). An upgrade to the existing spillway was completed in 2021. This spillway inlet is constructed to meet closure needs and diverts water into an operational channel directing water to the APTSF. The spillway invert is set at 5,727 m MG; an operational maximum water level of 5,726.2 m MG has been established to provide storage for an environmental design flood (EDF) of 1/200 annual exceedance probability (AEP).

No tailings deposition is expected in the PHTSF until site closure, when tailings deposition may be used to support desired surface grading activities. The PHTSF currently acts as a water reservoir for site requirements. Water is transferred from the NATSF to the PHTSF where it is then reclaimed for milling process via a reclaim intake located near the right abutment at the north side of the facility. Water transfer from the NATSF pond, including discharge from the NATSF stabilization dewatering wells, report to the south end of the PHTSF.

#### 18.3.5 TSF Performance Monitoring

TSFs are monitored and block cave induced subsidence is tracked through a combination of InSAR (a radar satellite imagery technique), drone-based photogrammetry, and the following suite of surface and subsurface instrumentation:

- Slope inclinometers.
- Shape accelerating arrays.
- Time-domain reflectometers.
- Differential global position systems.
- Extensometers.
- Survey prisms.
- Settlement plates.

All TSFs located on the New Afton Mine site undergo thorough review and oversight from qualified professionals including, at minimum, the following evaluations:

- Quarterly inspections from the New Afton Mine TSF Qualified Person (The TSF Qualified Person is
  a required role according to the *Health, Safety and Reclamation Code for Mines in British*Columbia. This role is currently fulfilled by the New Afton Tailings and Surface Superintendent.)
- Annual inspections from facility Engineers of Record (EORs).
- Twice annual site and technical review from the Independent Tailings Review Board (ITRB).
- Dam Safety Reviews performed every five years.
- Third-party reviews as required by regulators.

#### 18.3.6 TAILINGS STABILIZATION

The projected ground movement from the block cave is well understood and has led to the development of stabilization plans for the NATSF and HATSF facilities. The HATSF stabilization was initiated in 2015 with the installation of the first dewatering wells and earthworks; confirmation testing was completed in 2023. The timing of the NATSF stabilization activities aligned with the transitioning of tailings deposition to the APTSF, which started in 2022 and is projected to be materially complete by Q1 2026. The stabilization programs at the NATSF and HATSF are designed and constructed to provide appropriate controls to prevent significant uncontrolled release of tailings. These stabilization areas are shown in Figure 18-1.

Understanding block-cave induced ground movements is a critical component of effective TSF risk management and stabilization at New Afton. New Gold has implemented a comprehensive subsidence monitoring program along with numerical modelling forecasts (discussed in section 16.4.7) to track surface displacements and plan for subsidence progression. This program supports assessment of subsidence-derived risks using Quantifiable Performance Objectives (QPOs) and Trigger Action Response Plans (TARPs) developed in coordination with the NATSF and HATSF EORs along with additional reviewing consultants and in alignment with industry best practices. Block-cave induced subsidence is currently observed at both the NATSF and HATSF embankments within expected limits and with both facilities performing within tolerable QPO risk classifications.

The stabilization strategy for both the NATSF and HATSF is to decrease flowability of the tailings before mining induced subsidence is expected to negatively affect the facilities. This is accomplished through pond removal, dewatering/depressurization of the in situ tailings using wells, and the use of a wick drain and surcharge program at the HATSF. The result of these activities is enhanced consolidation of in situ tailings.

Pond removal at the HATSF was accomplished by transferring water to the NATSF when the facility was being utilized as the primary tailings disposal facility. Pond removal at the NATSF is currently being managed by using process water rather than fresh water wherever possible and the use of mechanical evaporators to accelerate natural evaporation processes.

Dewatering and depressurization at each facility are carried out using conventional groundwater wells and submersible pumps. At the HATSF, wick drains, and a surcharge load have been effectively used to achieve consolidation and flowability objectives. At the NATSF, wick drains, in combination with dewatering wells, have been successful and are continuing to be utilized to meet both dewatering, depressurization, and consolidation objectives.

The NATSF requires a crest raise along sections of Dam C and Dam B to ensure freeboard requirements are maintained as subsidence lowers the crest in these areas. Initiated in July 2024, the project is expected to be completed by the end of 2025 and will involve the placement of 520,000 m<sup>3</sup> of material.

As of February 2024, the HATSF structures and stabilization measures have been constructed and are suitable for their intended use. HATSF stabilization objectives have been achieved and no additional mitigation plan is necessary at this time.

NATSF stabilization activities are on track to be materially completed by the Q1-2026 target date, which is approximately two years before the forecasted subsidence impact.

#### 18.4 COMMENTS ON PROJECT INFRASTRUCTURE

The Qualified Person provides the following comments:

- Infrastructure required for current mining operations has been constructed and is operational.
- The TAT plant is operational, and tailings have been successfully deposited into the APTSF since late-2022. The APTSF has sufficient storage capacity to support the LOM plan.
- The tailings stabilization work is on schedule. HATSF stabilization is complete and NATSF stabilization is on track for completion well ahead of the expected subsidence impacts.

The planned East Extension operations are not expected to require additional surface facilities.

Technical Report New Afton Mine



### 19 MARKET STUDIES AND CONTRACTS

#### 19.1 MARKETS

New Afton produces a high-quality clean copper concentrate with typical copper grade, high gold grades, payable silver credits, and relatively low levels of impurities. Because of its quality and the continuing strong global demand for concentrate, the current New Afton concentrate is readily marketable to any of several smelters or concentrate marketing firms. Smelting and refining terms are generally similar and include treatment charges and refining charges which are generally known, with penalty charges for contaminants such as arsenic and mercury in the concentrates. Penalty terms are generally more variable than the treatment and refining terms. Concentrates from New Afton are typically sold through concentrate marketing firms, with long-term contracts that cover several years. There are no agency relationships relevant to the marketing strategies used and no market studies are relevant because the subject commodities are freely traded.

For the 2024 Mineral Reserve estimate, New Afton used metal prices of US\$1,650/oz for gold, US\$3.50/lb for copper, US\$20.00/oz for silver. For the 2024 Mineral Resource estimate, New Afton used metal prices 20% higher than the Mineral Reserves price assumptions, US\$1,980/oz for gold, US\$4.20/lb for copper, US\$24.00/oz for silver.

#### 19.2 CONTRACTS

New Gold has a number of contracts, agreements, and purchase orders in place for goods and services that are required for the operation of the mine. All contracts and agreements are negotiated with vendors and have a contractual scope, terms, and conditions. The most significant of those contracts cover maintenance services, fuel, explosives, grinding media, milling reagents, and concentrate haulage.

New Afton has multiple contracts for the sale of concentrates at terms consistent with industry standards. There are other contracts for the transportation of concentrates, port services in Vancouver, and representation services related to concentrate analysis at delivery. New Afton does not engage in forward metal sales or hedging.

New Afton also entered into and maintains a cooperation agreement with the SSN First Nation, as outlined in Section 20.7.2.

#### 19.3 COMMENTS ON MARKET STUDIES AND CONTRACTS

The Qualified Person provides the following comments:

- The concentrate produced by the New Afton Mine is readily marketable.
- Contract terms are considered to be within industry norms, and typical of similar contracts in Canada.
- Commodity pricing assumptions, marketing assumptions, and current major contract areas are
  acceptable for use in estimating Mineral Reserves and in the economic analysis that supports the
  Mineral Reserves.

# 20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

#### 20.1 Introduction

New Afton operates in the traditional territory and on the ancestral lands of the Stk'emlupsemc te Secwépemc Nation (the SSN), one of the seven historical "divisions" of the Secwépemc Nation. The SSN consists the Tk'emlúps te Secwépemc (TteS) and Skeetchestn Indian Band (SIB). New Gold's *Sustainability Policy*, approved by the Board of Directors on October 28, 2024, provides the directives and mandates that guide New Gold's environmental stewardship and meaningful community engagement. The *Sustainability Policy* covers areas such as risk management, environmental monitoring, water, tailings, climate change, biodiversity, and closure, and also outlines New Gold's commitments:

- To comply with applicable laws and regulations in the operating jurisdictions.
- To promote a culture of avoiding harm to the environment and to the public by adopting current and evolving international best practices to guide systems and processes.
- To conduct regular assessments of operations to continuously improve sustainability performance as well as ensure consistency with the policy.

New Afton maintains effective compliance with applicable permits and regulations and holds all major permits and licences for mine operations. The New Afton Mine was reviewed and permitted as a major mine under the BC Mines Act in 2007 and received BC Environmental Management Act permits in 2010. The M-229 permit is issued under the Mines Act and is administered by the Ministry of Mining and Critical Minerals (MCM – formally Ministry of Energy, Mines and Low Carbon Innovation – EMLI). The Effluent Discharge 100224 and Air Discharge permit 100223 are issued under the Environmental Management Act and administered by the Ministry of Environment and Parks (ENV – formally the Ministry of Environment and Climate Change Strategy).

#### 20.2 SITE CONDITIONS AND MONITORING

This subsection summarizes current baseline conditions at New Afton; this summary is based on the information included in the *C-Zone Permit Amendment Application* (New Gold, 2021), the *2023 Annual Reclamation Report* (New Gold, 2024a), the *2023 Annual Report for Authorization Number 100223* (New Gold, 2024b), and the *2023 Annual Report for Authorization Number 100224* (New Gold, 2024c).

#### 20.2.1 AIR QUALITY

The Kamloops area is classified as a semi-arid region, where the primary air quality concern at the site is particulate matter (PM) from fugitive dust. New Afton maintains a Fugitive Dust Management Plan as a tool to identify and mitigate impacts to air quality. The air quality monitoring program at New Afton uses a series of dustfall canisters, Partisol™ air samplers, and Thermo-Fisher continuous particulate monitors (PM2.5 and PM10). A receptor-based vegetation and soil monitoring program assesses for potential fugitive dust loadings to receptors annually. Air quality at the mine site is generally driven by regional sources rather than local mine sources. In recent years (2017,

Technical Report New Afton Mine

2018, 2021, and 2023), periods with elevated PM2.5 concentrations have correlated with periods of wildfire smoke that affected the Kamloops area.

#### 20.2.2 AMBIENT NOISE AND VIBRATION

Noise generated at the mine site, including that produced by the mill and machinery, combines with and sustains the overall noise environment, which also includes existing background sources such as the Trans-Canada Highway, road maintenance, farming machinery, residential construction, and ambient wind noise. The following primary noise receptors are located within three kilometres of the mine site:

- The Cherry Creek Estates trailer park located on the Trans-Canada Highway approximately 650 m from the western boundary of the mine site.
- Several private residences, with the closest primary residence located approximately 450 m from the western boundary of the mine site.
- Travellers on the Trans-Canada Highway, approximately 100 m from the process plant site.

Community complaints regarding operational noise and/or vibration generated from the mine are rare; filed complaints are investigated and managed proactively. The mine site has conducted vibration monitoring at different locations in order to understand potential vibration effects of operations. Vibration complaints were investigated in 2014 and were found to be below Environment Canada and the US Bureau of Mines (USBM) standards for vibration. As all mining occurs underground, there are no effects from airblast overpressure.

#### 20.2.3 GEOCHEMISTRY

New Afton is committed to proper environmental stewardship. In order to understand potential risks and inform potential need for mitigation, a range of geochemical programs have been implemented to determine possible geochemical risks. The ML/ARD Management Plan guides the geochemical characterization program and is reviewed and updated annually by a Qualified Professional as defined by the *M-229 Permit*. The *Permit M-229* contains several acid rock drainage (ARD) and metal leaching (ML) regulatory requirements. The geochemical programs use a range of kinetic and static tests such as humidity cell testing (HCT), field leach bins, weighted composite and grab sample acid-base accounting, and water quality samples.

New Afton tailings and waste rock are characterized by a low sulphide and high carbonate content, and are therefore generally considered non-acid-generating. However, some portions of the hypogene ore body and the high-sulphide pyrite zone in waste rock do pose some potential for producing acid-generating waste rock. Kinetic tests on the varieties of New Afton ore and waste rock indicate that metal leaching may occur under neutral to alkaline pH. All waste rock, including that classified as potentially acid-generating, is deposited in the subsidence zone located adjacent to the Afton pit or co-deposited in the APTSF, as required by *Permit M-229*.

Although New Afton ore types have potential for ARD, most (approximately 60%) of the sulphide, which contains much of the copper, is removed by the milling process as the soft sulphide material readily floats in the flotation process. This decrease of the sulphide concentration in the tailings results in the production of non-acid-generating tailings. This conclusion is supported by ongoing results from test work.

#### 20.2.4 SURFACE WATER QUALITY

New Afton does not discharge operational contact water (effluent) from active operations. Surface water runoff and groundwater seepage from the NATSF, the PHTSF, and the concentrator building are captured in water management ponds, containment ponds, or the APTSF capture zone via natural flow paths or engineered works designed to capture and transport water to these facilities. Some off-site flow from the historical Afton operation areas includes seasonal surface water flow from East Slough to the northeast, seepage water from the northwestern portion of the HATSF to the Northwest Water Management Pond (NWWMP), and seasonal runoff from the historical northwest waste rock pile.

Surface water quality monitoring is conducted within and proximal to New Afton as required by *Permit 100224* and *Permit M-229*; it is summarized in New Gold's annual reports to ENV and in the Annual Reclamation Report to MCM.

In accordance with surface water monitoring procedures, water samples are analyzed for general chemical parameters, anions, nutrients, and total and dissolved metals. ALS Environmental Services, a laboratory accredited by the Canadian Association for Laboratory Accreditation Inc., are contracted for all analytical work. Field blanks and duplicate samples are collected as part of the QA/QC program.

As there are no permit limits identified for water quality, surface water quality results are compared against the *BC* Approved Water Quality Guidelines for the Protection of Freshwater Aquatic Life (WQG-FWAL) as a point of reference. If an approved guideline is not available, the *BC Working Water Quality Guidelines* or Contaminated Sites Schedule 3.2 Generic Numerical Standards are used as a reference, where applicable.

Regional surface water quality is classified as basic circumneutral, beyond very hard, and high in sulphate. Generally, water quality on site and in the receiving environment reflects the regional water quality conditions. Some samples have yielded sulphate and selenium values exceeding thresholds set in WQG-FWAL.

#### 20.2.5 GROUNDWATER QUALITY

Prior to the start of mining operations by New Gold, baseline groundwater quality measurements were derived from eleven groundwater samples collected in April 2006 and June 2006. Results indicated naturally elevated concentrations of sulphate, sodium, iron, arsenic, selenium, lead, molybdenum, and zinc which exceeded thresholds in the *WQG-FWAL*. For most of the groundwater samples, pH values were consistently alkaline, indicating neutrality of groundwater near the mine site. This can be attributed to interactions between groundwater and the sedimentary rocks/overburden, or to high carbonate content of volcanic rocks, which has the effect of developing alkaline groundwater.

The Afton pit is identified as a groundwater sink, with groundwater flow vectors converging on the pit from distances of at least one kilometre away in all directions. The entire mine infrastructure is within this capture zone, with the exception of the western half of the inactive HATSF and the northwest waste rock storage location. The natural direction of groundwater flow at site is to the northwest.

Groundwater monitoring wells have been installed in overburden and bedrock horizons within the mine site at various periods prior to and during operations by New Afton. Currently, groundwater quality monitoring is conducted at New Afton as required by *Permit 100224* and is summarized in New Gold's annual reports to the ENV.

Signature Date: February 10, 2025

Technical Report New Afton Mine

Groundwater samples are collected as grab samples and then submitted to ALS Environmental Services for analysis. The *Groundwater Management Plan* includes 40 stations which are sampled quarterly or annually.

Regionally, groundwater is characterized as basic to circumneutral, beyond very hard, and high in sulphate. Groundwater water levels are generally stable with some decreasing water table elevations. There is no indication of mine-related influence on residential wells as measured at the Cherry Creek Estates treatment plant. Groundwater concentrations are compared to values presented in the *Contaminated Sites Regulation*; during sampling in 2023 values greater than regulated thresholds were identified in 34 wells as follows: sulphate (20 samples), molybdenum (18), fluoride (13), manganese (10), chloride (7), uranium (7), selenium (2), arsenic (1), chromium (1), and zinc (1).

#### 20.2.6 AQUATIC RESOURCES

Natural waterbodies in the area are shallow (less than 3.5 m deep) with summer water conditions characterized by high temperatures (17.6°C to 20.6°C) and anoxic conditions (0.84 mg/L to 3.35 mg/L dissolved oxygen). Many of the smaller ponds in the region are alkaline in nature due to high evaporation and minimal inflows of freshwater, leading to a saline aquatic environment which is subject to evapo-concentration.

Baseline aquatic studies were completed in 2006. Monitoring stations were established at two locations within Cherry Creek (outside the mine site) and at six ponds and/or sloughs within the mine site. The baseline study investigated sediment quality, physical limnology (including primary and secondary productivity), fisheries inventory, and wetlands. The mine site area does not contain any fish populations or suitable fish habitat, though does include wetlands which amphibians and invertebrates inhabit. Fish have been noted in Cherry Creek, west of the mine site. A barrier located downstream of the Trans-Canada highway limits fish migration upstream from Kamloops Lake. Lakes within the upper Cherry Creek watershed (upstream of the Alkali Creek Diversion Channel) are stocked by the province and are likely the source of fish documented lower in the system. In 2021, a *Human Health and Ecological Risk Assessment (HHERA)* was completed by Canada North Environmental Services. The results of this assessment indicate that activities at the New Afton Mine are unlikely to produce toxicological effects on the aquatic community (fish and benthic invertebrates) of Cherry Creek.

#### 20.2.7 Terrestrial Flora and Fauna

The presence of wildlife within the mine site area was determined by reviewing New Afton baseline wildlife inventories conducted in 2006 and ongoing mine site observations documented in annual reclamation reporting.

Although significant areas of the mine site have been impacted by historical mining, agriculture, and other types of development, terrestrial habitats are present and provide important habitat for wildlife. Terrestrial habitats include remnant ponderosa pine forest, big sage grassland, dry grassland, mesic/moist grassland, and exposed/excavated areas.

In accordance with New Afton's *Wildlife Management Plan*, wildlife sightings are routinely recorded and are reported in New Gold's annual reclamation reports. Although habitat on-site has been severely modified by prior land use, adjacent areas still support habitat that may be occupied by wildlife, including species at risk.



#### 20.2.8 Species at Risk and Critical Habitat

Table 20-1 (New Gold, 2021) lists the federally and provincially listed species at risk observed at New Afton. In British Columbia (BC), species are assigned to one of three lists, based on their provincial Conservation Status Rank. Red-listed species are Extirpated, Endangered, or Threatened in British Columbia. Blue-listed species are of Special Concern and Yellow-listed species are secure.

Table 20-1: Federally and provincially listed species at risk

Species		Status			
Common Name	Scientific Name	ВС	COSEWIC	SARA	
Mammals (excluding bats)					
American Badger	Taxidea taxus jeffersonii	Red	Endangered	Endangered	
Bats	·				
Little brown myotis	Eptesicus fuscus	Yellow	Endangered	Endangered	
Big brown bat	Myotis lucifugus	Yellow	-	-	
Townsend's big-eared bat	Corynorhinus townsendii	Blue	-	-	
Long-eared myotis	Myotis evotis	Blue -		-	
Birds					
Lewis's woodpecker	Melanerpes lewis	Blue	Threatened	Threatened	
Barn swallow	Hirundo rustica	Blue	Threatened	Threatened	
Common nighthawk	Chordeiles minor	Yellow	Special Concern	Threatened	
Raptors	·	·			
Short-eared owl	Asio flammeus	Blue	Special Concern	Special Concern	
Herptiles					
Great basin spadefoot	Scaphiopus intermontanus	Blue	Threatened	Threatened	
Western toad	Bufo boreas	Yellow	Special Concern	Special Concern	

New Afton maintains a *Biodiversity and Conservation Management Plan*; it includes the following wildlife protection initiatives to minimize further effects to species at risk and to enhance the habitat suitability in the mine area for certain types of wildlife:

- Implementation of the Spadefoot and Western Toad Management Plan, which was developed based on mine-sponsored M.Sc. research conducted by Thompson Rivers University.
- A bird nesting box program.
- A bat habitat enhancement project that includes the development of an artificial bat hibernaculum.

New Afton routinely engages with the local First Nations regarding biodiversity programs.

#### 20.2.9 Environmental Compliance

New Gold is committed to complying with conditions laid out in the various permits, licences, authorizations, approvals, and assessments as means to avoid or mitigate environmental impacts associated with activities at the New Afton Mine. New Afton maintains strong environmental compliance, with all reportable spills being reported on time and addressed as necessary.

#### 20.3 MINE WASTE MANAGEMENT

New Afton mine waste management consists of tailings and waste rock management. Mine waste is managed in compliance with all relevant permits and authorizations. There are four Tailings Storage Facilities (TSFs) on the New Afton mine site:

- The Afton Pit TSF (APTSF), which is the primary facility for LOM tailings deposition, and receives thickened and amended tailings. Waste rock is also co-disposed into this facility.
- The New Afton TSF (NATSF), which was active prior to the commissioning of the APTSF; it may be
  used for deposition if required.
- The Historical Afton TSF (HATSF), which has been inactive since the late 1990s.
- The Pothook TSF (PHTSF), which acts as a site water reservoir and currently receives no tailings deposition.

#### 20.3.1 TAILINGS MANAGEMENT

A detailed description of the four TSFs is provided in Section 18. Tailings are produced through the milling process within the mill and are then conveyed via a slurry pipeline to the tailings thickener where they are thickened through the site paste thickener to approximately 60% solids or greater. They are then dosed and mixed with cement before entering the pumping circuit. Tailings deposition is primarily directed to the APTSF and must meet density and strength targets as specified within the APTSF Qualitative Performance Objectives. New Afton has the ability and appropriate approvals for both thickened tailings and thickened and amended tailings (TAT) to be sent directly to the NATSF if needed. Pond water at the NATSF is reclaimed by a floating barge for reuse in the mill.

New Afton utilizes strong tailings governance to ensure the safety and stability, both geotechnical and geochemical, of all tailings. The *New Gold Tailings Storage Facility Management Policy*, updated and signed by the CEO on August 16, 2023, outlines New Gold's commitments regarding tailings management. New Gold strives for zero harm to people and the environment as a result of tailings management. The policy includes the following commitments to tailings management:

- Delineating strong and transparent governance with clear responsibilities and accountabilities throughout the organization, up to the Board of Directors.
- Ensuring the oversight of an Independent Tailings Review Board.
- Providing Indigenous partners with the opportunity to review risks and findings from independent reviews.
- Publicly disclosing tailings storage facility information.
- Having a rigorous emergency preparedness plan, including post incident review and participation with regulatory authorities and communities of interest.

The New Afton Tailings Management System includes the following elements:

- Element 1: Policy and Commitment.
- Element 2: Planning.
- Element 3: Implementation.

- Element 4: Performance Evaluation.
- Element 5: Management Review.

New Gold is a member of the Mining Association of Canada (MAC) and therefore utilizes the Towards Sustainable Mining protocols to inform tailings governance. The New Afton Mine achieved the highest rating of AAA for all indicators for the Tailings Management protocol at the most recent MAC external verification in 2024.

#### 20.3.2 WASTE ROCK DUMPS

Waste rock produced by block cave mining at New Afton is deposited in the APTSF or in the block cave subsidence area. The APTSF and subsidence zone are designated potentially acid generating (PAG) storage areas.

Several historical waste rock dumps were developed from the Afton pit between 1974 and 1977. These are termed Waste Rock Dump No. 1, Waste Rock Dump No. 2, and Waste Rock Dump No. 3; they are located to the south and west of the Afton pit. These historical waste rock dumps were covered when the original Afton Mine closed in 1997. The cover was generally comprised of 0.2 to 0.45 m of glacial till and topsoil material that was revegetated. Portions of the historical waste rock dumps have been covered by the NATSF (Dams B and C), the Pothook Dam, and the HATSF East Dam. A historical waste rock dump is also located to the northwest of the HATSF, known as the Northwest Waste Rock Pile, which was reclaimed in 1997.

Historical Afton waste rock from the dump downstream of the HATSF East Dam is being reused as construction material at the NATSF. Excavated waste rock is subject to geochemical characterization as part of the site ML/ARD Management Plan. Any waste rock identified to have a neutralization potential ratio (NPR) of less than 2.0 is deposited within the subsidence zone adjacent to the Afton pit or co-deposited in the APTSF.

#### 20.3.3 CLOSURE REQUIREMENTS FOR TAILINGS MANAGEMENT FACILITIES

Closure of the New Afton site, including tailings facilities and waste rock dumps, is discussed in Section 20.8. The post-closure land-use objectives for the tailings facilities, outlined in the most recent *Reclamation and Closure Plan* (RCP) (New Afton, 2024d), are to establish native grasslands and rock slopes (on rockfill dams) capable of supporting wildlife, and to create flood routing structures for passive water management. At closure, the APTSF will be allowed to fill with water. Modelling projections indicate the APTSF will remain a groundwater sink in post closure.

Active and passive closure activities include regular inspections of the dams, spillways, and subsidence areas, as well as the execution of any maintenance needs identified during those inspections. Inspections are expected to be frequent during the first five years, after which their frequency will be re-evaluated. Tailings facilities will be reclaimed to be geotechnically and geochemically stable.

#### 20.4 WATER MANAGEMENT

The Kamloops area is located in the rain shadow of the British Columbia Coast Mountains and is characterized by a semi-arid climate. Precipitation is relatively modest, averaging approximately 257 mm annually (of which 175 mm is rainfall), with light winter snow and infrequent rain in the spring and fall. The annual average potential evaporation could be as high as twice the average annual precipitation. Accordingly, the mine is characterized as having a net

Technical Report New Afton Mine

negative water balance (even in wet years); it relies on water pumped from Kamloops Lake to offset the water balance deficit.

New Gold has developed a *Site Water Management and Monitoring Plan* which addresses how water is managed during operation and closure; the most recent update was completed on November 14, 2023. This management plan covers physical water management on site, as well as monitoring of surface water to provide surveillance and early identification of potential off-site impacts or variations from predicted water quality values. The water management objectives set for New Afton are as follows:

- Maintain zero-discharge of operational contact water and minimize seepage from all water management infrastructure.
- Reuse and efficiently utilize water where possible during operations and minimize the requirements of off-site water supply.
- Ensure the water balance is always updated and relevant.
- Ensure New Afton's water withdrawal from Kamloops Lake is within its water licence conditions.
- Define monitoring requirements to ensure any impacts are measured, potential pollution is minimized, and that adequate information is available for the modelling of operational and postclosure water quantity and quality.
- Conduct inspections of water management infrastructure to maintain operational efficiency.

Fresh water is drawn from Kamloops Lake and is used primarily for ore processing make-up water, as road dust suppressant, for vehicle wash-down, fire control, and drilling. Water balance modelling is used to track the inventory of water on site, as well as water consumptions and water losses.

Water from the NATSF is used at the mill for processing as water is currently ponded on the NATSF. However, after dewatering of the NATSF, reuse will be sourced from the APTSF drainage through the mine dewatering system and the water cap at the PHTSF will become the main water management pond. The expected date for the removal of the NATSF pond is the second half of 2025. At that time, any water required beyond on-site reuse will be pumped from Kamloops Lake, as per current licences.

Removal of the NATSF pond is being managed by utilizing process water over fresh water, which reduces the overall water volumes on site, and by using mechanical evaporators to accelerate natural evaporation processes. New Afton operates 12 mechanical evaporators from April until October but this will cease with removal of the pond in the second half of 2025.

Tailings seepage water is collected either in the mine workings or via the interception wells prior to entering the underground workings. The water collected in the mine workings is pumped to the mill where it joins the mill process water stream. The water from the Interception Wells is pumped into the Pothook TSF, where it becomes a component of process water.

HATSF seepage water flows west from the northwestern portion of the facility to a seepage collection pond which maintains control of the water through evaporation and pump-back for processing.

The mine site potable water treatment plant provides water to washrooms, kitchens, change room showers, and sinks across the site. Bottled potable water is brought on-site for drinking.

#### 20.5 ENVIRONMENTAL STUDIES

Baseline studies and environmental impact assessment were completed by New Gold and Rescan Environmental Services in 2007 as part of the *Mines Act* application for the New Afton mine (Rescan, 2007). Environmental management plans were developed at the time for air quality, water, waste, waste rock and tailings, ecosystems and vegetation, wildlife, aquatic resources, and surface subsidence zone.

The latest environmental studies and management plans were completed in 2022 during the C-Zone permitting process and the following were updated in 2024 for the preparation of the five-year update of the RCP:

- Hydrogeological model.
- Surface water quality model.
- Subsidence model.

New Afton maintains an ISO 14001-certified *Environmental Management System* (EMS), which consists of a series of best-practice environmental management plans and a comprehensive environmental monitoring program to ensure compliance with all legislation and permits. ISO 14001:2004 certification was obtained in 2013, and the EMS was certified to the new 14001:2015 standard after the upgrade audit in December 2017. Certification was renewed in 2020 and 2023 and maintained through a surveillance audit in November 2024. Additionally, a third-party legal compliance audit was completed in 2024.

The mine site has adopted the *Towards Sustainable Mining Standards (TSM)* as required by the Mining Association of Canada (MAC). New Afton Mine completed an external verification of compliance with MAC TSM in October 2024 and obtained AAA score in most of the indicators.

New Gold prepares annual reports for the *Air Discharge Permit 100223, Effluent Discharge Permit 100224, and M-229* permit as follows:

- Air Discharge Permit 100223 Annual Report to ENV provides a summary of air quality and soil
  and vegetation monitoring data, fugitive dust management, and discussion of compliance with
  permits conditions. The report is written in accordance with requirements set in Air Discharge
  Permit 100223 under the Environmental Management Act.
- Effluent Discharge Permit 100224 Annual Report to ENV provides a summary of recorded spill
  incidents, the results of the monitoring programs for surface water quality and groundwater
  quality, and a discussion of compliance with permits conditions. The report is written in
  accordance with requirements set in the Effluent Discharge Permit 100224 under the
  Environmental Management Act.
- Permit M-229 Annual Reclamation Report to MCM, which describes all of the environmental
  management activities carried out during the calendar year, inclusive of surface water,
  groundwater geochemistry, and progressive and ongoing reclamation. The report is written in
  accordance with the Mines Act Permit M-229.

According to the 2023 Annual Report for Authorization Number 100223 (New Gold, 2024b), the 2023 Annual Report for Authorization Number 100224 (New Gold, 2024c), and the 2023 Annual Reclamation Report (New Gold, 2024a), New Afton maintained compliance with effluent and air discharge limits in 2023 as per Permit 100223, Permit 100224, and Permit M-229 requirements.

Signature Date: February 10, 2025



#### 20.6 PROJECT PERMITTING

New Afton complies with applicable Canadian permitting requirements at federal and provincial levels. The approved permits address the authority's requirements for operation of the underground mine, TSF, waste rock dumps, process plant, water usage, and effluents discharge. The summary of current and required authorizations is presented below.

#### 20.6.1 CURRENT PERMITS, LICENCES, AND AUTHORIZED WORKS

#### Permit M-229

The site's operational and closure obligations and commitments are regulated by *Permit M-229*. Since approval was granted in 2007 to commence operations, various amendments to Permit *M-229* have occurred to reflect updates to the current mine plan and to regulatory standards. Amendments to *Permit M-229* are shown in Table 20-2.

Table 20-2: Approved amendments to Permit M-229

Approval Date	Approval Update
07-Oct-07	Approval granted for construction, operation, and closure of the mine site.
03-Sep-08	Approval granted for extension to the permitted lease boundary.
25-Sep-08	Approval granted for construction of the Pothook Dam.
11-Dec-08	Approval granted to construct the NATSF.
18-Jun-10	Approval granted for extension to the permitted lease boundary.
25-Mar-14	Approval granted to increase mill throughput.
31-Mar-17	Approval granted to amend Permit M-229 for the transfer of the HATSF to New Gold, which was previously under Permit M-112.
07-Jun-18	Approval granted to use rockfill in construction of NATSF dam.
15-Apr-19	Approval to use autonomous mining equipment.
02-Jul-19	Approval of NATSF Dam A early works.
04-Oct-19	Approval of NATSF Design Update to elevation 5,769 m MG and conditional approval to elevation 5,776 m MG.
21-Oct-20	Approval of thickener construction.
21-May-21	Approval for mining of B3.
17-Jan-22	Approval for custom milling of Elk Gold ore.
06-Oct-22	Approval for mining of C-Zone.

#### Permit 100223 (Air Emissions)

The Ministry of Environment and Climate Change Strategy (MoE, now ENV) originally issued Air Emission Permit 100223 (Permit 100223) on June 3, 2010, under the provision of the Environmental Management Act. This permit quantifies the discharges permitted at the following facilities:

- The ore pile reclaim system
- The pebble crusher and surface conveyors
- The underground materials handling system
- Primary and development crushing

Miscellaneous sources, which include the flotation circuit, laboratory facilities, natural gas
heaters on the mine air intake fans, concentrate preparation and load-out, batch plant, and
general maintenance activities and building exhausts.

*Permit 100223* was amended on November 10, 2015, and again on December 20, 2016, with the inclusion of the HATSF in the permit area. *Permit 100223* was amended on December 22, 2022, to include the updated site infrastructure associated with placement of amended tailings into the APTSF.

#### Permit 100224 (Effluent Discharge)

MoE (now ENV) issued *Permit 100224* on June 2, 2010, under the provision of the *Environmental Management Act*. This permit was reviewed, updated, and amended throughout 2013, with the minor amendment being issued on October 10, 2013. *Permit 100224* allows two authorized discharges: concentrator tailings and sewage treatment plant effluent, both of which report to the NATSF.

This involves the following structures: mill concentrator, tailings storage impoundment, Pothook pit, tailings dam seepage pond, interception well recovery works, tailings supernatant reclaim system, tailings pipelines, cyclone separation units, mine groundwater collection system, tailings pump box overflow pipeline, site drainage pond, storm water storage pond, oil-water separation units, maintenance facilities, and ancillary infrastructures.

Permit 100224 was amended on December 22, 2016, to reflect inclusion of the HATSF into the permit. Permit 100224 was amended on June 30, 2021, to reflect inclusion of future mining approvals (B3 and C-Zone) and TAT deposition into the APTSF impoundment. Permit 100224 was amended on November 30, 2023, to authorize operation of 12 Minetek and EcoMister evaporators.

#### Permit 111855 (Tailings Supernatant Vapour Discharge)

ENV issued *Permit 111855* on March 28, 2024, under the provision of the *Environmental Management Act. Permit 111855* allows for the discharge of tailings supernatant from evaporators to the air. The maximum supernatant flow to the evaporators 1,795 m³/hour. The permit authorizes the use of a total of twelve Minetek and EcoMister evaporators, supernatant reclaim pumps within the NATSF, intake filter screens, and related appurtenances. The authorized duration is from March 28, 2024, to November 30, 2025.

#### Permit 123886 (Conditional Water Licence)

MoE (now the *Ministry of Water, Lands and Resource Stewardship* (WLRS)) issued *Permit 123886* on April 12, 2010, under the provision of the *Water Sustainability Act* (formally *the Water Act*). *Permit 123886* authorizes the diversion of fresh water from Kamloops Lake to the mine site. Authorized equipment includes a screened intake, pumps, pipe, and tanks at the mine site.

#### Permit 126715 (Water Licence Amendment)

MoE (now WLRS) issued *Permit 126715* on November 7, 2011, under the provision of the *Water Sustainability Act* (formally the *Water Act*). *Permit 126715* supplements the conditional water licence (*Permit 123886*) and authorizes the diversion of fresh water from Kamloops Lake to the mine site for a maximum quantity of water of 9.09 m³/day (2,000 gal/day). Authorization includes the use of a screened intake, pumps, pipe, and tanks at the mine site. The licence authorizes the use of water for industrial purpose in three buildings located at the mine site.

#### Permit C132319 (Conditional Water Licence)

*BC Forests, Lands, Natural Resource Operations and Rural Development (MFLNRO* now WLRS) issued a conditional water licence on May 22, 2015, under the provision of the *Water Sustainability Act. Permit C132319* authorizes the use of water from Kamloops Lake for mining/processing ore for a maximum quantity of water of 1,322,400 m³/year, with a maximum drawdown rate of 6,960 m³/day. The authorization includes the use of a screened intake, pumps, pipe, and tanks at the mine site.

#### Permit C504133 (Conditional Water Licence)

MFLNRO (now WLRS) issued a conditional water licence on February 25, 2022, with a precedence date of February 19, 2021, under the provision of the *Water Sustainability Act. Permit C504133* includes use of water from Kamloops Lake for mining/processing ore for a maximum quantity of water of 3,120 m³/day. Authorized works are a screened intake, pumps, pipe, pumphouse and access road. This licence terminates on December 31, 2031. Prior to the termination date, the licensee may apply to the *Comptroller of Water Rights* or to the *Water Manager* in accordance with the provisions of the *Water Sustainability Act* to amend this licence to extend its term.

#### 20.6.2 REQUIRED AUTHORIZATIONS FOR DEVELOPMENT

New Afton is not currently seeking any additional or amendments to authorizations. An authorization to amend Permit M-229 permit will be required for longitudinal stope mining of Extension. Minor waste rock storage on surface will be required and tailings will continue to be stored in the APTSF.

#### 20.7 Social or Community Aspects

#### 20.7.1 Social and Economic Impacts

New Afton Mine is located in the traditional territory and central lands of the Stk'emlupsemc Te Secwepemc Nation (the SSN). The SSN consists of two First Nations communities, the Tkemlúps te Secwepemc (TteS) and the Skeetchestn Indian Band (SIB).

The mine is located approximately 10 km from the City of Kamloops, which has a growing population of approximately 97,000. New Afton employs most of its staff from the nearby communities. As of 2024, the workforce totalled 725 employees, 79% of which (569 employees) were from the Kamloops region. A total of 174 of New Afton employees identify as First Nations (24% of the workforce) and 38 are SSN members (5% of the workforce).

As part of the *Mines Permit Application* in 2007 (Rescan, 2007), a socio-economic assessment was conducted which included a description of existing socio-economic conditions and expected project impacts. The assessment included both Indigenous and non-Indigenous communities and found that, overall, the New Afton site would provide a net benefit to communities through job creation, training, and economic opportunities. Mitigation measures were recommended for any potential negative effects (such as perceptions of environmental effects, visual impacts of the mine site).

#### 20.7.2 Indigenous Communities

New Gold's *Human Rights Policy* sets forth the commitment to respect the rights and traditions of Indigenous people where it operates by proactively seeking, engaging, and supporting meaningful dialogue regarding its

operations. The SSN, consisting of the TteS and the SIB, has asserted unextinguished title and rights on the land where the mine is located.

New Gold has maintained an agreement with SSN, the Participation Agreement, initially signed in 2008 and amended in 2011. This agreement was revised as the Cooperation Agreement 2021, and was most recently amended and restated in 2024. The agreement affirms mutual commitment to the vision of a consent-based, stable, and environmentally responsible relationship regarding New Afton's operations and its activities that is respectful of SSN title and rights. The agreement secures and maintains SSN's consent to the project during operations and closure and considers the following values:

- Environmental and Regulatory Matters.
- Cultural Heritage and Archaeology.
- HR, Employment, Training, and Education.
- Business Opportunities.
- Financial Considerations.

#### 20.7.3 CULTURAL HERITAGE

An *Archaeological Impact Assessment* (AIA) of developments associated with the mine was conducted in 2007 and 2008. The AIA identified one archaeology site, northwest of the mine, that was already known, and three new sites: two along the shoreline of Kamloops Lake adjacent to the fresh water pumphouse, and one within the mine permit area. In 2011, another AIA was completed to assess four additional areas not covered by the previous assessment. Four archaeological sites were identified during this second AIA. One additional archaeology site was discovered accidentally in 2014. Since then, additional cultural heritage and archaeological surveys have been conducted at the mine on an individual project basis.

New Gold acknowledges that archaeological assessment cannot completely eliminate the risk of encountering archaeological resources. As such, New Gold and SSN developed an Archaeological and Cultural Heritage Site Mitigation Management Plan. The plan summarizes surveys, lists archaeology and cultural heritage sites, and provides mitigation and management recommendations aimed at reducing the impact on archaeology and cultural heritage sites. Guidelines have also been developed to guide cultural heritage and archaeological projects and to set out timelines and deliverables.

New Gold employs a Dig Permit process to assess for known archaeological or cultural heritage sites for all surface ground disturbance work. Employees and contractors are required to excavate following a specific *Chance Find Procedure;* if archaeological materials are encountered during any phase of development, operations in the locality are suspended and the find is reported to the relevant First Nation(s) archaeologist, who may inform the BC Ministry of Forests Archaeology Branch as required. Any cultural materials that predate A.D. 1846 are protected by the *Heritage Conservation Act of British Columbia*.

#### 20.8 MINE CLOSURE

Signature Date: February 10, 2025

The latest update of the RCP was prepared in 2024 and submitted to the MCM on November 1, 2024 (New Gold, 2024b). This submission updated the previous RCP submitted in 2021, which included the C-Zone project as part of the permit application. The summary of mine closure requirements presented below is based on the latest version of the RCP.

Permit conditions and reclamation standards defined by the *BC Health, Safety and Reclamation Code* (*HSRC - MCM*, 2024) that are relevant to mine closure must be met in order to support planning towards release of obligations under the *BC Mines Act*. The *BC Mines Act* and the accompanying *HSRC* are administered by MCM, and contain the relevant legislative framework supporting mine closure in BC. The *HSRC* indicates that the primary objective of the *RCP* is to return all areas disturbed by mining operations to pre-mining land use and capability. Closure measures and strategy for New Afton are also developed with consideration to the *BC Environmental Management Act* and the *BC Water Sustainability Act*.

Mine closure is one of the core areas of engagement between New Afton and the Stk'emlupsemc Te Secwepemc Nation (SSN), the Skeetchestn Indian Band (SIB), and Tkemlúps te Secwépemc (TteS). The current closure objectives are first to reclaim to a mosaic of native grasslands supporting wildlife and a second to support hunting and trapping. Topics of discussion include reclamation research and development, control of invasive species, and review of closure-related risks, particularly for tailings management.

The RCP includes details on ensuring physical stability, chemical stability, water management, reclamation of water courses, and erosion and sediment control. It is a holistic plan, which considers interdisciplinary inputs to ensure consideration and mitigation of risks.

#### 20.8.1 Progressive Reclamation

New Gold carries out progressive reclamation, conducts research activities for reclamation programs, and partners with the SSN to implement successful reclamation measures. Progressive reclamation activities are reported to MCM annually in the Annual Reclamation Report.

New Gold has conducted following progressive reclamation activities at New Afton:

- Salvaging topsoil.
- Re-sloping, re-seeding, hydroseeding, and planting of native trees.
- Wetland rehabilitation project on lands owned by New Gold north of the mine site.
- Erosion- and sediment-control-planning to minimize surface erosion and quantity of sediment entering water bodies.
- Delivering programs for wildlife protection, including initiatives to build and locate artificial habitat structures to enhance site for wildlife.

#### 20.8.2 CLOSURE AND POST-CLOSURE MONITORING

The purpose of the closure and post-closure monitoring and maintenance program is to evaluate and ensure that the site is safe, stable, and non-polluting in accordance with the identified mine closure objectives. Monitoring and maintenance will be conducted to assess how the reclamation measures meet reclamation end-land-use objectives. Activities involve inspections, sampling, and assessments of physical, geochemical, and biological aspects.

#### 20.8.3 CLOSURE COST ESTIMATE

Signature Date: February 10, 2025

The most recent *Reclamation Liability Cost Estimate* (RLCE) of New Afton Mine, as submitted to the MCM on November 1, 2024, is C\$70,428,000. It assumes C\$30,378,000 for post-closure monitoring and maintenance over the following 100 years. Based on the standard regulatory discount rates applicable in British Columbia, the Net

Present Value (NPV) of the post-closure monitoring and maintenance costs is C\$8,122,000, while the conventional closure works cost is not subject to discount. This gives a total NPV of C\$48,185,000. Since BC regulations don't allow to discount the total RLCE below C\$50,000,000; the current bonding for the site is therefore fixed at C\$50,000,000.

## 20.9 COMMENTS ON ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACTS

The Qualified Person provides the following comments:

- The information provided by New Afton's environmental experts supports that there are
  adequate baseline data and ongoing environmental studies to understand potential
  environmental risks and potential mitigations which may be required.
- New Gold holds all major permits and licences for mine operations at New Afton, and a Mines
   Act permit amendment for mining East Extension will be sought.
- Environmental liabilities for the New Afton Mine are typical of those that would be expected to be associated with a mining operation conducted via underground mass mining methods.
- New Afton maintains strong relationships with Indigenous partners and collaborates on environmental and business matters.
- A Cooperation Agreement is in place with the Stk'emlupsemc Te Secwepemc Nation.

The Qualified Person is not aware of any known environmental issues that could materially impact New Gold's ability to extract the mineral resources or mineral reserves that are not discussed in this report.

### 21 CAPITAL AND OPERATING COSTS

#### 21.1 INTRODUCTION

Capital and operating costs are based on the LOM plan presented in section 16.5 of this technical report and were prepared based on recent operating performance and on New Gold's current budget forecast. Cost estimates for the East Extension mining zone are based on an internal technical study, completed to a pre-feasibility level of accuracy of ±25%.

All costs in this section are in US dollars and are based on an exchange rate assumption of C\$1.35 : US\$1.00 for 2025 to 2027 and C\$1.30 : US\$1.00 for the remainder of the LOM Plan.

#### 21.2 CAPITAL COSTS

Capital costs are based on budget estimates and supplier and contractor quotes, engineering designs, maintenance strategies, production plans, and recent operating history.

Total LOM capital is expected to be approximately \$191.0 million, including \$43.4 million of sustaining capital and \$147.6 million of growth capital, as shown in Table 21-1. Capital costs are expected to taper off over the next three years as C-Zone construction is completed. East Extension total capital is expected to be \$41 million; it will benefit from the ability to utilize the C-Zone materials handling, ventilation, and dewatering systems and other mine infrastructure.



**Table 21-1: Capital cost estimates** 

Category	2025	2026	2027	2028	2029	2030	2031	Total
Sustaining Capital (\$ million	ns)							
C-Zone	0.4	0.9	5.2	4.6	4.6	4.7	-	20.4
East Extension	-	1.9	0.5	-	-	-	-	2.4
Other	5.8	12.3	0.5	1.1	0.3	-	0.6	20.6
Total Sustaining Capital	6.2	15.1	6.2	5.7	4.9	4.7	0.6	43.4
Growth Capital (\$ millions)								
C-Zone	85.6	-	-	-	-	-	-	85.6
East Extension	16.3	21.7	0.5	0.3	-	-	-	38.8
Other	17.2	6.0	-	-	-	-	-	23.2
Total Growth Capital	119.1	27.7	0.5	0.3	-	-	-	147.6
Total Capital (\$ millions)	125.3	42.8	6.7	6.0	4.9	4.6	0.6	191.0

#### **Underground Development and Equipment**

Approximately 67% of C-Zone capital and 25% of East Extension capital is related to mine development and drawbell construction, for which the cost estimate is based on mine plans and schedules, equipment data, consumable estimates, and labour schedules. A further 20% of total capital is related to mining equipment, and mine infrastructure, for which the cost estimate is based on engineered quantities and supplier quotes.

#### **Other Capital Costs**

Other capital expenditures include tailings management, processing plant capital projects and other infrastructure. Total LOM tailings management capital is estimated at \$19.1 million, mostly related to the NATSF. The TAT plant and APTSF have sufficient capacity to meet the LOM throughput and total capacity requirements. Total processing capital of \$11.4 million is mostly related to the cleaner circuit upgrade scheduled for 2025 to improve metallurgical recoveries and other equipment replacement.

#### 21.3 OPERATING COSTS

The basis for the operating cost estimate is the New Afton budget and LOM plan. The production plan drove the calculation of the mining and processing costs, as the mining mobile equipment fleet, workforce, contractors, power, and consumables requirements were calculated based on specific consumption rates. Consumable prices and labour rates are based on current contracts and agreements. LOM operating costs are shown in Table 21-2.



Table 21-2: Operating cost estimates

	2025	2026	2027	2028	2029	2030	2031	Total / Average
Total Operating Costs (\$ n	millions)							
Mining	55.7	76.1	76.3	72.3	70.7	72	48.9	472
Processing	63.6	60.6	58.2	56.2	54.3	53.0	49.7	395.6
G&A	24.3	21.5	20.3	20.6	20.3	19.0	14.4	140.4
Other	12.5	10.2	21.3	16.9	17.5	16.1	33.9	128.4
Total	156.1	168.4	176.1	166.0	162.8	160.1	146.9	1,136.4
Unit Operating Costs (\$/t	processed)							
Mining	10.92	13.52	13.21	12.63	12.21	12.34	8.56	11.93
Processing	12.47	10.76	10.07	9.83	9.38	9.09	8.69	10.00
G&A	4.76	3.82	3.51	3.61	3.51	3.26	2.51	3.55
Other	2.43	1.80	3.70	2.96	3.01	2.75	5.94	3.24
Total	30.59	29.89	30.47	29.02	28.12	27.45	25.71	28.72

#### **Mining and Processing Costs**

Open pit and underground mining costs are derived from the production plan and estimates for labour costs, equipment productivity, maintenance costs and diesel and other consumables. Processing costs are driven by tonnes processed, consumption rates and prices for reagents, consumables and electricity, and plant equipment maintenance strategies. Mining costs are inclusive of primary crushing and conveyance to surface. Block cave mining costs and processing costs are expected to remain relatively in line with 2024 actual costs over the next three years despite the increased production rate, due to lower fixed costs per tonne and the elimination of truck haulage from B3 block cave, reducing the costs per tonne. Mining costs increase in 2026 as East Extension is mined using the long-hole stoping method, which has a higher cost per tonne than the block cave method. Mining and processing unit costs decrease in 2028-2031 primarily driven by a reduction in mobile equipment rebuilds and a decreased cement requirement associated with tailings deposition.

#### **G&A Costs**

G&A costs include maintenance of site infrastructure, human resources, finance, environment, community relations, asset protection and security, safety, information technology, supply chain and site management.

#### **Other Operating Costs**

Other operating cost includes concentrate transport costs, inventory movements, royalties, and other costs.

## 22 ECONOMIC ANALYSIS

Under NI 43-101, producing issuers may exclude the information required in *Section 22– Economic Analysis* on properties currently in production, unless the technical report includes a material expansion of current production. This section is not required as New Gold is a producing issuer, the New Afton Mine is currently in production, and no material expansions are planned in the current LOM plan.

New Gold performed an economic analysis of the New Afton Mine using the estimates presented in this report and confirms that the outcome is a positive cash flow that supports the statement of Mineral Reserves.

22 – Economic Analysis 153

Technical Report New Afton Mine

## **23** ADJACENT PROPERTIES

Several properties have been mined within the Iron Mask batholith complex. The New Afton deposit is located approximately mid-way along this belt. Other properties that have been mined include the Galaxy underground mine and the Ajax East and Ajax West open pits, all three of which are located east of New Afton. The Ajax property is owned by KGHM International Ltd., which is currently permitted for the reclamation and closure of the Ajax property.

New Afton Mine is the principal mining project in the immediate district. Information regarding mineralization at adjacent properties is not necessarily indicative of mineralization at New Afton.

23 – Adjacent Properties 154

## **24** OTHER RELEVANT DATA AND INFORMATION

This section is not relevant to this technical report as there are no other relevant data or information on the New Afton Mine that have not been summarized and presented in the technical report.

## 25 Interpretation and Conclusions

#### 25.1 Introduction

The Qualified Persons note the following interpretations and conclusions in their respective areas of expertise, based on the review of data available for this technical report.

#### 25.2 MINERAL RIGHTS, SURFACE RIGHTS, ROYALTIES, AND AGREEMENTS

Information provided by New Gold's legal and tenure experts on the mining tenure held by New Gold in the New Afton Mine area supports that the Company has valid title that is sufficient to support Mineral Reserves.

New Gold holds sufficient surface rights to support current mining operations and mining of Mineral Reserves.

Environmental liabilities for the New Afton Mine are typical of those that would be expected to be associated with a mining operation conducted via open pit and underground mass mining methods.

The Qualified Person is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the property that are not discussed in this report.

#### 25.3 GEOLOGY, MINERALIZATION, AND EXPLORATION

The understanding of geological controls, geometry, and grade variability of the copper-gold porphyry mineralization at New Afton is sufficient to support estimation of Mineral Resources and Mineral Reserves. This understanding is strengthened by a history of production and exploration that spans more than a decade. The alteration assemblages and mineral zonation associated with the porphyry-style mineralization are well understood and support both the interpretation of mineral resource domains for estimation purposes and exploration concepts for targeting.

K-Zone is a new zone of copper-gold porphyry mineralization recently discovered through underground drilling. The understanding of the geometry and grade distribution could be improved by additional drilling at better drilling angles. Additional underground development is proposed to provide better drilling platforms to improve definition and further test the extents of the K-Zone.

The exploration programs completed to date are suitable to the style of mineralization at New Afton. In addition to exploration potential around the Main Zone, exploration potential remains in the HW zone and K-Zone. The New Afton mineralized system is open at depth and to the east, with potential for the discovery of new mining zones.

## 25.4 DRILLING AND ANALYTICAL DATA COLLECTION IN SUPPORT OF MINERAL RESOURCE ESTIMATION

Drilling procedures, including data collected during the exploration and delineation drilling programs, follow best practice. Collar and down-hole surveys, lithological, alteration, mineralization, structural geology, and geotechnical data was collected and catalogued following best practice guidelines to support estimation of Mineral Resources and Mineral Reserves. The drill spacing and frequency of sampling is adequate and reflects the mineralized zones' dimensions and styles of mineralization. Litho-structural 3D modelling constructed independently of grade further supports the interpretation of mineral resource domains.

Sample preparation, analysis and security are performed in accordance with industry best practice. QA/QC programs were implemented to adequately address issues of precision, accuracy, and contamination by including blanks, duplicates, and certified standard samples.

#### 25.5 METALLURGICAL TESTWORK

The testwork undertaken is of a level adequate for ensuring an appropriate representation of metallurgical characterization and the derivation of corresponding metallurgical recovery factors for B3, C-Zone, and East Extension.

Metallurgical assumptions are supported by multiple years of production data.

Recovery improvements resulting from the cleaner circuit upgrade are expected to partly offset the impact of a coarser grind size, as the processing rate returns to approximately 16,000 tpd.

Grade-recovery models for the various ore types were developed using processing throughput rates to inform the forecasting copper and gold recoveries for the LOM plan.

LOM copper and gold recovery rates are estimated to be approximately 88.6 and 84.5%, respectively. There are no known processing factors that could have a significant effect on economic extraction.

The New Afton concentrate has historically been very clean and marketable. There are no known deleterious elements that could have a significant effect on economic extraction.

#### 25.6 MINERAL RESOURCE ESTIMATES

The Qualified Persons are of the opinion that Mineral Resources have been estimated using industry-accepted practices and Mineral Resources are reported using the 2014 CIM Definition Standards.

There are no other environmental, permitting, legal, title, taxation, socioeconomic, marketing, political or other relevant factors known to the Qualified Person that would materially affect the estimation of Mineral Resources that are not discussed in this Report.

The Qualified Persons are of the opinion that the use of constraining volumes and cut-off grades to report the Mineral Resources demonstrate that there are "reasonable prospects for eventual economic extraction", as defined in the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019).



#### 25.7 MINERAL RESERVE ESTIMATES

The Qualified Person is of the opinion that Mineral Reserves were estimated using industry-accepted practices, and conform to the *2014 CIM Definition Standards*. Mineral Reserves are based on underground block caving and stoping mining assumptions.

The Mineral Reserves are acceptable to support mine planning.

Factors that may affect the Mineral Reserve estimates include: changes to the long-term copper and gold price and exchange rate assumptions; changes to the parameters used to derive the cave outlines and stope shapes and determine the cut-off values; changes to geotechnical and hydrogeological assumptions; changes to the cave mixing model and dilution estimates; changes to metallurgical recovery assumptions; changes to inputs to capital and operating cost estimates; ability to maintain social and environmental licence to operate.

There are no other environmental, legal, title, taxation, socioeconomic, marketing, political or other relevant factors known to the qualified person that would materially affect the estimation of Mineral Reserves that are not discussed in this report.

#### 25.8 MINE PLAN

Current operations use the block caving mining method. New Gold has successfully constructed and operated multiple block caves at New Afton for more than 12 years.

C-Zone achieved commercial production in 2024 and New Afton is scheduled to complete the transition from B3 block cave to C-Zone block cave production in 2025.

Mine planning of the new East Extension zone considers long-hole stoping methods.

Construction of the C-Zone materials handling system, including a new gyratory crusher and extension of the conveyor system, was completed in 2024. East Extension will utilize the same materials handling system.

Mine designs incorporate underground infrastructure and ventilation requirements.

The planned mobile equipment fleets are suitable for the selected mining methods.

Based on current Mineral Reserves, New Afton has a projected mine life of seven years (2025-2031).

#### 25.9 RECOVERY METHODS

The New Afton processing plant uses conventional processes and equipment to enable economic recovery over a wide range of mill throughputs, particle sizes and copper-gold mineralogies. The plant has been in operation since 2012.

New Afton has previously achieved the planned processing rates of approximately 16,000 tpd during mining of the Lift 1 block caves.

Processing plant performance is expected to improve with the relocation of the material sizer downstream of the C-Zone gyratory crusher and with the upgrade of the cleaner circuit. Both projects are scheduled for completion in 2025.

The operation has access to an adequate supply of process water and power to support the LOM plan.

#### 25.10 Infrastructure

Infrastructure required for current mining operations has been constructed and is operational.

The TAT plant is operational, and tailings have been successfully deposited into the APTSF since late-2022. The APTSF has sufficient storage capacity to support the LOM plan.

The tailings stabilization project is on schedule. HATSF stabilization is complete and NATSF stabilization is on track for completion well ahead of the expected subsidence impacts.

The planned East Extension operations are not expected to require additional surface facilities. Environmental, Permitting, and Social Considerations

The information provided by New Afton's environmental experts supports that there is adequate baseline data and ongoing environmental studies to understand potential environmental risks and potential mitigations which may be required.

New Gold holds all major permits and licences for mine operations at New Afton, and a Mines Act permit amendment for mining East Extension will be sought.

Environmental liabilities for the New Afton Mine are typical of those that would be expected to be associated with a mining operation conducted via underground mass mining methods.

New Afton maintains strong relationships with Indigenous partners and collaborates on environmental and business matters.

A Cooperation Agreement is in place with the Stk'emlupsemc Te Secwepemc Nation.

The Qualified Person is not aware of any other significant environmental or social factors and risks that may affect access, or the right or ability to perform the proposed work program that are not discussed in this report.

#### 25.11 MARKETS AND CONTRACTS

The concentrate produced by the New Afton Mine is readily marketable.

Contract terms are considered to be within industry norms, and typical of similar contracts in Canada.

Commodity pricing assumptions, marketing assumptions, and current major contract areas are acceptable for use in estimating Mineral Reserves and in the economic analysis that supports the Mineral Reserves.



#### 25.12 CAPITAL COST ESTIMATES

Capital costs consist mostly of the remaining development, cave construction, and underground infrastructure needed to complete the C-Zone project, as well as processing improvements, tailings, and underground development and mining equipment to support East Extension.

Capital cost estimates are acceptable to support the Mineral Reserve estimate. The LOM plan estimated total capital cost is \$191.0 million.

#### 25.13 OPERATING COST ESTIMATES

The basis for the operating cost estimate is the New Afton budget and LOM plan. The production plan drove the calculation of the mining and processing costs, as the mining mobile equipment fleet, workforce, contractors, power, and consumables requirements were calculated based on specific consumption rates. Consumable prices and labour rates are based on current contracts and agreements.

Operating cost estimates are acceptable to support the Mineral Reserve estimate. The LOM plan estimated total operating cost is \$1,136.4 million, averaging \$28.72 per tonne processed.

#### 25.14 ECONOMIC ANALYSIS

This section is not required as New Gold is a producing issuer, the New Afton mine is currently in production, and no material expansions are planned in the current LOM plan.

Mineral Reserves for the New Afton mine are supported by a positive cash flow.

#### 25.15 RISKS AND OPPORTUNITIES

The major risks to the New Afton Mine are associated with the following elements:

- Negative variations to the copper and gold price assumptions.
- Significant additional dilution or ore losses due to cave deviation or variations to the mine plan.
- Oversized material or hung drawpoints during the early stages of C-Zone cave propagation, potentially limiting daily tonnage until additional drawpoints are blasted or drawpoints become free-flowing.
- Significant delays to the completion of the tailings stabilization project, potentially impacting C Zone production.
- Changes in geotechnical conditions and modelling parameters, including but not limited to the following:
  - The extent and magnitude of subsidence affecting site infrastructure.
  - Convergence in underground production drifts exceeding expectations.
  - Cave growth deviation and induced stress from the C-Zone block cave impacting underground development and infrastructure.



#### The major opportunities are as follows:

- Extension of mine life and improved production profile through conversion of Mineral Resources to Mineral Reserves, including K-Zone, D-Zone, and HW Zone.
- Potential to expand mineralization and identify new zones with additional drilling.
- Further improvements in metallurgical recoveries with process plant improvements.
- Further reduction in TAT cement consumption with additional testing and analysis.
- Overperformance of drawpoints in C-Zone pulling in residual grade from B3 post closure.



## **26 RECOMMENDATIONS**

K-Zone is a new zone of copper-gold porphyry mineralization with potential to increase New Afton's Mineral Resources and Mineral Reserves. The recommended work program is for additional underground drilling to better define the internal grade distribution and further test the overall footprint of the zone. In addition to drilling, proposed work includes development of an exploration drift at the 4500 Level to improve drilling angles, shorten the length of exploration holes, and improve the overall definition of the zone. The drilling program also includes surface drilling to test the larger K-Zone footprint towards the east. Drilling results will be used to support resource estimation work and aim at improving the confidence in the modelling and resource classification of K-Zone, and guide engineering studies on applicable methods of mining.

The work program consists of an approved budget including US\$9M for drilling and US\$5M for exploration drift development. Proposed drilling totals 35,000 m and includes 10,000 m of infill drilling for resource conversion, and 25,000 m for footprint expansion. Exploration drift totals 700 m of development and includes three drill bays. This budget is included in the cost estimates for 2025.

In addition to K-Zone, the New Afton Mine has a significant Mineral Resource base and includes exploration targets with the potential for conversion to Mineral Reserves. Zones to the east of the current block caves and above the elevation of the C-Zone extraction level have been identified as a promising opportunity to extend the New Afton mine life that would require a minimal investment of capital. The Qualified Persons recommend that technical studies be conducted to assess the potential feasibility of these zones, by using geotechnical analysis, mining method selection, conceptual mine design, evaluation of materials handling and ventilation requirements, surface subsidence implications, and capital and operating cost estimates. Existing human resources at New Afton Mine have the capacity to complete these studies, supported by external consultants where required.

26 – Recommendations 162



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## 28 CERTIFICATES OF QUALIFIED PERSONS

#### Certificate of Qualified Person – Joshua Parsons

- I, Joshua Parsons, P.Eng., as an author of this report entitled "NI 43-101 Technical Report, New Afton Mine, British Columbia, Canada" prepared for New Gold Inc. with an effective date of December 31, 2024, do hereby certify that:
- 1. I am the Principal Mine Engineer at New Afton Mine, New Gold Inc. 4050 Trans-Canada Highway, Kamloops, British Columbia, V2C 5N4.
- 2. I graduated from Dalhousie University, Nova Scotia, Canada in 2014 with a Bachelor's degree in Mineral Resource Engineering.
- 3. I am registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (EGBC Licence #50228). I have 10 years' experience working at an operating block cave mine where I was responsible for cave management, mine planning, mine design, mining studies, drill and blast, long-range planning, budgeting, annual reporting, and technical team supervision. I also have 8 years' experience in mineral reserve estimation and reporting at the New Afton Mine.
- 4. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 5. I have been working at the New Afton Mine was since August 2014.
- 6. I am responsible for Sections 12, 14, 15, 16, 19, 21 and 22, and for related disclosures in Sections 1, 25 and 27 of the Technical Report.
- 7. I am non-independent of the Issuer applying the test set out in Section 1.5 of NI 43-101 as I am a full-time employee of New Gold Inc. at the New Afton Mine.
- 8. I have had prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the items of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101 and Form 43-101F1.

Signed on this 10th day of February 2025
"Signed and Sealed"
Joshua Parsons, P.Eng.

#### Certificate of Qualified Person - Devin Wade

- I, Devin Wade, P.Geo., as an author of this report entitled "NI 43-101 Technical Report, New Afton Mine, British Columbia, Canada" prepared for New Gold Inc. with an effective date of December 31, 2024, do hereby certify that:
- 1. I am the Chief Exploration Geologist at New Afton Mine, New Gold Inc. 4050 Trans-Canada Highway, Kamloops, British Columbia, V2C 5N4.
- 2. I graduated from Simon Fraser University, British Columbia, Canada in 2006 with a Bachelor of Science Major in Earth Sciences.
- 3. I am registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (EGBC Licence #57850). I have worked as a Geoscientist with 20 years' experience in mineral exploration. I have overseen all exploration activities at the New Afton Mine since August 2016 to present in the role of Chief Exploration Geologist.
- 4. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 5. I have been working at the New Afton Mine since August 2016.
- 6. I am responsible for Sections 7, 8, 9, 10, 11 and 26, and for related disclosures in Sections 1, 25 and 27 of the Technical Report.
- 7. I am non-independent of the Issuer applying the test set out in Section 1.5 of NI 43-101 as I am a full-time employee of New Gold Inc. at the New Afton Mine and have been since August 1, 2016.
- 8. I have had prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the items of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101 and Form 43-101F1.

Signed on this 10th day of Fe	bruary 2025		
"Signed and Sealed"			
Devin Wade, P.Geo.			

#### Certificate of Qualified Person – Jennifer Katchen

- I, Jennifer Katchen, P.Eng., as an author of this report entitled "NI 43-101 Technical Report, New Afton Mine, British Columbia, Canada" prepared for New Gold Inc. with an effective date of December 31, 2024, do hereby certify that:
- 1. I am the Chief Metallurgist at New Afton Mine, New Gold Inc. 4050 Trans-Canada Highway, Kamloops, British Columbia, V2C 5N4.
- 2. I graduated from the University of British Columbia, Vancouver, BC, Canada, in 2004 with a Bachelor of Applied Science in Metals & Materials Engineering and in 2006 with a Master of Applied Science in Mining Engineering.
- 3. I am registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (EGBC Licence #33875), and the Canadian Institute of Mining, Metallurgy & Petroleum. I have been employed as a Metallurgist at operating mineral concentrators for 17 years. I have contributed to metallurgical portions of feasibility studies at several mines and authored technical papers in the area of mineral processing as well.
- 4. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 5. I have been working at the New Afton Mine since May 2012.
- 6. I am responsible for Sections 13 and 17 and for related disclosures in Sections 1, 25 and 27 of the Technical Report.
- 7. I am non-independent of the Issuer applying the test set out in Section 1.5 of NI 43-101 as I have been employed by New Gold Inc.
- 8. I have had prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the items of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101 and Form 43-101F1.

Signed on this 10th day of February 2025
"Signed and Sealed"
Jennifer Katchen, P.Eng.

#### Certificate of Qualified Person - Vincent Nadeau-Benoit

- I, Vincent Nadeau-Benoit, P.Geo., as an author of this report entitled "NI 43-101 Technical Report, New Afton Mine, British Columbia, Canada" prepared for New Gold Inc. With an effective date of December 31, 2024, do hereby certify that:
- 1. I am Director, Mineral Resources at New Gold Inc. at Suite 3320, 181 Bay St., Toronto, Ontario M5J 2T3.
- 2. I graduated from Université du Québec à Montréal, Quebec, Canada, in 2010 with a Bachelor of Science degree in Earth and Atmosphere Science (Geology).
- 3. I am registered as a Professional Geologist (P.Geo) with the Ordre des Géologues du Québec (OGQ No. 1535), the Association of Professional Geoscientists of Ontario (APGO license No. 3889), and the Association of Professional Engineers and Geoscientists of British Columbia (EGBC License #54427). I have worked as a geologist on mining related projects for a total of 15 years since my graduation. I have been a consulting resource geologist on numerous exploration and mining projects (precious and base metals) around the world for due diligence and regulatory requirements. I have also been a field geologist involved in mineral exploration and mine geology projects for precious and base metal properties in Canada.
- 4. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 5. I visited the New Afton Mine on numerous occasions, including the most recent visit on November 18<sup>th</sup> to 21<sup>st</sup>, 2024.
- 6. I am responsible for Sections 12 and 14, and related disclosures in Sections 1, 25 and 27 of the Technical Report.
- 7. I am non-independent of the Issuer applying the test set out in Section 1.5 of NI 43-101 as I have been employed by New Gold Inc. since August 2023.
- 8. I have had prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the items of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101 and Form 43-101F1.

At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the

"Signed and Sealed"	
Signed on this 10th day of February 2025	
Technical Report contains all scientific and technical information the Technical Report not misleading.	Titlat is required to be disclosed to make

#### Certificate of Qualified Person – Matthew Davis

- I, Matthew Davis, P.Eng., as an author of this report entitled "NI 43-101 Technical Report, New Afton Mine, British Columbia, Canada" prepared for New Gold Inc. with an effective date of December 31, 2024, do hereby certify that:
- 1. I am Superintendent, Tailings and Surface at New Afton Mine, New Gold Inc. 4050 Trans-Canada Highway, Kamloops, British Columbia, V2C 5N4.
- 2. I graduated from the University of Alberta, Canada, in 2003 with a Bachelor of Science degree in Civil Engineering.
- 3. I am registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (EGBC Licence #31365). I have worked as a civil engineer on mining related projects for a total of 22 years since my graduation. My additional experience for the purpose of the Technical Report is:
  - 9 years of civil design, contract management, and long-term infrastructure planning experience.
  - Became Tailings and Surface Superintendent in 2016 and serve as the TSF Qualified Person as defined in the Health, Safety and Reclamation Code for Mines in British Columbia.
     4.
- 5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 6. I have been working at the New Afton Mine since January 2012.
- 6. I am responsible for Section 18 and for related disclosures in Sections 1, 25 and 27 of the Technical Report.
- 7. I am non-independent of the Issuer applying the test set out in Section 1.5 of NI 43-101 as I have been employed by New Gold Inc.
- 8. I have had prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

Signed on this 10th day of Fe	ebruary 2025		
"Signed and Sealed"			
Matthew Davis, P.Eng.			

#### Certificate of Qualified Person – Emily O'Hara

- I, Emily O'Hara, P.Eng., as an author of this report entitled "NI 43-101 Technical Report, New Afton Mine, British Columbia, Canada" prepared for New Gold Inc. with an effective date of December 31, 2024, do hereby certify that:
- 1. I am Manager, Water Strategy and Stewardship at New Gold Inc. Suite 3320, 181 Bay St., Toronto, Ontario, M5J 2T3.
- 2. I graduated from the University of New South Wales, Sydney, Australia, in 2010 with a Bachelor of Engineering in Environmental Engineering (Honours), Bachelor of Commerce.
- 3. I am registered with the Professional Engineers Ontario (License #100584925) and the Association of Professional Engineers and Geoscientists of the Province of British Columbia (EGBC License #44617). I have worked as an environmental engineer on mining related projects for a total of 14 years since my graduation, 14 years working in the environmental management and sustainability for mine operators, and 12 years operational on-site experience. I have experience in environmental monitoring programs, regulatory reporting, environmental compliance, permitting, Indigenous engagement, water management and modelling and tailings governance and management.
- 4. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 5. I visited the New Afton Mine on November 4 to 7, 2024
- 6. I am responsible for Sections 2, 3, 4, 5, 6, 20, 23 and 24 and for related disclosures in Sections 1, 25 and 27 of the Technical Report.
- 7. I am non-independent of the Issuer applying the test set out in Section 1.5 of NI 43-101 as I have been a full-time employee of New Gold Inc. since July 2022.
- 8. I have had prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the items of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101 and Form 43-101F1.

At the effective date of the Technical Report, to the best of my knowledge, information, and belief, t Technical Report contains all scientific and technical information that is required to be disclosed to ma the Technical Report not misleading.	
Signed on this 10th day of February 2025	
"Signed and Sealed"	
Emily O'Hara, P.Eng.	