



OSISKO DEVELOPMENT

CARIBOO GOLD PROJECT – 2023 FEASIBILITY STUDY

NYSE: **ODV** | TSXV: **ODV**
www.osiskodev.com

JANUARY 2023

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This presentation (this "**Presentation**") contains forward-looking information and forward-looking statements (together, "**forward-looking statements**") within the meaning of applicable Canadian securities laws and the United States Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, are forward-looking statements and are based on expectations, estimates and projections as at the date of this Presentation. Any statement that involves discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "budget", "scheduled", "forecasts", "estimates", "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could", "would", "might" or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward-looking statements.

In this Presentation, forward-looking statements relate, among other things: the ability of Osisko Development Corp. ("**Osisko Development**", the "**Company**" or "**ODV**") to achieve the results in the Cariboo FS (as defined herein); the assumptions, qualifications and limitations of the results of the Cariboo FS, including the economic results (NPV, IRR, FCF and AISC calculations) and the sensitivity analysis of the variables included therein; LOM estimates; production capacity and expectations; expected mining methods; Cariboo being a large-scale, cash producing, long-life and profitable gold mine (or any of those things); capital cost estimates; operating cost estimates; AISC gold prices and exchange rate assumptions; mining and mine design expectations; processing expectations; infrastructure assumptions; permitting, environmental and closure expectations (timing and if at all); steps required to obtain an EAC; cooperation of stakeholders, community and partners; royalties; any potential value enhancement opportunities; the benefits (if any) of the sorting facility on reducing processing costs, increasing gold recoveries and reducing waste materials; our ability to define grade continuity within the mineralized vein corridors; future gold productions; the ability of exploration results (including drilling) to accurately predict mineralization; future mining activities; the ability of Osisko Development to identify mineral resources at our properties; the ability of Osisko Development to expand mineral resources beyond current mineral resource estimates; the ability to adapt to changes in gold prices; estimates of costs, estimates of planned exploration and development expenditures; the ability of Osisko Development to obtain further capital on reasonable terms; the profitability of our mining operations; Osisko Development being well-positioned as a gold development company in Canada, U.S.A. and Mexico; indicative valuations; expected investor returns; mineral inventory; and estimates of gold prices. All forward-looking statements entail various risks and uncertainties that are based on current expectations and actual results may differ materially from those contained in such information.

Although Osisko Development believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements involve known and unknown risks, uncertainties and other factors and are not guarantees of future performance and actual results may accordingly differ materially from those in forward-looking statements. These uncertainties and risks relate, among other things, to: the Company's ability to achieve the results in the Cariboo FS; the realization of the assumptions, limitations, qualifications and sensitivities in the Cariboo FS; the ability of exploration activities (including drill results) to accurately predict mineralization; the ability to realize upon geological modelling; the ability of Osisko Development to complete further exploration activities, including drilling; property interests in the assets of Osisko Development; the ability of the results of exploration activities; risks relating to mining activities; fluctuations in spot and forward prices of gold, silver, base metals or certain other commodities; fluctuations in currency markets (such as the Canadian dollar to United States dollar exchange rate); change in international, national and local government, legislation, taxation, controls, regulations and political or economic developments; risks and hazards associated with the business of mineral exploration, development and mining (including environmental hazards, industrial accidents, unusual or unexpected formations pressures, cave-ins and flooding); inability to obtain adequate insurance to cover risks and hazards; the presence of laws and regulations that may impose restrictions on mining; employee relations; relationships with and claims by local communities and indigenous populations; availability of increasing costs associated with mining inputs and labour; the speculative nature of mineral exploration and development (including the risks of obtaining necessary licenses, permits and approvals from government authorities); and title to properties. However, there can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Investors are cautioned that forward-looking statements are not guarantees of future performance. Osisko Development cannot assure investors that actual results will be consistent with these forward-looking statements and investors should not place undue reliance on forward-looking statements due to the inherent uncertainty therein.

For additional information with respect to these and other factors and assumptions underlying the forward-looking statements in this news release concerning Osisko Development, please refer to the public disclosure record of Osisko Development, including the restated annual information form of Osisko Development for the year ended December 31, 2021 as amended, and the most recent annual and interim financial statements and related management's discussion and analysis of Osisko Development, which are available on SEDAR (www.sedar.com) and EDGAR (www.sec.gov) under Osisko Development's issuer profile. The forward-looking statements in this news release reflect management's expectations as of the date of this news release and are subject to change after such date. Osisko Development disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, other than as required by law.

This Presentation does not constitute an offer to sell or a solicitation of an offer to buy any securities in the United States or any other jurisdiction. No securities may be offered or sold in the United States or in any other jurisdiction in which such offer or sale would be unlawful prior to registration under the U.S. Securities Act of 1933 or an exemption therefrom or qualification under the securities laws of such other jurisdiction or an exemption therefrom.

Unless otherwise noted, this Presentation has been prepared based on information available as of January 3, 2023. All currency references are to Canadian dollars, unless specified otherwise.

NON-IFRS MEASURES

ODV used in this Presentation, certain non-IFRS measures including, "all-in sustaining cost" or "AISC" and "total cash cost". All-in sustaining cost per gold ounce is defined as production costs less silver sales plus general and administrative, exploration, other expenses and sustaining capital expenditures divided by gold ounces. Cash costs are a non-IFRS measure reported by ODV on an ounces of gold sold basis. Cash costs include mining, processing, refining, general and administration costs and royalties but excludes depreciation, reclamation, income taxes, capital and exploration costs for the life of the mine. The Company believes that such measures provide investors with an alternative view to evaluate the performance of the Company. Non-IFRS measures do not have any standardized meaning prescribed under International Financial Reporting Standards ("IFRS"). Therefore they may not be comparable to similar measures employed by other companies. The data is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. See the section entitled "Non-IFRS Measures" in the January 3, 2023 press release of ODV, and the Cariboo FS, which will be made available on SEDAR (www.sedar.com) under Osisko Development's issuer profile and on Osisko Development's corporate website (<https://osiskodev.com/cariboo-gold-project/>) within 45-days.

CAUTIONARY NOTE TO U.S. INVESTORS

Osisko Development is subject to the reporting requirements of the applicable Canadian securities laws, and as a result, reports information regarding mineral properties, mineralization and estimates of mineral reserves and mineral resources in accordance with Canadian reporting requirements, which are governed by National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101"). NI 43-101 differs significantly from the disclosure requirements of the United States Securities and Exchange Commission (the "SEC") generally applicable to US companies. As such, the information included in this Presentation concerning mineral properties, mineralization and estimates of mineral reserves and mineral resources is not comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements of the SEC.

CAUTIONARY NOTE REGARDING MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES

This Presentation uses the terms measured mineral resources, indicated mineral resources, and inferred mineral resources as a relative measure of the level of confidence in the resource estimate. Readers are cautioned that mineral resources are not economic mineral reserves and that the economic viability of mineral resources that are not mineral reserves has not been demonstrated. The estimate of mineral resources may be materially affected by geology, environmental, permitting, legal, title, socio-political, marketing, or other relevant issues. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to the category of indicated mineral resource or measured mineral resource. The mineral resource estimate is classified in accordance with the *Canadian Institute of Mining, Metallurgy and Petroleum's CIM Definition Standards on Mineral Resources and Mineral Reserves* adopted in 2019 and incorporated by reference into NI 43-101. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies or economic studies except for a preliminary economic assessment as defined under NI 43-101. Readers are cautioned not to assume that further work on the stated resources will lead to mineral reserves that can be mined economically.

CAUTION REGARDING MINERAL RESOURCES

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CAUTION REGARDING INFERRED MINERAL RESOURCES

Readers are cautioned that the Cariboo PEA, being a preliminary economic assessment (within the meaning of NI 43-101), is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have economic consideration applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary economic assessment (within the meaning of NI 43-101) will be realized. Furthermore, the Cariboo PEA has been superseded by the Cariboo FS as the current technical report in respect of the Cariboo Project for purposes of NI 43-101.

SCIENTIFIC AND TECHNICAL INFORMATION

The scientific and technical information in this Presentation relating to the Cariboo Gold Project is supported by a technical report entitled "*NI 43-101 Technical Report – Feasibility Study for the Cariboo Gold Project*" which was prepared for Osisko Development by BBA Engineering Ltd. with contributions from several independent consulting firms, including Falkirk Environmental Consultants Ltd., Golder Associates Ltd, InnovExplo Inc., JDS Energy and Mining Inc., KCC Geoconsulting Inc., Klohn Crippen Berger Ltd., SRK Consulting (Canada) Inc., and WSP USA Inc. (the "**Cariboo FS**"). Each author of the Cariboo FS is a "qualified person" within the meaning of NI 43-101 and considered to be "independent" of Osisko Development for purposes of Section 1.5 of NI 43-101. Please see the full text of the Cariboo FS for assumptions, qualifications and limitations relating to the disclosure about the Cariboo Gold Project.

An electronic copy of the Cariboo FS will be made available on SEDAR (www.sedar.com) under Osisko Development's issuer profile and on Osisko Development's corporate website (<https://osiskodev.com/cariboo-gold-project/>) within 45-days of the January 3, 2023 press release of ODV.

The Cariboo FS supersedes the technical report entitled "*NI 43-101 Technical Report – Preliminary Economic Assessment for the Cariboo Gold Project*" dated June 22, 2022 (with an effective date of May 24, 2022) (the "**Cariboo PEA**") as the current technical report in respect of the Cariboo Project for purposes of NI 43-101. Therefore, the Cariboo PEA should no longer be relied upon.

QUALIFIED PERSONS

Maggie Layman, P.Geol, Vice President Exploration of Osisko Development, and Mr. François Vézina, ing., P.Eng., MBA, Senior Vice President, Project Development, Technical Services and Environment of Osisko Development Corp., each of whom is a "qualified person" for purposes of NI 43-101, have reviewed and approved the scientific and technical information in this Presentation.

INVESTMENT HIGHLIGHTS

Building Toward Becoming a Premier North American Mid-tier Gold Mining Company



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PAST-PRODUCING ADVANCED BROWNFIELD PROJECTS IN TIER 1 JURISDICTIONS

Assets located in North America with access to brownfield infrastructure benefitting from grid power and skilled labour pools



WORLD-CLASS TEAM LED BY CEO SEAN ROOSEN WITH STRONG FOCUS ON ESG

Successfully discovered, funded, developed and operated Canadian Malartic, one of the world's largest gold mines



DEVELOPING THE TINTIC PROJECT IN UTAH, USA

New discovery in the prolific East Tintic district, which historically produced >2.8 Moz Au, >285 Moz Ag, >128 kt¹ Cu²



PHASED LOWER-RISK DEVELOPMENT OF THE CARIBOO PROJECT IN CANADA

Feasibility production ~164 kozpa over 12 year LOM; C\$502M NPV5% and 20.7% IRR; 2.0 Moz Reserves³



LARGE, HIGHLY-PROSPECTIVE EXPLORATION PROPERTIES IN NORTH AMERICA



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EXECUTING ON OUR STRATEGY

Path to Building an Intermediate Gold Producer



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2023 MILESTONES

2023 YEAR-END STATUS

2024+ STATUS

CARIBOO GOLD
(BC, CANADA)

EA PROCESS
COMPLETED

LAUNCH
PROJECT
FINANCING

COMPLETE
PERMITTING

**SHOVEL READY /
FINANCE & BUILD**

JUNIOR PRODUCER

**TINTIC PROJECT –
TRIXIE** (UTAH, USA)

INITIAL
RESOURCE
ESTIMATE

DECLINE
FROM
SURFACE

RAMP
UP TO BULK
MINING

**PRODUCING ASSET WITH
SIGNIFICANT UPSIDE
POTENTIAL**

**PRODUCING ASSET
WITH DEMONSTRATED UPSIDE**

INTERMEDIATE PRODUCER

**ADDITIONAL
UPSIDE** (ALL)

TINTIC
TRIXIE
EXPLORATION

TINTIC
REGIONAL
EXPLORATION

CARIBOO
BULK
SAMPLE

**POTENTIALLY SIGNIFICANT
VALUE CREATING INITIATIVES**

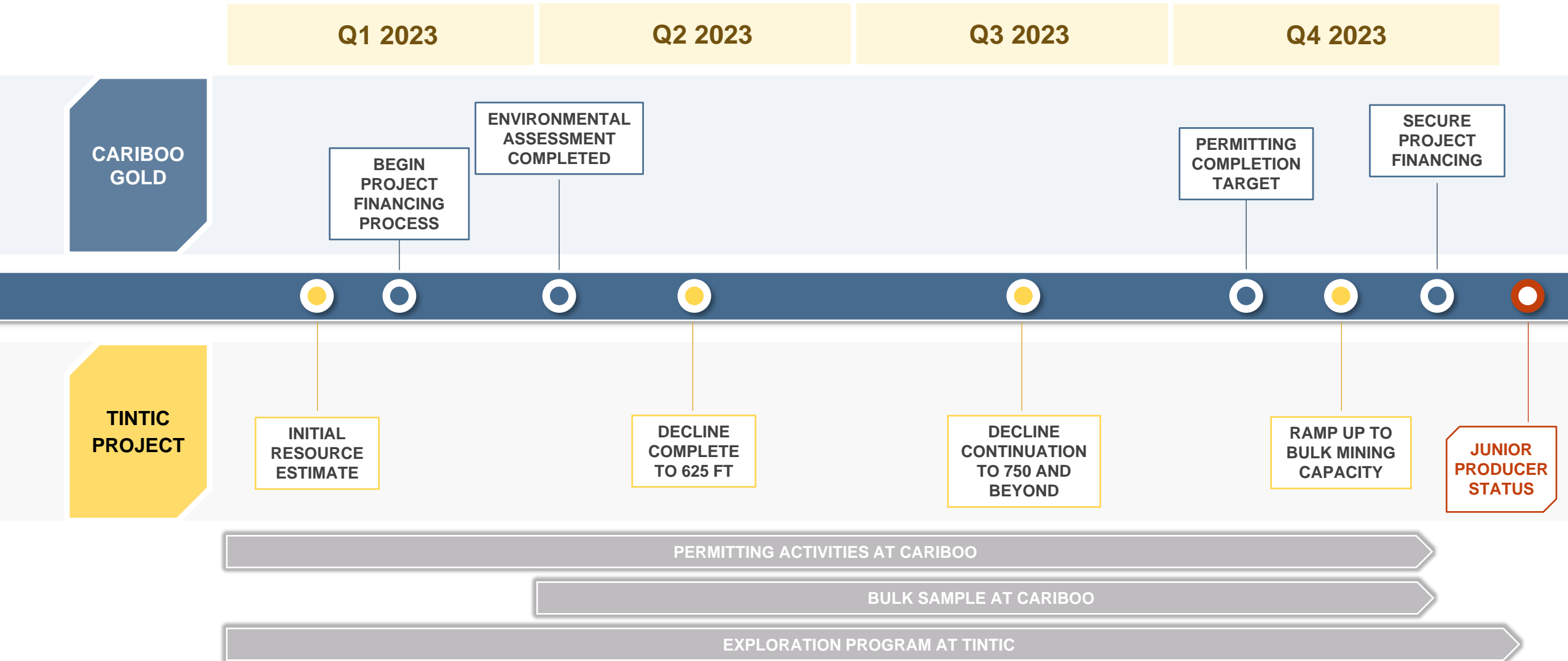
**EXPLORATION POTENTIAL CONVERTED
INTO ECONOMIC POTENTIAL**

EXECUTING ON OUR STRATEGY – 2023 IN FOCUS

Path to Building an Intermediate Gold Producer



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CARIBOO FEASIBILITY STUDY AT A GLANCE¹



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MINE LIFE

12 YEARS

Phase 1 (1-3); Phase 2 (4-12)

FIRST PRODUCTION

2024 (Phase 1)
2027 (Phase 2)

INITIAL CAPITAL

C\$137.3 M
Expansion C\$451.1 M

TOTAL GOLD RECOVERED¹

1.87 MOZ
2.03 Moz Probable Reserves

PRODUCTION (LOM Avg.)

~164,000 oz/yr

LOM AISC²

US\$968/oz
US\$886/oz (Phase 2)

NPV5% | IRR (US\$1,700/oz Au, after-tax)

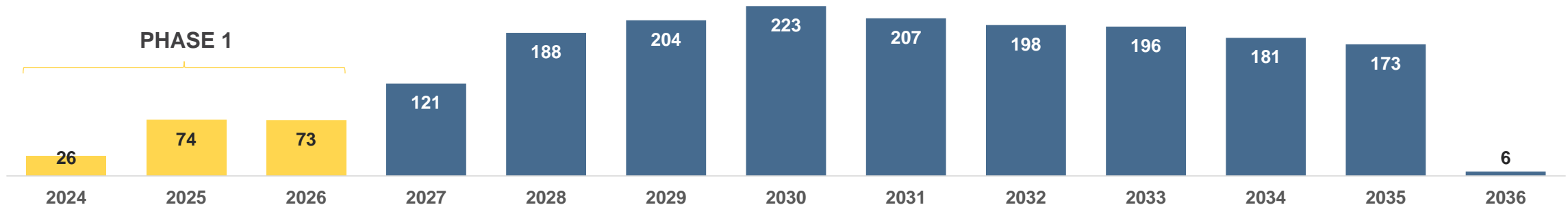
C\$502 M | 20.7%

RESOURCES¹

1.57 MOZ M&I
1.71 MOZ Inferred

SCALABLE PRODUCTION PROFILE WITH POTENTIAL FOR INCREMENTAL GROWTH

(Gold production, kozpa)



CARIBOO 2023 FEASIBILITY STUDY HIGHLIGHTS

FS demonstrates that Cariboo will be a large-scale, long-life and profitable gold mine



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SCALABLE PHASED DEVELOPMENT

LOW INITIAL CAPITAL OF \$137M
INITIAL 12 YEAR MINE LIFE

- Minimizing exposure to development risk with flexibility to scale up
 - Phase 1: 1,500 tpd operation at **~73 koz / year** (first 3 years)
 - Phase 2: 4,900 tpd with UG development and production increase to **~194 koz / year**
 - First gold pour expected in Q3 2024
- ~164 koz / yr LOM Avg.**

BULK TONNAGE UG MINING WITH ORE SORTING MINIMIZING COST & ENVIRONMENTAL FOOTPRINT

- Deploying highly mechanized, low-cost, bulk tonnage mining methods
- Ore sorting facility expected to significantly improve processed grades, reduce processing volumes, reduce energy costs, reduce water usage and tailings volumes
- Mining and processing designed to minimize overall environmental and carbon footprint

ACCESS & INFRASTRUCTURE: A KEY DIFFERENTIATOR AMONG SIMILAR STAGE PROJECTS IN CANADA

- Property accessible via Highway 26 with proximity to the CN Railway
- Located near major towns with access to skilled labour pools
- Plugged into the BC Hydro grid with kWh costs ranging between 6.4¢-7.8¢
- Existing wholly-owned QR mill and fully permitted milling/tailings facility ~100 km from minesite

SIGNIFICANT UPSIDE POTENTIAL BEYOND BASE CASE

- Average depth of defined mineralization ~350 meters and remains open at depth – anomalous gold values at current depth of ~800 meters
- Potential to convert additional inferred resources located adjacent to reserve blocks at minimal incremental developmental cost

LOCATION, LOCATION, LOCATION ...



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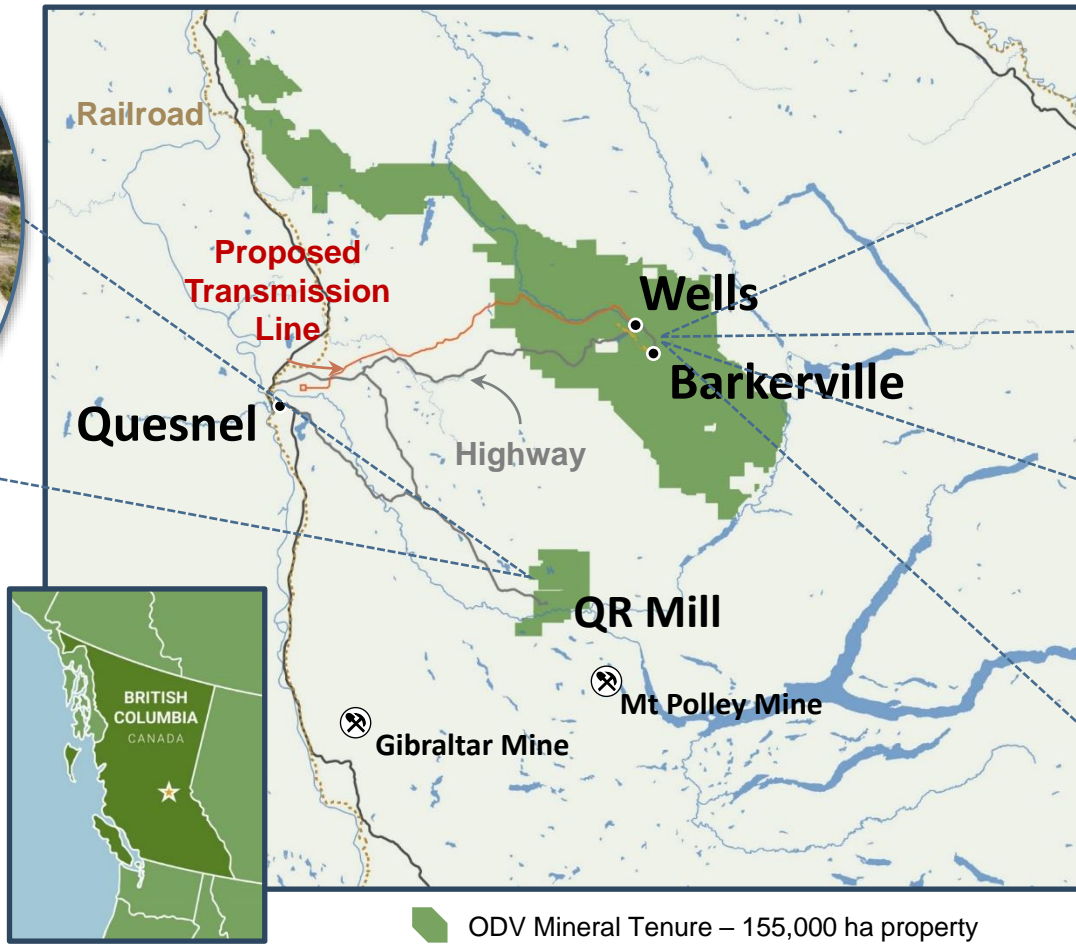


QR MILL

100% OWNED, FULLY PERMITTED AND OPERATIONAL
Produced gold in 2022



PORTAL TO LOWHEE ZONE



ROADHEADER AT SITE



CARIBOO 2023 FEASIBILITY STUDY SUMMARY



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SUMMARY OPERATING RESULTS¹

		Phase 1 (2024 – 2026)	Phase 2 (2027 – 2036)	LOM (12 years)
Ore Mined	Mt	1.5	15.2	16.7
Throughput	tpd	1,500	4,900	4,056
Average Grade	g/t Au	4.43	3.72	3.78
Average Recovery	%	93.6%	91.8%	92.0%
Gold Production	koz	205	1,663	1,869
Avg. Gold Production	koz/yr	73	194	164
Operating Costs	C\$/t mined	\$170	\$96	\$103
Initial / Expansion Capex	C\$M	\$137	\$451	\$588
Sustaining Capex	C\$M	\$134	\$332	\$467
Total Cash Costs ²	US\$/oz	\$1,149	\$748	\$792
AISC ²	US\$/oz	\$1,634	\$886	\$968

SUMMARY ECONOMIC RESULTS¹ (US\$1,700/OZ AU)

		LOM (12 years)	
Total Revenue	C\$M	\$4,126	
Cumulative Cash Flow (pre-tax) ²	C\$M	\$1,192	
Average Annual CF (pre-tax) ²	C\$M/year	\$104	
Total Taxes Paid	C\$M	\$291	
Cumulative FCF (after-tax)²	C\$M	\$901	
Average Annual FCF (after-tax)²	C\$M/year	\$79	
		PRE-TAX	AFTER-TAX
Net Present Value (NPV5%)	C\$M	\$691	\$502
Internal Rate of Return (IRR)	%	24.4%	20.7%

CARIBOO: RESERVES AND RESOURCES



MINERAL CATEGORY	2022 PEA MRE ¹			2023 FEASIBILITY ²		
	Tonnes (Mt)	Grade (g/t)	Ounces (000's)	Tonnes (Mt)	Grade (g/t)	Ounces (000's)
PROVEN & PROBABLE RESERVES	–	–	–	16,703	3.8	2,031
MEASURED & INDICATED RESOURCES	27,102	4.0	3,470	14,682	3.3	1,571
INFERRED RESOURCES	14,407	3.5	1,621	15,470	3.4	1,712

M&I RESOURCES CONVERSION TO RESERVES

1. Refer to ODV news release dated May 24, 2022 and the technical report filed in relation thereto a description of this historic estimate. ODV believes this historic estimate continues to be reliable and relevant to understanding the progress to the current understanding of the project geology. The 2023 Feasibility supersedes this historic resource. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves and the issuer is not treating the historical estimate as current mineral resources or mineral reserves. The historic estimate consisted of a Measured Resource of 8 koz Au (47 kt grading 5.1 g/t Au) and an Indicated Resource of 3.46 Moz Au (27 Mt grading 4.0 g/t Au) and 14.4 Mt at a grade of 3.5 g/t Au for a total of 1.6 Moz in the Inferred category.

2. Refer to ODV news release dated January 3, 2023 and slides 31 and 32 for further details. The Probable Mineral Reserve consists of 2.031 Moz Au in 16.703 Mt at a grade of 3.78 g/t Au; the Mineral Resource includes in the Measured category, 8 koz Au in 47 kt grading 5.06 g/t Au; in Indicated, 1.564 Moz Au in 14.635 Mt grading 3.32 g/t Au, in Inferred, 1.712 Moz Au in 15.470 Mt grading 3.44 g/t Au. Measured and indicated resources are exclusive of mineral reserves.

CARIBOO – LOW CAPITAL INTENSITY & ADVANCED VERSUS PEERS



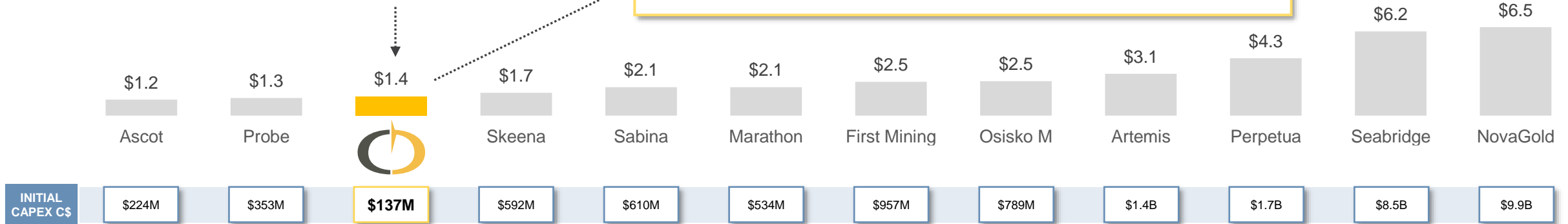
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CAPITAL INTENSITY – NORTH AMERICAN GOLD DEVELOPERS

(Development Capex / Annual Gold Production, US\$/kozpa)

Phased approach with low initial capex to first production

- ✓ Low capital intensity
- ✓ Peer leading initial construction cost
- ✓ Access, infrastructure, labour, rail proximity, power → key differentiators



ESTIMATED FIRST PRODUCTION – NORTH AMERICAN GOLD DEVELOPERS

2024	2025	2026+	2027+
(FEASIBILITY) OSISKO DEVELOPMENT ARTEMIS GOLD (CONSTRUCTION) SKEENA RESOURCES (FEASIBILITY) ASCOT RESOURCES (CONSTRUCTION)	SABINA GOLD & SILVER (FEASIBILITY) MARATHON GOLD (FEASIBILITY)	OSISKO MINING (FEASIBILITY)	NOVAGOLD (FEASIBILITY) PERPETUA (FEASIBILITY) SEABRIDGE (PFS) FIRST MINING (PFS) WALLBRIDGE (EXPLORATION) NEW FOUND GOLD (EXPLORATION)

SIGNIFICANT RE-RATE POTENTIAL

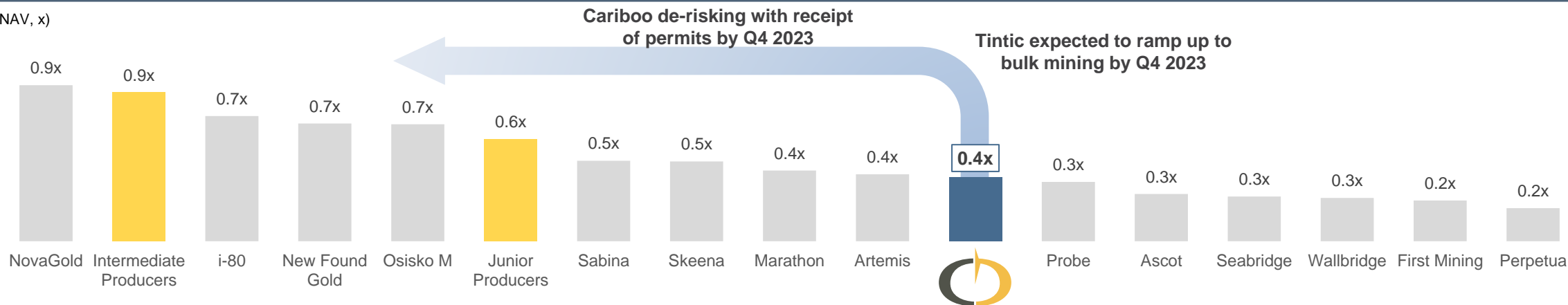
As Projects De-Risk and Production Scales Up



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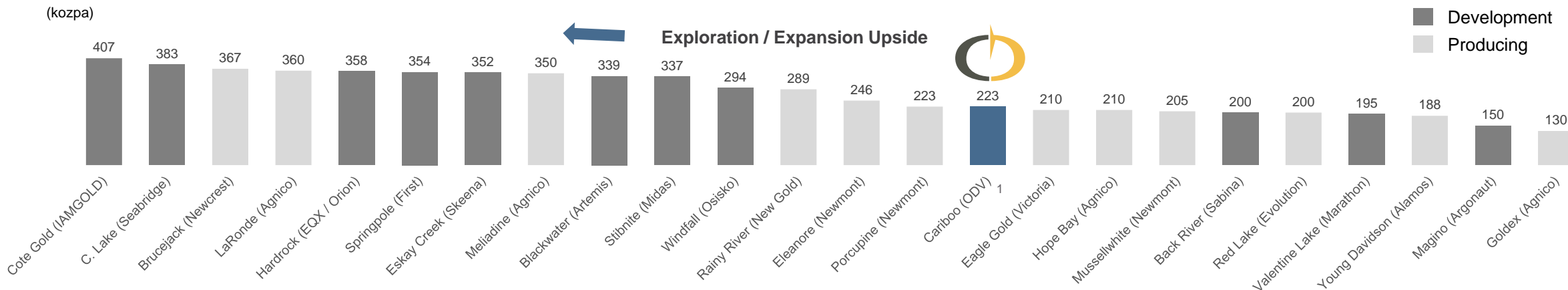
PRICE / NAV – NORTH AMERICAN GOLD DEVELOPERS

(PNAV, x)



ANNUAL PRODUCTION – NORTH AMERICAN GOLD ASSETS

(kozpa)



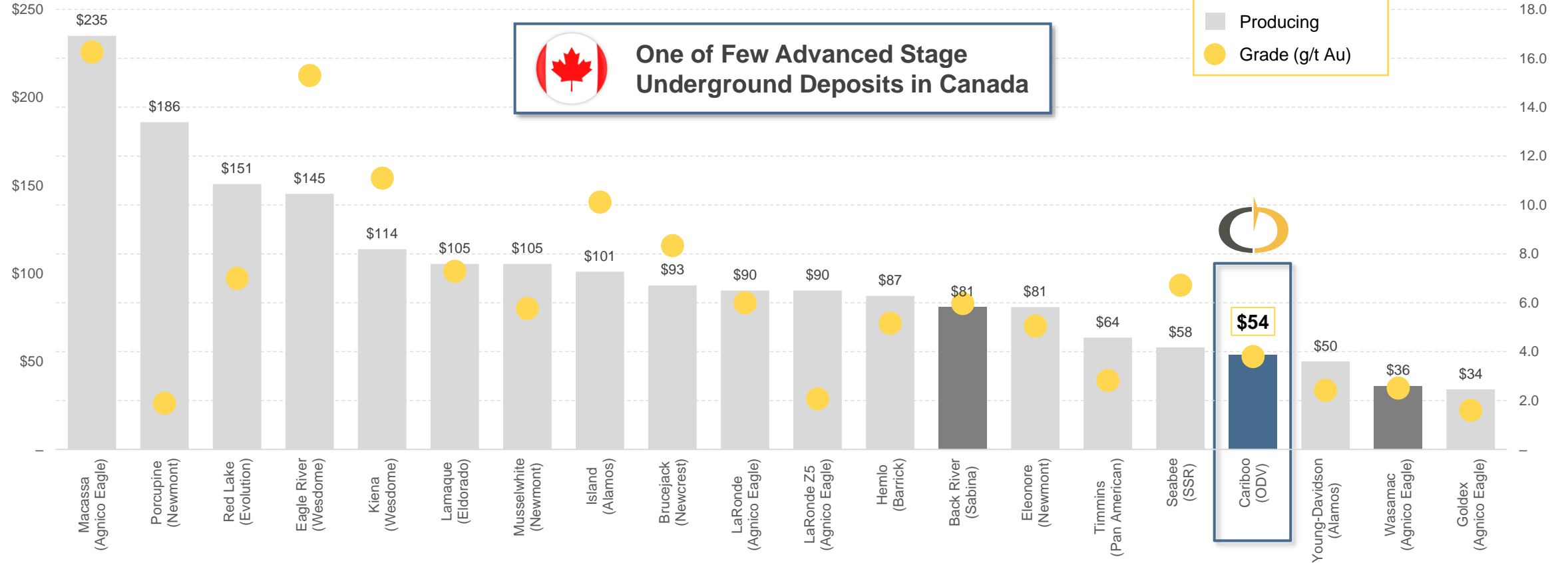
CARIBOO BENCHMARKING: CANADIAN UNDERGROUND MINES



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CANADIAN UNDERGROUND GOLD ASSETS: UG MINING COSTS (C\$/tonne) vs. GRADE (Au g/t)

(C\$/tonne, UG mining costs)



One of Few Advanced Stage Underground Deposits in Canada

- Development
- Producing
- Grade (g/t Au)

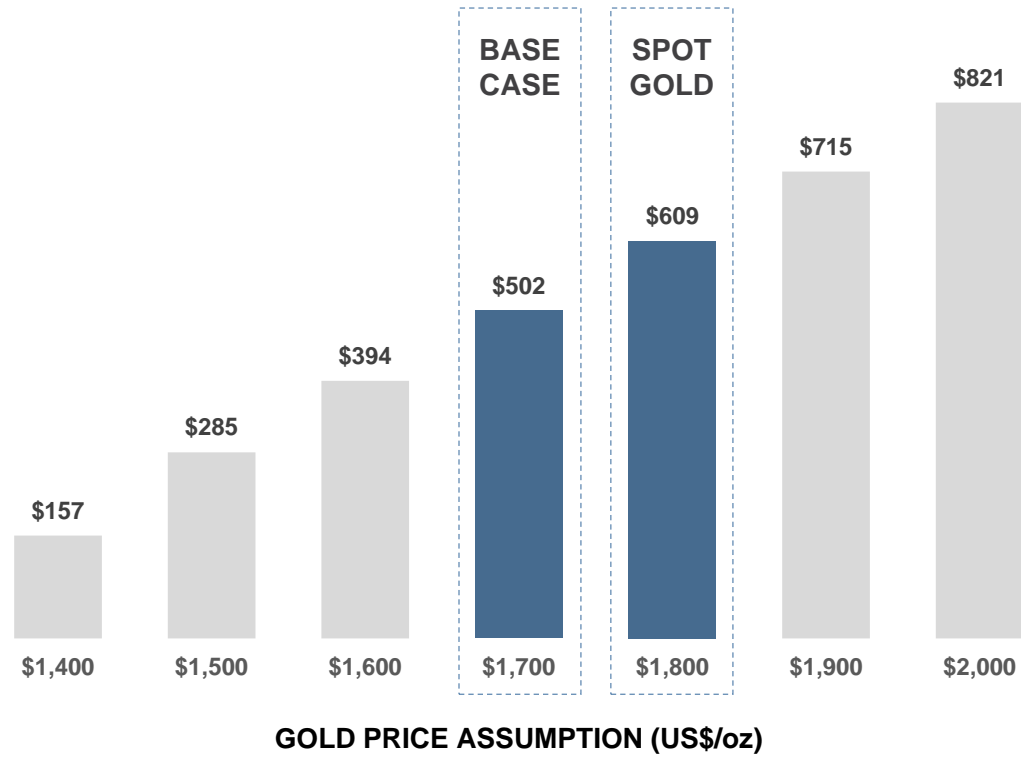
MAJORITY OF PRODUCING UNDERGROUND MINES IN CANADA OWNED BY MAJORS

CARIBOO GOLD PROJECT: NPV & IRR SENSITIVITY ANALYSIS

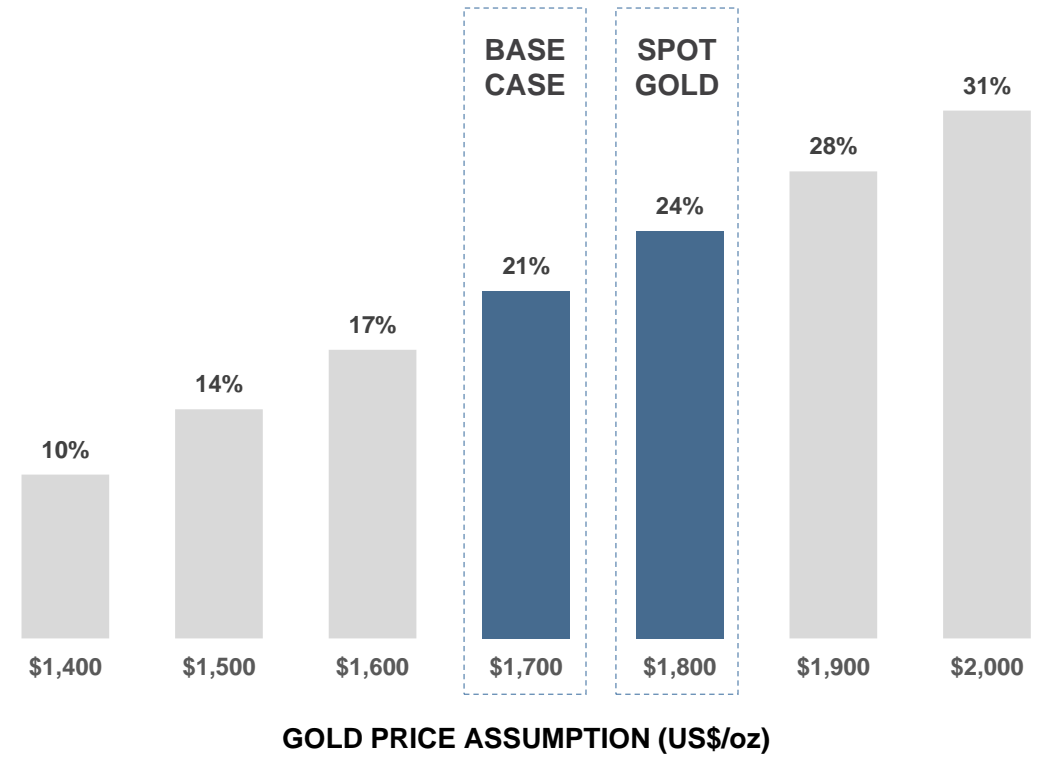


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NPV5% SENSITIVITY | AFTER-TAX (C\$M)¹



IRR SENSITIVITY | AFTER-TAX (%)¹

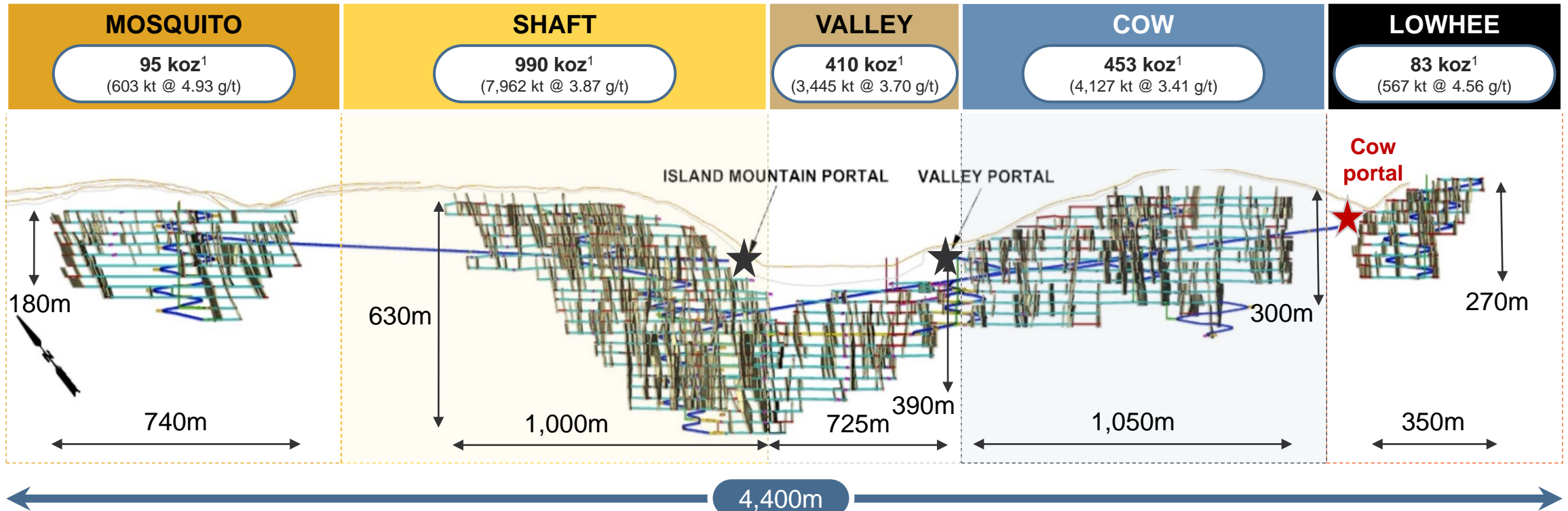


MINE DESIGN SUMMARY

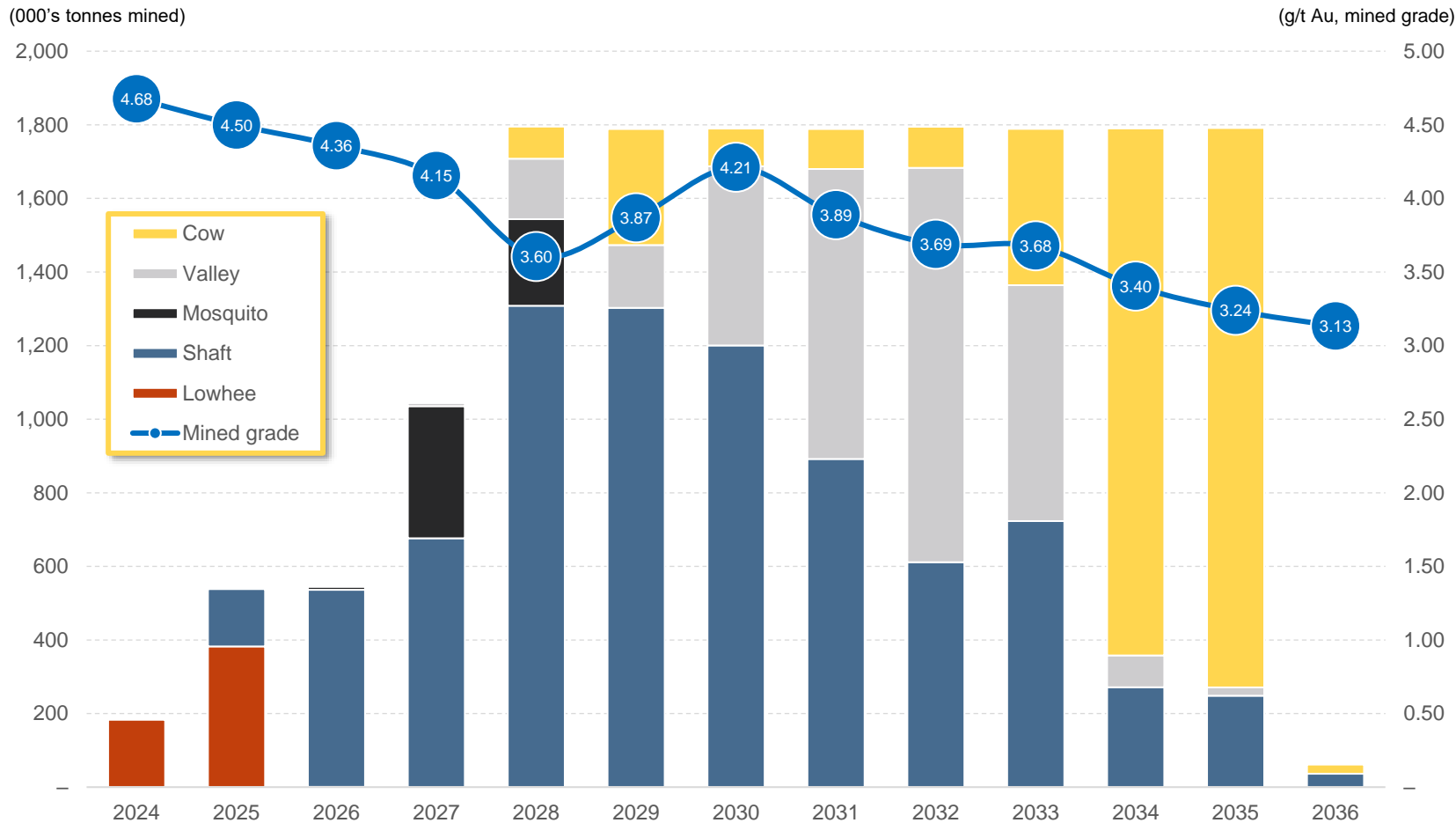


Phase 1 production to come from Lowhee, Shaft and Mosquito deposits

- The vertical extent of all mineable blocks averages ~350 meters and mineralization has been tested down to 900 meters
- The mine is planned to be accessed by two portals from surface (Cow and Valley portals)
- Mineralization is open at depth and along strike and between some deposits due to lack of surface drilling
- A series of internal ramps connected to the main ramps provide access to all mining zones, as illustrated below



MINED TONNES vs. GRADE BY DEPOSIT¹



LOWHEE, SHAFT AND MOSQUITO

Expected to be mined in Phase 1

48%

of mined material expected to be sourced from the Shaft Deposit

4.32 g/t Au

Mined grade in the first 4 years of operations

PHASE II – STREAMLINED EXPANSION TO OPTIMIZE MINING

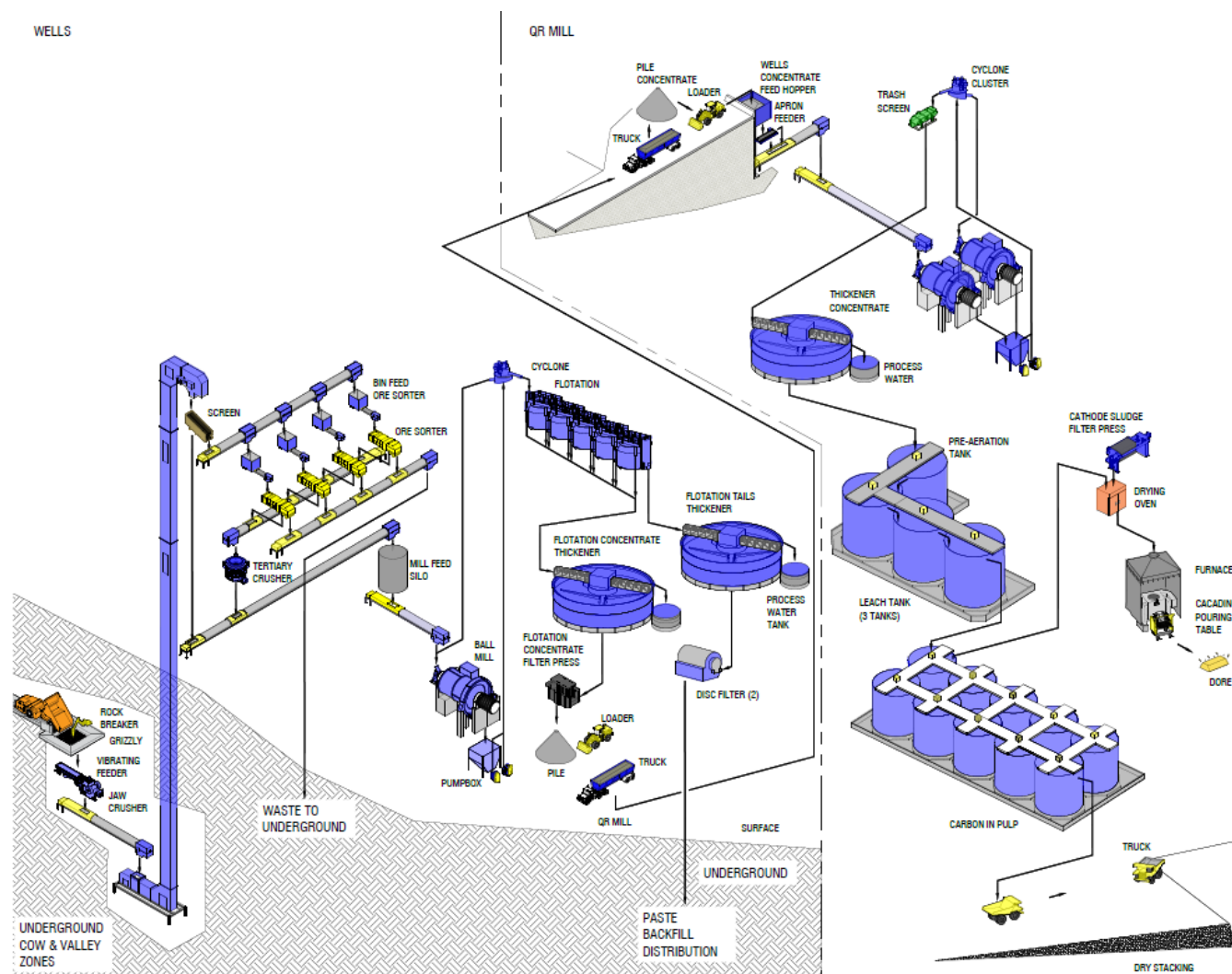


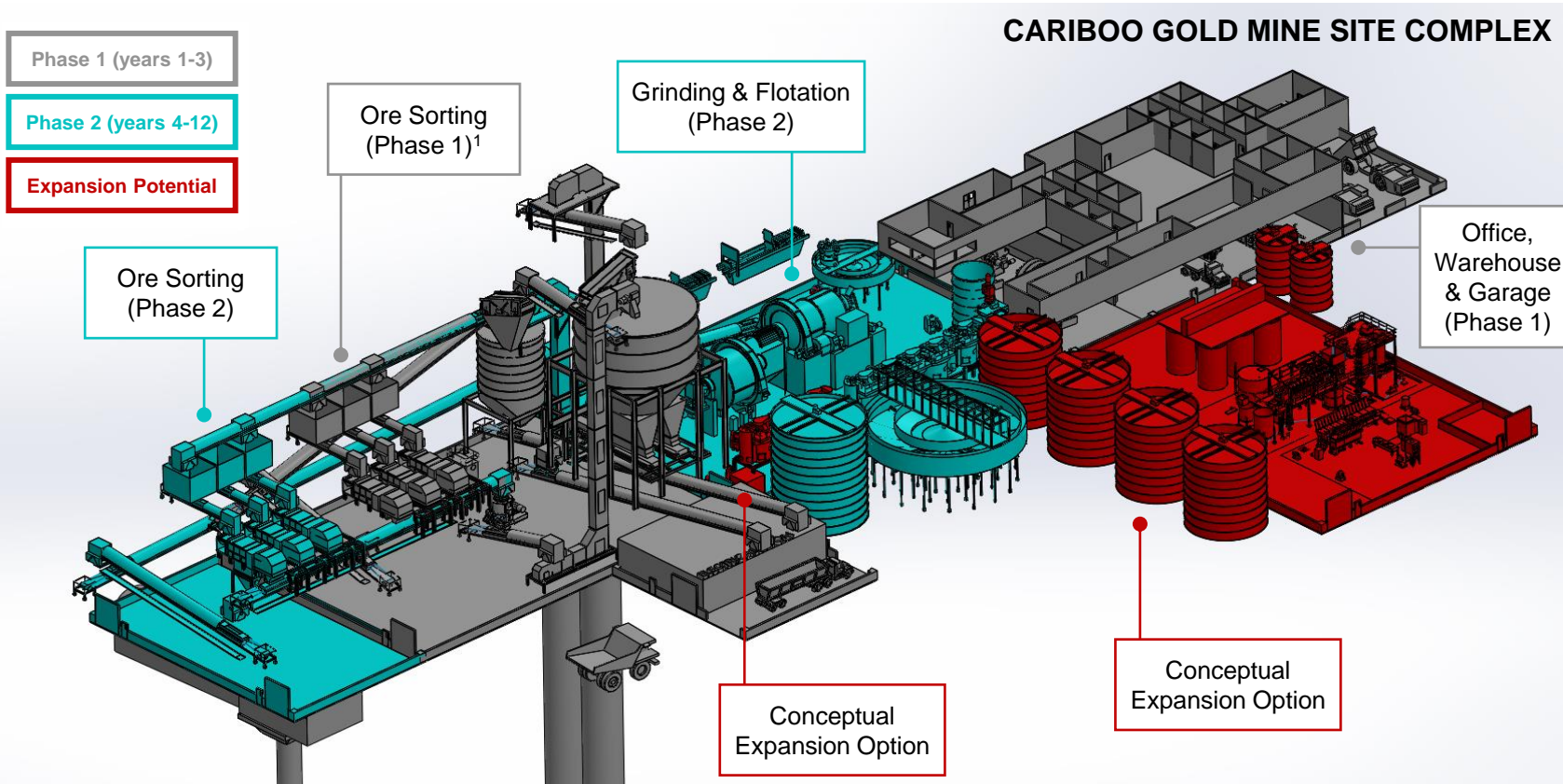
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KEY METRICS AND BENEFITS

- 4,900 tpd expansion throughput
- Underground primary crushing with conveyor to surface
- Ore sorting, comminution and flotation conducted at mine site
- Flotation concentrate processed at QR Mill for further comminution, leaching and refining
- Expansion capital of \$451 million
- Avg. feed grade of 3.72 g/t Au and post-ore sorting feed grade of 6.39 g/t Au
- Designed to streamline expansion beyond 4,900 tpd

FLOW SHEET





**STREAMLINED
DESIGN THAT
ALLOWS SCALING
PROCESSING
CAPACITY BEYOND
4,900 TPD**

Current Phase II design layout incorporates sufficient room for future throughput expansion potential

NATURE OF MINERALIZATION FAVORABLE TO ORE SORTING

Metallurgical testing to date indicates that Cariboo mineralization is well suited for ore sorting



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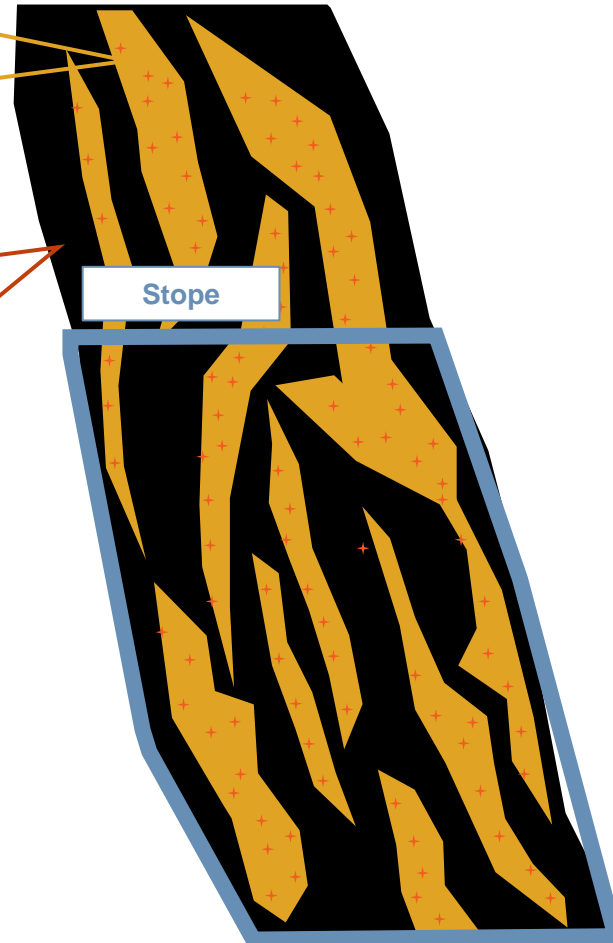
Ore Sorting Separates Gold Rich (11.0 g/t¹) Host Rock From Unmineralized Sandstone

Pyrite hosted in quartz veins
High Density Material (~5 g/cm³)

Sandstone
Low Density Material (~2.5 g/cm³)
Unmineralized Waste

Stope

- Stopes designed to follow vein corridors
- Gold uniquely pyrite hosted within a high-density network of mineralized quartz veins
- Ore sorting effective at separating sandstone (waste) from the high-density gold-associated pyrite
- 95.6% average gold recovery and 62.1% separation of the waste material based on testing to date²



481 VEIN CORRIDORS

2 M MINIMUM WIDTH OF
VEIN CORRIDORS

6.7 KM MODELLED STRIKE
LENGTH

700 M WIDTH TO A DEPTH
OF 600 M AND OPEN

~11 G/T AVG ESTIMATED
UNCAPPED LENGTH
WEIGHTED GRADE OF
QUARTZ VEINS IN VEIN
CORRIDORS¹

ORE SORTER TECHNOLOGY: CARIBOO FEASIBILITY STUDY

Ore sorting provides significant benefits at low opex of ~\$1.00 per tonne feed

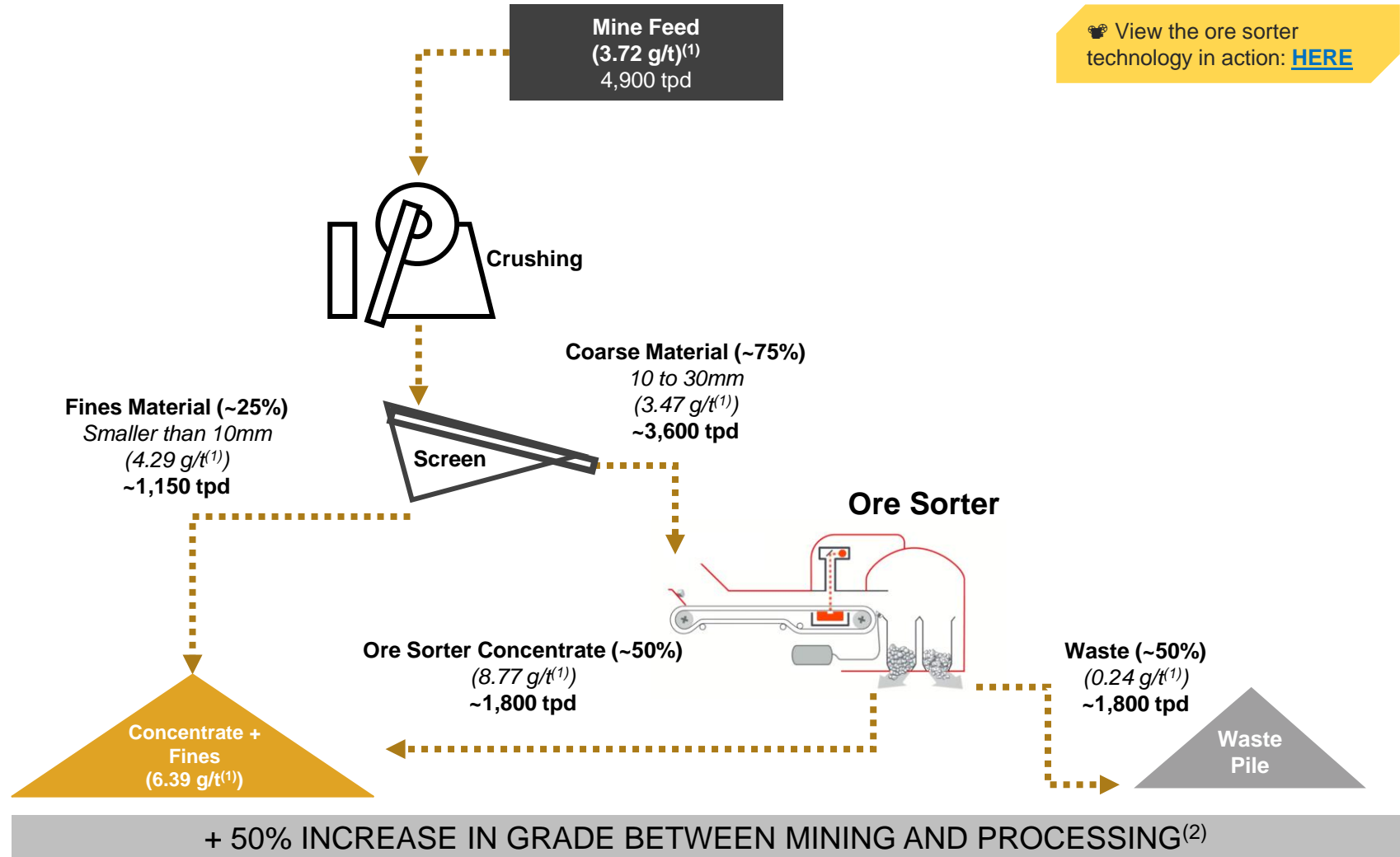


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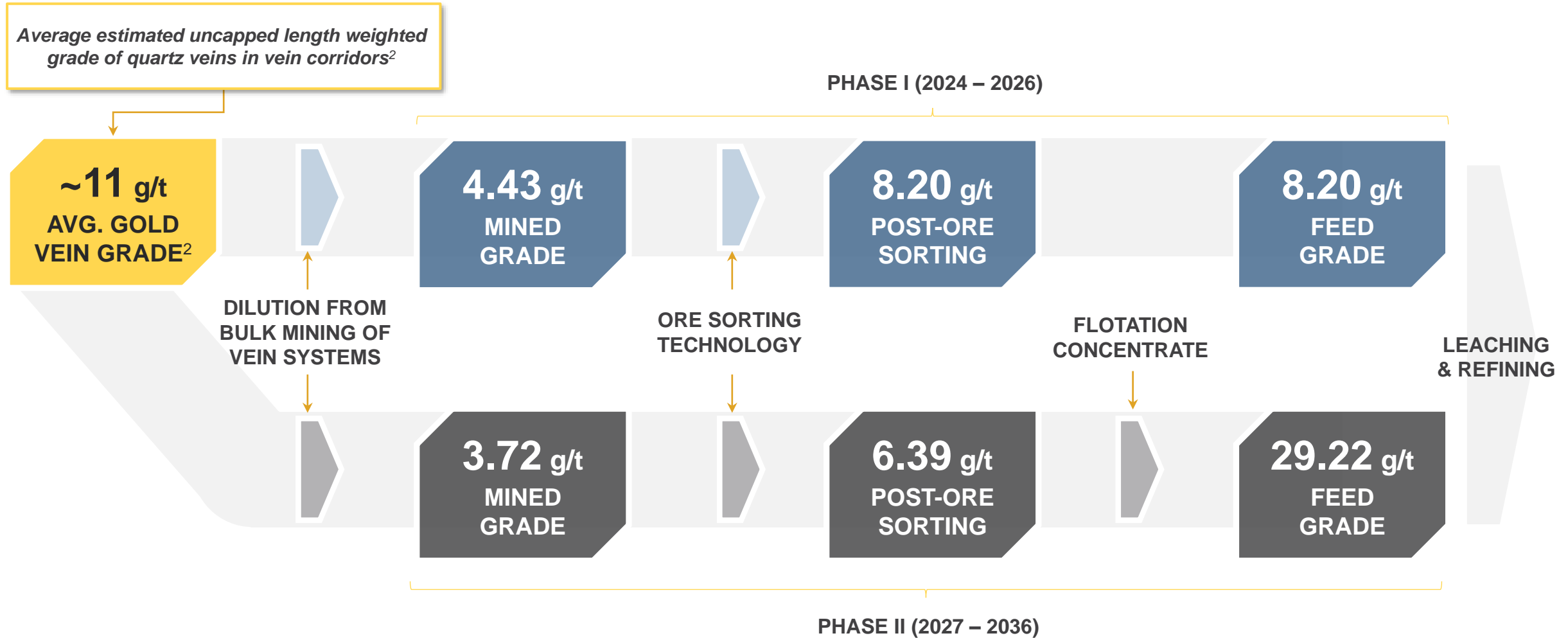
ORE SORTING IS A GREEN TECHNOLOGY

- Significant reduction in energy, water and chemical usage
- ~40% of mined material removed as waste
- 10-15% of waste used as backfill and/or road construction
- Robust, low maintenance technology

View the ore sorter technology in action: [HERE](#)



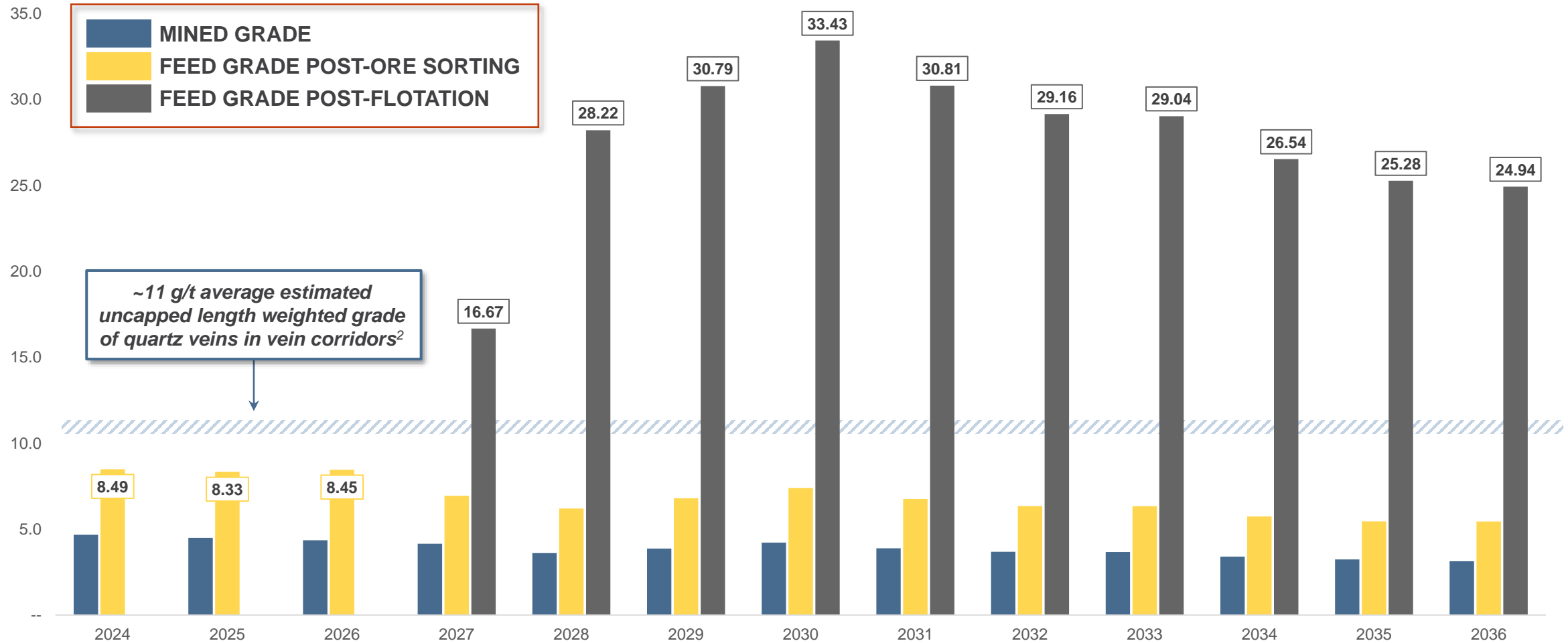
UP “GRADE” PROCESS¹



FEED UP “GRADE”: ORE SORTING & FLOTATION¹

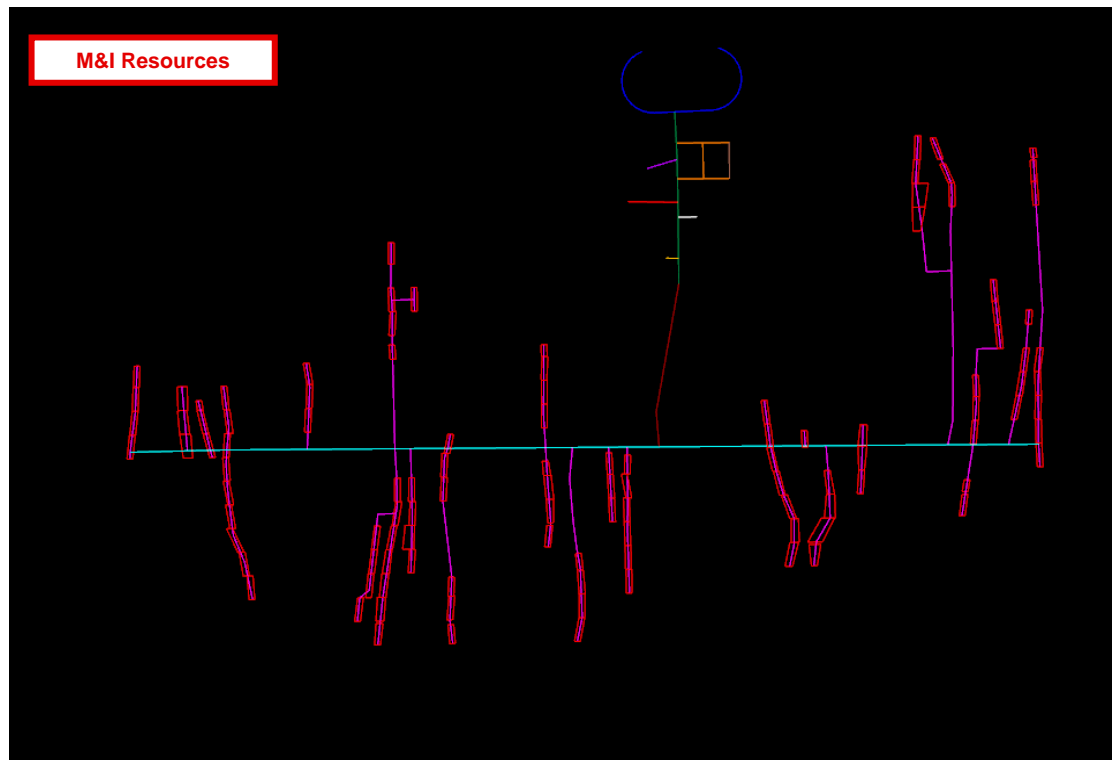


(Gold grade, g/t)



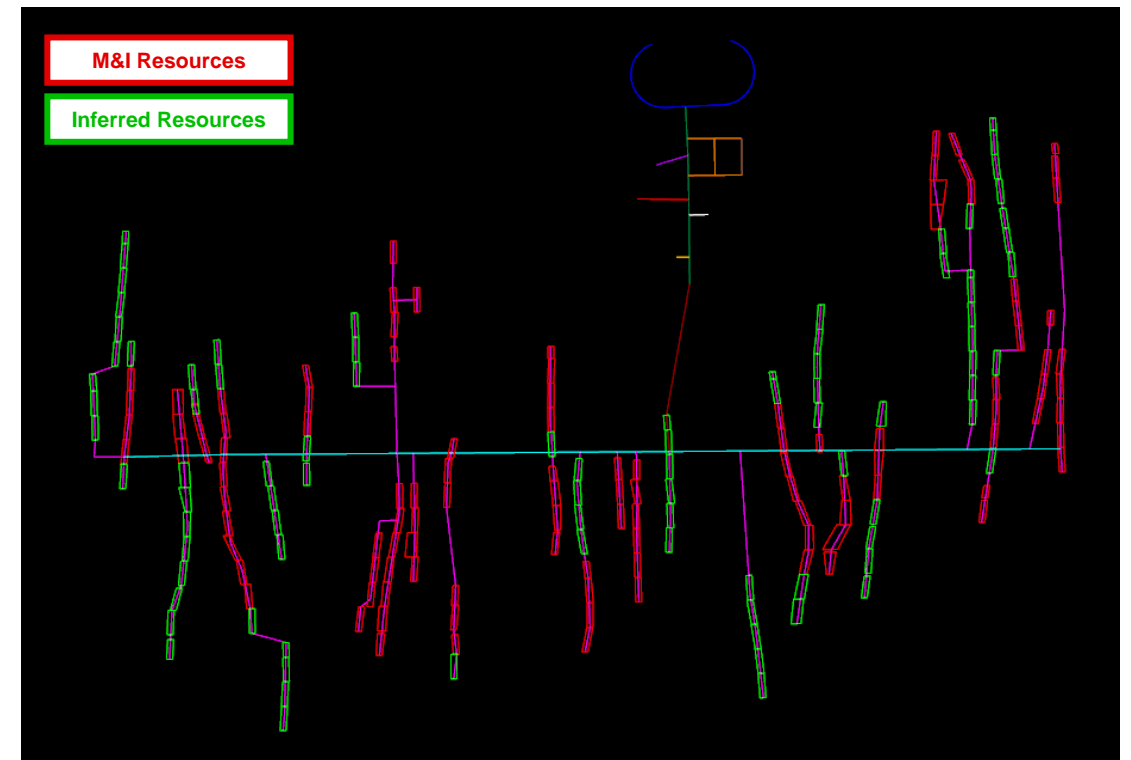
FEASIBILITY STUDY – M&I RESOURCES ONLY¹

- All ramp, access and haulage drifts and other primary infrastructure to be constructed to provide access to minable stopes as defined in the Feasibility Study



ADDITIONAL INFERRED RESOURCES¹

- Potential to convert inferred resources near mined ounces at minimal additional development capex
- Inferred resources appear to be extensions of existing veins

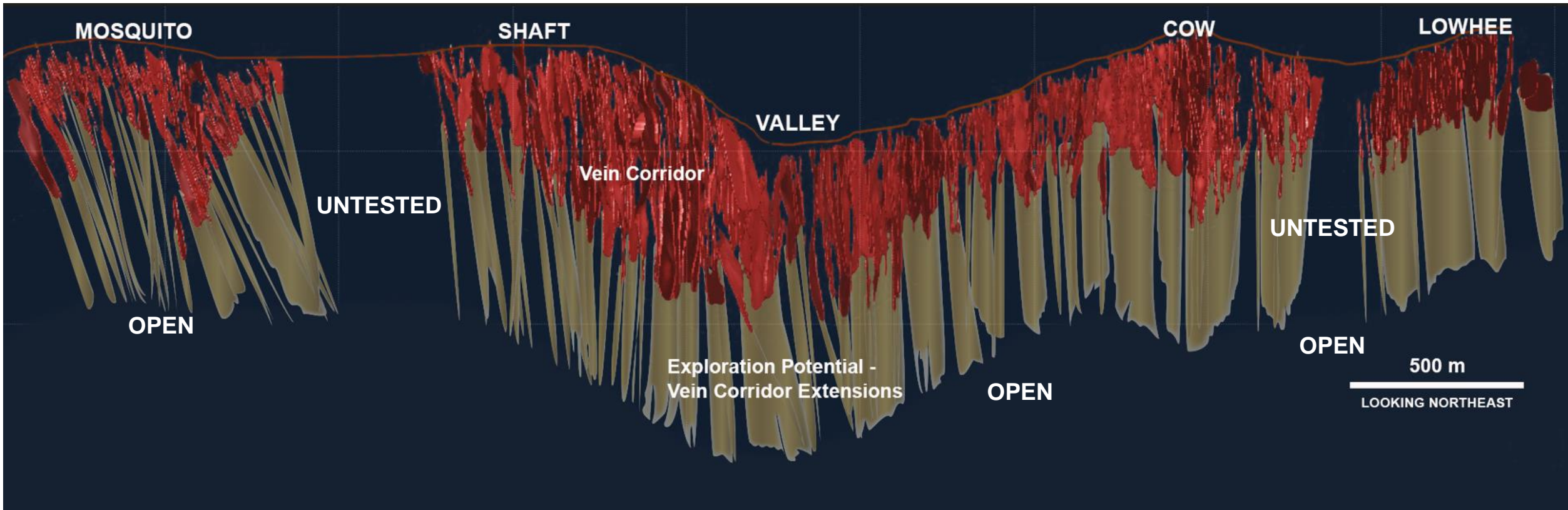


CARIBOO EXPLORATION POTENTIAL AT DEPTH



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- 2.03 Moz Au at 3.8 g/t Au in Probable Reserves¹
- 1.57 Moz Au at 3.3 g/t Au M&I resources, 1.71 Moz at 3.44 g/t Au Inferred Resources with potential to be converted¹
- >500 m additional depth potential of known vein corridors adjacent to mine plan untested – mineralized veins intersected at depth to ~800 m and still open. Average deposit depth is ~350 m

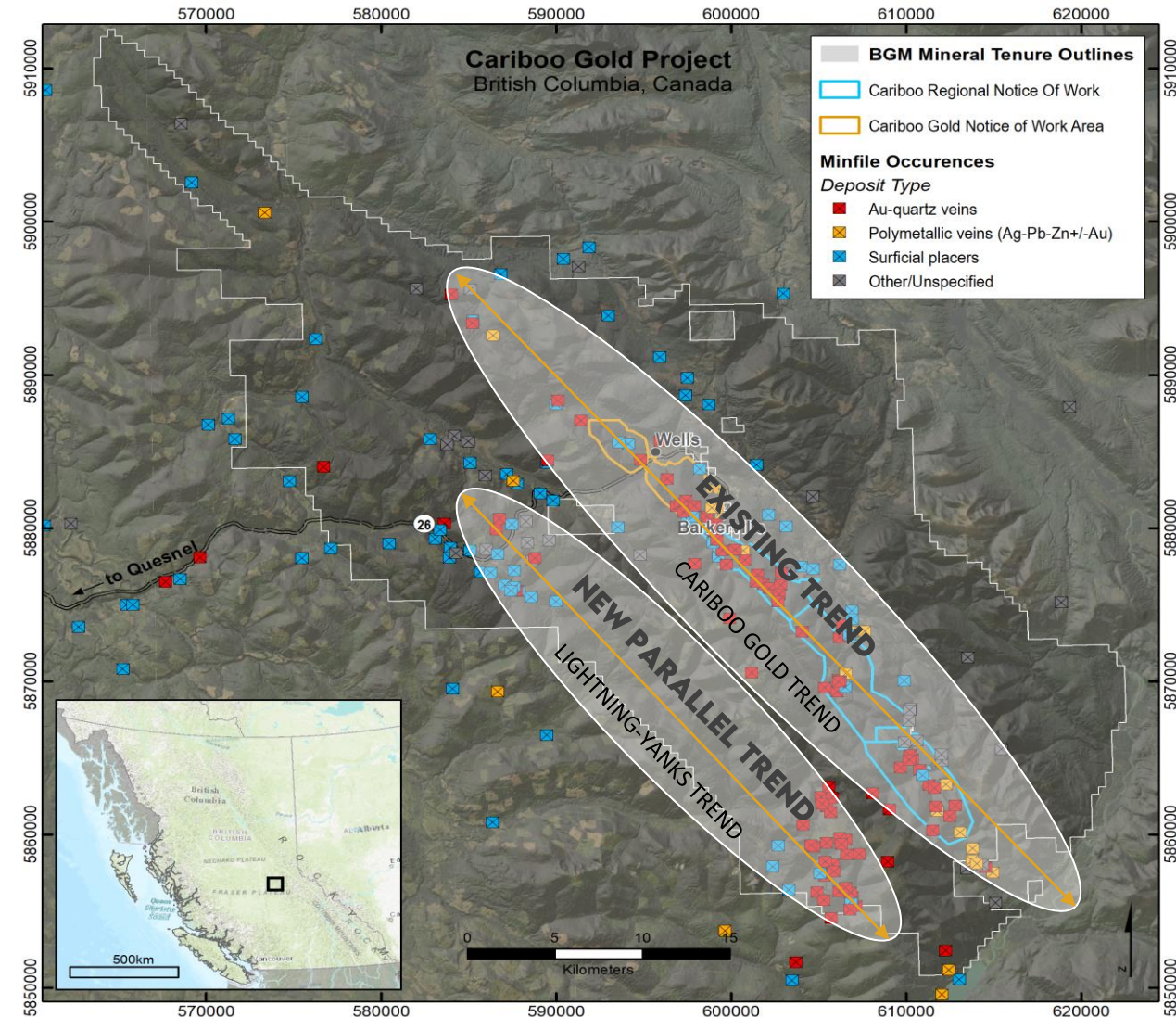


DEVELOPING A MINING CAMP



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- District-scale exploration upside in under-explored Cariboo Gold Belt
- High degree of confidence in geological model with anomalous gold values >2.0 g/t Au in $\sim 80\%$ of drill holes
- 155,000 ha property with 83 kilometers strike of gold targets
- $\sim 700,000$ meters drilled in the last seven years
- Strong support from the BC government
- Year-round exploration and access, infrastructure and work force

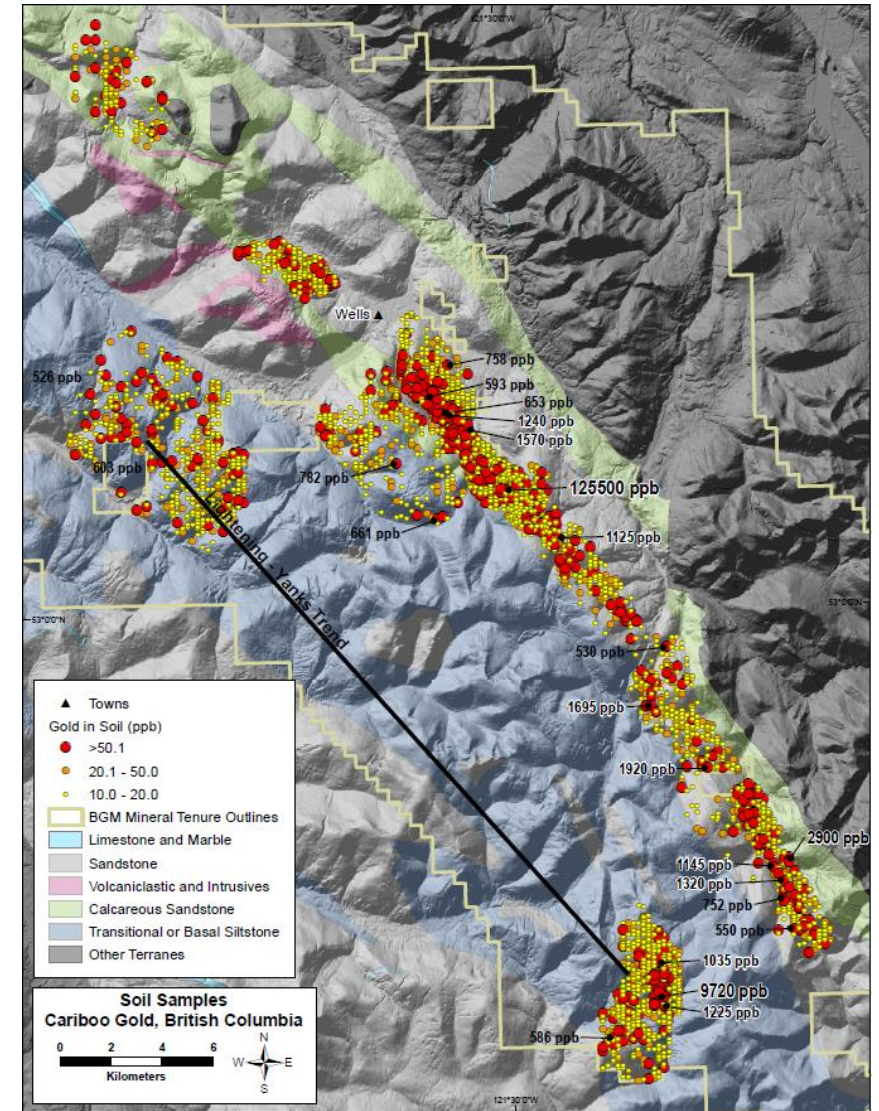


CARIBOO REGIONAL EXPLORATION TARGETS



OSISKO DEVELOPMENT

- > 25 other targets to drill and growing
- Two mineralized trends
- ~25,000 soil samples
- 2,375 rock samples
- 1,100 stream sediment samples
- Airborne geophysics over all claims (Cariboo and Quesnel)
- Ongoing historic data compilation
- Systematic 1:2,000 scale geologic mapping over principal target areas





APPENDIX

CARIBOO MINERAL RESERVES & RESOURCES

(Measured and Indicated Resources are exclusive of Reserves)



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MINERAL RESERVES	PROVEN			PROBABLE			PROVEN & PROBABLE		
	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)
Cow	–	–	–	4,127	3.41	453	4,127	3.41	453
Valley	–	–	–	3,445	3.70	410	3,445	3.70	410
Shaft	–	–	–	7,962	3.87	990	7,962	3.87	990
Mosquito	–	–	–	603	4.93	95	603	4.93	95
Lowhee	–	–	–	567	4.56	83	567	4.56	83
TOTAL RESERVES	–	–	–	16,703	3.78	2,031	16,703	3.78	2,031

MINERAL RESOURCES	MEASURED			INDICATED			MEASURED & INDICATED			INFERRED		
	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)
Bonanza Ledge	47	5.06	8	32	4.02	4	79	4.64	12	–	–	–
BC Vein	–	–	–	1,030	3.12	103	1,030	3.12	103	461	3.55	53
KL	–	–	–	386	3.18	39	386	3.18	39	1,918	2.75	169
Lowhee	–	–	–	1,368	3.18	140	1,368	3.18	140	445	3.34	48
Mosquito	–	–	–	1,288	3.68	152	1,288	3.68	152	1,290	3.55	147
Shaft	–	–	–	4,781	3.39	523	4,781	3.39	523	6,468	3.84	800
Valley	–	–	–	2,104	3.14	213	2,104	3.14	213	2,119	3.30	225
Cow	–	–	–	3,644	3.31	388	3,644	3.31	388	2,769	3.03	270
TOTAL RESOURCES	47	5.06	8	14,635	3.32	1,564	14,682	3.33	1,571	15,470	3.44	1,712

MINERAL RESERVES

1. Totals may not add up due to rounding.
2. Mineral Reserves have been estimated in accordance with CIM Definition Standards for Mineral Resources and Mineral Reserves (2014), which are incorporated by reference in NI 43-101.
3. Mineral Reserves used the following assumptions: US\$1,700/oz gold price, USD:CAD exchange rate of 1.27, and variable cut-off value from 1.70 g/t to 4.00 g/t Au.
4. Mineral Reserves include both internal and external dilution along with mining recovery. The external dilution is estimated to be 8%. The average mining recovery factor was set at 93.6% to account for ore left in each block in the margins of the deposit.

MINERAL RESOURCES

1. Mineral Resources are exclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
2. The Mineral Resource Estimate conforms to the 2014 CIM Definition Standards on Mineral Resources and Reserves and follows the 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines.
3. A total of 481 vein zones were modelled for the Cow Mountain (Cow and Valley), Island Mountain (Shaft and Mosquito), Barkerville Mountain (BC Vein, KL, and Lowhee) deposits and one gold zone for Bonanza Ledge. A minimum true thickness of 2.0 m was applied, using the Au gold grade of the adjacent material when assayed or a value of zero when not assayed.
4. The estimate is reported for a potential underground scenario at a cut-off grade of 2.0 g/t Au, except for Bonanza Ledge at a cut-off grade of 3.5 g/t Au. The cut-off grade for the Cow, Valley, Shaft, Mosquito, BC Vein, KL, and Lowhee deposits was calculated using a gold price of US\$1,700/oz; USD:CAD exchange rate of 1.27; global mining cost of \$54.32/t; processing and transport cost of \$22.29/t; G&A plus Environmental cost of \$15.31/t; and sustaining CapEx cost of \$31.19/t. The cut-off grade for the Bonanza Ledge deposit was calculated using a gold price of US\$1,700/oz; USD:CAD exchange rate of 1.27; global mining cost of \$79.13/t; processing and transport cost of \$65.00/t; and G&A plus Environmental cost of \$51.65/t. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rate, mining cost, etc.).
5. Bulk density varies from 2.69 g/cm³ to 3.20 g/cm³.
6. A four-step capping procedure was applied to composited data. Restricted search ellipsoids ranged from 7 to 50 g/t Au at four different distances ranging from 25 m to 250 m. High-grades at Bonanza Ledge were capped at 70 g/t Au on 2.0 m composited data.
7. The gold Mineral Resources for the Cow, Valley, Shaft, Mosquito, BC Vein, KL, and Lowhee vein zones were estimated using Datamine Studio™ RM 1.9 software using hard boundaries on composited assays. The silver Mineral Resources and the dilution halo gold mineralization were estimated using Datamine Studio™ RM Pro 1.11. The OK method was used. Mineral Resources for Bonanza Ledge were estimated using GEOVIA GEMSTM 6.7 software using hard boundaries on composited assays. The OK method was used to interpolate a block model.
8. Results are presented in situ. Calculations used metric units (metres, tonnes, g/t). Any discrepancies in the totals are due to rounding effects.



OSISKO DEVELOPMENT

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