

## **CAUTIONARY STATEMENTS**



#### 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, projections, objectives, assumptions 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; alSC gold prices and exchange rate assumptions; the assumptions; 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 of 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 utility of the existing infrastructure at the Trixie test mine ("Trixie"); the utility of historic data in respect of Trixie; 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; expec

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 relating to the Trixie MRE; the ability of exploration activities in the Cariboo FS; the assumptions, limitations and qualifications relating to the Trixie MRE; the ability of exploration activities (including drill results) to accurately precipitation activities, including drilling; property interests in the assets of Osisko Development; the ability of the results of exploration activities, including drilling; property interests in the assets of Osisko Development; the ability of the results of exploration activities, including drill results) in spot and forward prices of gold, silver, base metals or certain other compodities; 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 o

For additional information with respect to these and other factors and assumptions underlying the forward-looking statements made herein 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.secs.gov) under Osisko Development's issuer profile. The forward-looking statements in this presentation 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 March 24, 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, income taxes, capital and exploration costs for the life of the mine. The Company believes that such measures 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 company better 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 news release of the Company dated January 3, 2022 and the Cariboo FS (as defined herein), which are available on SEDAR (<a href="https://osiskodev.com/cariboo-gold-project/">https://osiskodev.com/cariboo-gold-project/</a>).

#### **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.

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## **CAUTIONARY STATEMENTS**



#### **CAUTION REGARDING 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 resources and that the economic viability of mineral resources that are not mineral resources that are not mineral resource estimates may be materially affected by geology, environmental, permitting, legal, title, socio-political, marketing or other relevant issues. However, other than as disclosed in this Presentation, Osisko Development is not aware of any known environmental, permitting, legal, title, socio-political, marketing or other relevant issues that could materially affect the estimates of mineral resources disclosed herein. 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 measured 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 Resources and 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 HISTORIC ACTIVITIES – TRIXIE TEST MINE**

Certain scientific and technical information in this Presentation relating to the Trixie is historic in nature and provided by Tintic Consolidated Metals LLC ("Tintic") in connection with Osisko Development's acquisition of Tintic. This information is being provided for illustrative purposes only and readers should not infer that historical mining activities, including production, can be achieved by Osisko Development. The historical information in this presentation in nature and does not comply with NI 43-101. To that end, a qualified person has not done sufficient work on behalf of Osisko Development to classify any historical estimate as current mineral resources or mineral resources or mineral resources or mineral resources.

#### **BURGIN HISTORIC RESOURCE**

The past producing Burgin mine, previously operated by Kennecott until 1978, has potential for a significant silver-lead-zinc-gold deposit. The historic resource as outlined in the 2011 PEA is referenced herein. Osisko Development believes that the historic resource continues to be relevant and reliable as an indication of the potential of the Burgin Mine. Further exploration work including drilling will be required to upgrade the historic resource to current. Osisko Development cautions sufficient work has not been done to classify the historic resources as a current resource and Osisko Development is not treating the historic resources as a current resource.

#### 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" and dated January 12, 2023 (with an effective date of December 30, 2022), 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 nd 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 Feasibility Study on the Feasibility Study for the Cariboo Gold Project. An electronic copy of the Cariboo Fs is a available on SEDAR (www.sec.gov) under Osisko Development's issuer profile, and on Osisko Development's corporate website (https://osiskodev.com/cariboo-gold-project/).

The Cariboo FS supersedes the technical report entitled "NI 43-101 Technical Report – Preliminary Economic Assessment for the Cariboo Gold Project" and 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.

The scientific and technical information in this Presentation relating to the initial mineral resource estimate for Trixie, Tintic Project is supported by a technical report entitled "NI 43-101 Technical Report, Initial Mineral Resource Estimate for the Trixie Deposit, Tintic Project, Utah, United States of America" dated January 27, 2023, with an effective date of January 10, 2023 (the "Trixie MRE") prepared, reviewed, and approved by William J. Lewis, P. Geo, Ing. Alan J. San Martin, MAusIMM (CP) and Richard Gowans, P. Eng. Mr. Lewis, Mr. San Martin and Mr. Gowans are employees of Micon International Limited (Micon). Each author of the Trixie MRE 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 Trixie MRE is available on SEDAR (<a href="https://osiskodev.com/tintic-project/">www.sec.gov</a>) under Osisko Development's issuer profile, and on Osisko Development's corporate website (<a href="https://osiskodev.com/tintic-project/">https://osiskodev.com/tintic-project/</a>).

The scientific and technical information in this Presentation relating to the San Antonio Project is supported by the technical report entitled "NI 43-101 Technical Report for the 2022 Mineral Resource Estimate on the San Antonio Project, Sonora, Mexico" and dated July 12, 2022 (with an effective date of June 24, 2022) prepared for Osisko Development by Micon International Limited (the "San Antonio Technical Report"). Each author of the San Antonio Technical Report 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 San Antonio Technical Report for assumptions, qualifications and limitations relating to the disclosure about the San Antonio Project. An electronic copy of the San Antonio Technical Report is available on SEDAR (<a href="https://osiskodev.com/san-antonio/">https://osiskodev.com/san-antonio/</a>).

#### **QUALIFIED PERSONS**

Maggie Layman, P.Geo, 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.

#### ABBREVIATIONS AND UNITS OF MEASUREMENT

In this Presentation, the Company uses certain abbreviations, including: measured and indicated ("M&I"), million ("M"), thousand ("k"), metric tonnes ("oz"), grams per tonne ("qh"), gold ("Au"), silver ("Aq"), copper ("Cu"), lead ("Pb"), zinc ("Zn").

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# **INVESTMENT HIGHLIGHTS**



Building a Premier North American Mid-tier Gold Mining Company



# PREMIER MINING JURISDICTIONS



Brownfield properties with existing accessible infrastructure and meaningful exploration upside

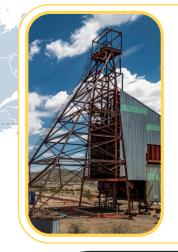


## CARIBOO GOLD PROJECT (BC, CANADA)

100% Ownership

### Feasibility Study Completed (Jan 2023) | Advancing Mine Permitting

- 2.0 Moz reserves (16.7 Mt at 3.8 g/t Au) | 1.6 Moz M&I resources | 1.7 Moz inferred resources<sup>1</sup>
- Phased approach with lower-risk development → C\$137M initial capital to first production by 2024
- Feasibility production ~164 kozpa over 12 years LOM | C\$502M NPV5% and 20.7% IRR
- District exploration upside with a 192,000 ha property (83 km strike), excellent infrastructure, BC government support



## TINTIC PROJECT - TRIXIE (UTAH, USA)

100% Ownership

### Decline ~62% complete | Target processing run-rate of ~500 tons per day

- Initial MRE: 213 koz Au M&I resources grading 28.1 g/t Au | Inferred 243 koz grading 19.6 g/t Au<sup>2</sup>
- ~4,550 chip samples collected over ~2,000 ft strike length with 74.2 g/t Au & 95.65 g/t Ag average grades
- >17,000 acres of patented (private) mining claims
- Existing site infrastructure, extensive UG workings, grid power, VAT leach facility and mining fleet

## TINTIC PROJECT - REGIONAL TARGETS (UTAH, USA)

100% Ownership

- Highly prospective 5 km long corridor with 23 historic mines, legacy datasets and established UG infrastructure
- Targets include potential high-sulphidation epithermal Au-Ag, carbonate replacement and porphyry deposits

## SAN ANTONIO GOLD PROJECT (SONORA, MEXICO)

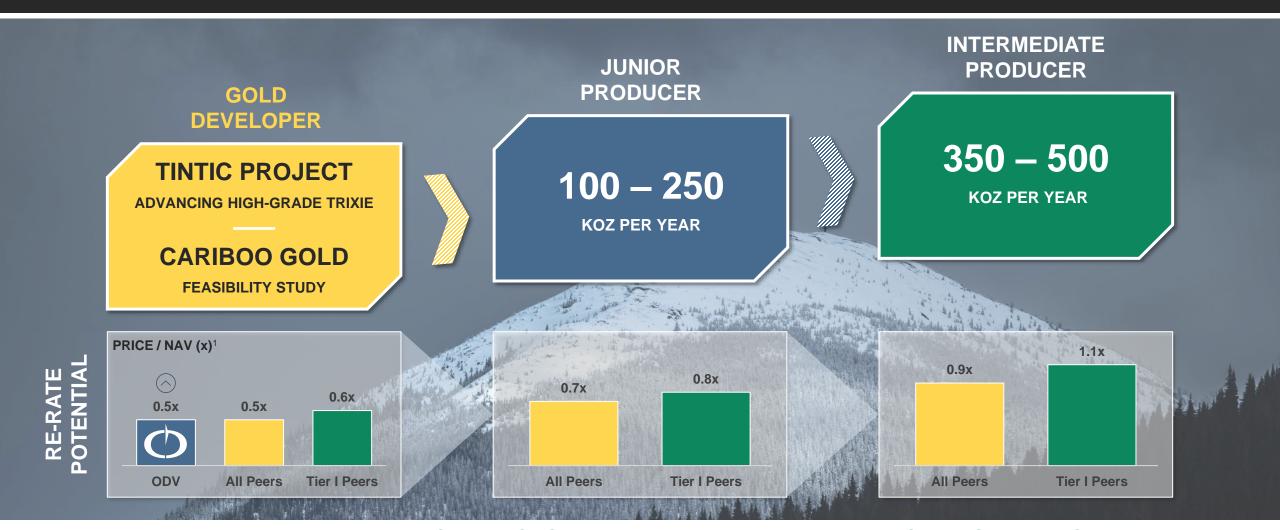
100% Ownershi

### Advancing mine permitting | Processing stockpile material

- 576 koz indicated resources (1.20 g/t Au) | 544 koz inferred resources (1.02 g/t Au)<sup>3</sup>
- 5 known deposits and at least a dozen other gold exploration targets over 11,338 hectares
- Located 160 km from airport and towns of Hermosillo; mine infrastructure and water on site

# **EXECUTING ON OUR VISION & STRATEGY**





BUILDING A NORTH AMERICAN FOCUSED INTERMEDIATE GOLD PRODUCER - STEP-BY-STEP

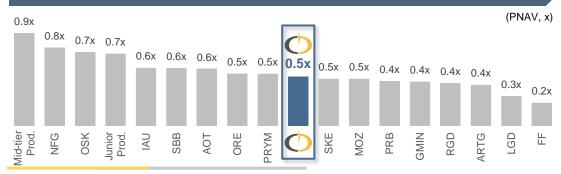
# **CAPITAL STRUCTURE SNAPSHOT**



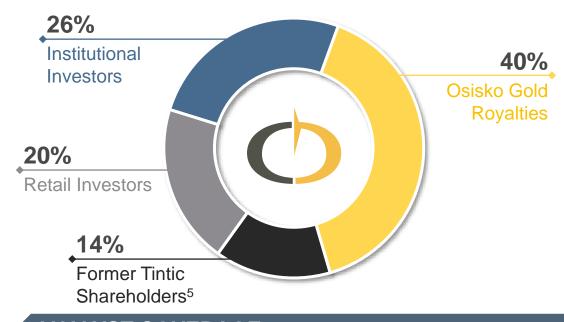
## **OSISKO DEVELOPMENT CORP.**1,2

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Current Share Price (closing price on Mar 23, 2023)	C\$6.36 /share
Basic Shares Outstanding	83.5 million
Options, DSUs, and RSUs	3.0 million
Warrants <sup>3</sup>	31.9 million
Fully Diluted Shares Outstanding	118.4 million
Market Capitalization – Basic	C\$531.1 million
Cash & Cash Equivalents	C\$105.9 million
Investment Holdings (marketable securities)	C\$38.7 million
Total Debt <sup>4</sup>	C\$19.1 million
Enterprise Value – Basic	C\$405.5 million

## **RELATIVE PRICE / NAV VALUATION<sup>1</sup>**



## SHAREHOLDER OWNERSHIP



# **ANALYST COVERAGE**











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Source: Company disclosures. Broker research. S&P CapitallQ.





# **TINTIC PROJECT**

Utah, USA 100% ODV ownership

# **TINTIC PROJECT: ASSET SNAPSHOT**

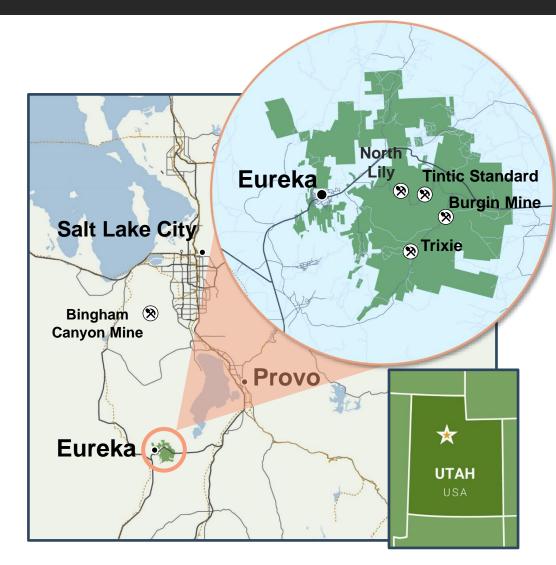


OWNERSHIP	LOCATION / LAND PACKAGE	MINE TYPE	METALS	STAGE
100% ODV	Utah, USA >17,000 acres of patented (private) claims	Underground	Gold, Silver Cu, Pb, Zn	Initial Resource (Q1 2023)

#### HIGHLY PRODUCTIVE HISTORICAL MINING DISTRICT

- Located 95 km south of Salt Lake City, Utah, ~65 km from the prolific Bingham Canyon copper mine, one of the largest operating open pit mines globally
- Fast-tracking Trixie while advancing other prospective exploration targets, including high quality porphyry, epithermal and CRD targets
- Second largest metal producing district in Utah following Bingham, with 23 pastproducing mines located within Tintic property





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# TRIXIE INITIAL MINERAL RESOURCE ESTIMATE ("MRE")



## TRIXIE MINERAL RESOURCES ESTIMATE - January 10, 20231

RESOURCE	TONNES	METAL	GRADE	CONTAINED METAL		
CATEGORY	(000's)	(g/t Au)	(g/t Ag)	(000's oz Au)	(000's oz Ag)	
MEASURED	11	190.61	195.53	67	69	
INDICATED	225	20.17	43.73	146	316	
MEASURED & INDICATED	236	28.08	50.77	213	385	
INFERRED	385	19.64	42.82	243	530	

# HIGH-GRADE DEPOSIT

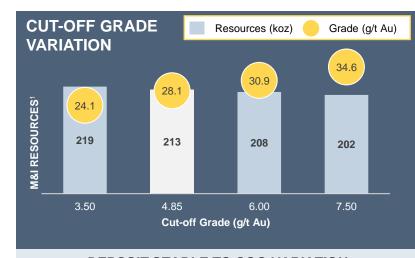
MRE comprises small footprint (380 m length x 85 m width x 140 m depth)<sup>1</sup>

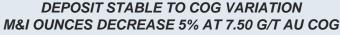
# MEANINGFUL UPSIDE

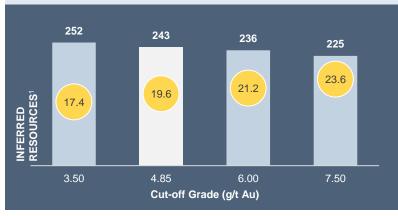
~10% of the main Trixie area explored to date

# 74.2 g/t Au AND 95.65 g/t Ag

Average length weighted grade of all 4,550 chip samples collected to date<sup>2</sup>







# **UNDERGROUND RAMP DEVELOPMENT ~62% COMPLETE**



Completion of the ramp a critical path item in unlocking value at Trixie

## RAMP DEVELOPMENT: ~1,390 M (4,550 ft.)

#### **RAMP FROM SURFACE TO 625 LEVEL**

- Enables bulk extraction at higher tonnage by providing underground access to a modern, mechanized fleet
- Accelerates development and exploration activities at lower levels

#### PROGRESS: ~62% COMPLETED TO DATE

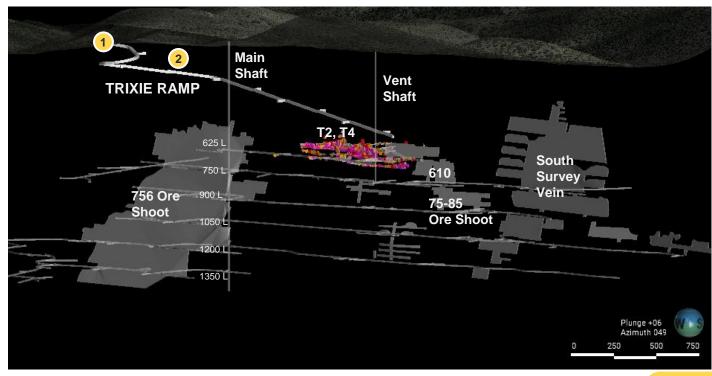
- ~4,300 ft. (1310 m) to be driven from surface, and 350 ft. (106 m) to be driven from underground
- Decline size 16x16 ft. (5x5 m), with muckbays excavated every 300 ft. (100 m) potential to later use for UG exploration platforms
- O Designed to intercept major known structures in the area at 90°





## 3 HISTORIC MINERALIZED ZONES OPEN AT DEPTH AND STRIKE

756	610	SOUTH SURVEY
ORE SHOOT	ORE SHOOT	VEIN
<ul> <li>Developed over 900 ft. (275 m) strike and 1,000 ft. (300 m) vertical</li> <li>Mined for flux by Kennecott</li> <li>Average grades 6 to 8 g/t Au</li> </ul>	<ul> <li>Focus of 2001-2002 mining activity</li> <li>Mined down to the 1,200 ft. level</li> <li>Average grades 21 g/t Au</li> </ul>	<ul> <li>Mined by Kennecott in the 1980's</li> <li>Extends for 3,400 ft. (1,030 m) south of the main shaft</li> </ul>

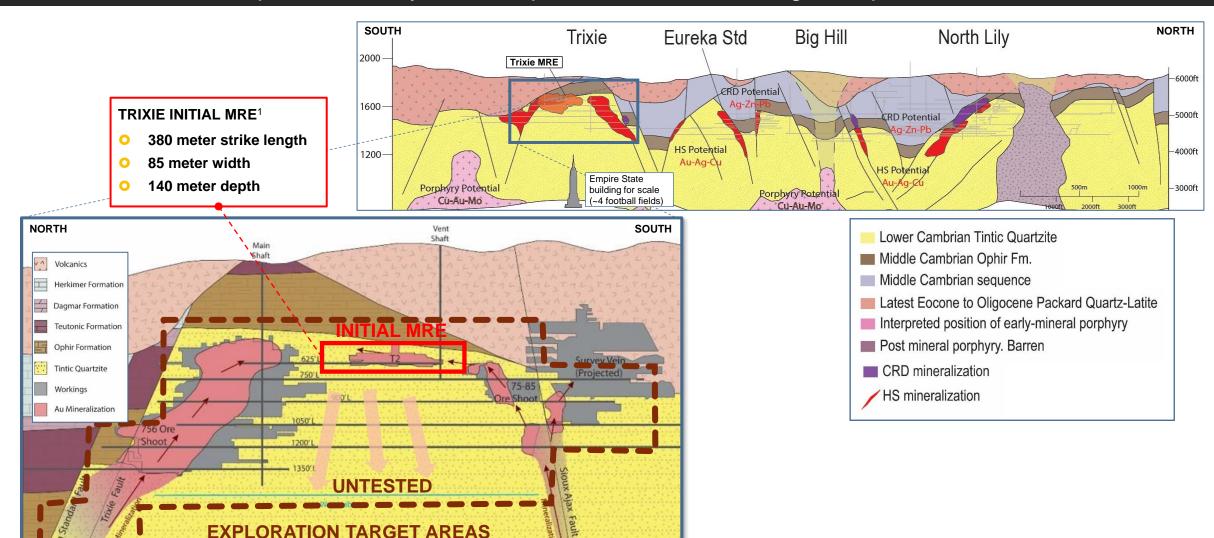


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# TRIXIE EXPLORATION POTENTIAL



Initial MRE at Trixie represents a very small footprint of the overall underground potential

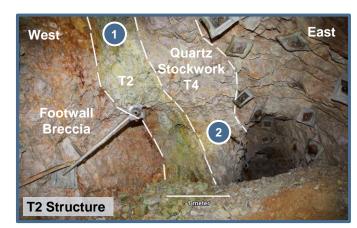


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1. Refer to the full text of the Trixie MRE technical report for the assumptions, qualifications and limitations relating to disclosure about the initial mineral resource estimate for Trixie, Tintic Project. The Trixie MRE comprises five mineralized zones within the greater Trixie deposit, including T1, T2, T3, T4 and 75-85 zones over a strike length of 610 m, a maximum width of 105 m and to a maximum depth of 295 m. These dimensions are for the overall size of the mineralized zone structures, with the Trixie MRE blocks contained within a smaller 380 m strike length, 85 m width and 140 m depth footprint.

# TRIXIE EXPLORATION POTENTIAL



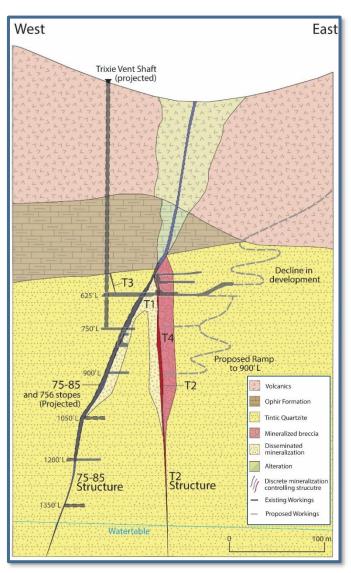




**T4 Stockwork** Zone

### **T2 Discrete Breccia Zone**





## TRIXIE MINERALIZATION

#### **OVERVIEW**

- High-sulphidation epithermal mineralization structurally controlled and hosted within the brittle Tintic Quartzite
- Mineralization capped by impermeable shales of the Lower **Ophir Formation**

## T2 DISCRETE BRECCIA ZONE (~0.2-3.0 m wide)



- Native Au and rare Au–Ag-rich +/- Cu- telluride minerals with quartz
- Highest assays to date 16,381 g/t Au and 2,541 g/t Ag over 0.43 meters in a chip sample

## **T4 STOCKWORK ZONE** (up to ~25 m wide) 2



- Typical grade of 0.3 to 1.0 oz/t (10 to 34 g/t), which is in the hanging-wall to the T2 zone
- Au Ag-rich mineralization in host rock quarzite with quartzbarite-sulfosalt stockwork veining

#### 75-85 STRUCTURE

- All historic mining focused on west dipping 75-85 structure
- Within the T4 zone of high-density, smaller-scale T2 parallel structures

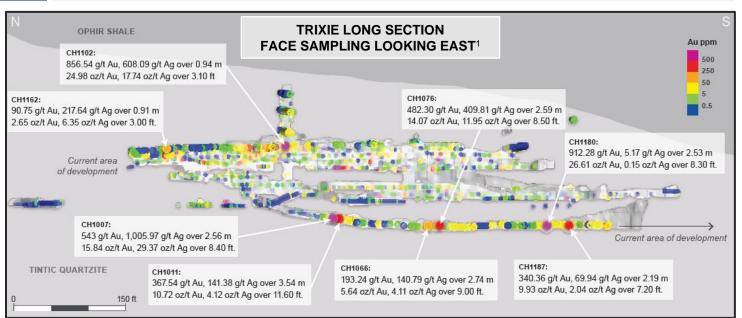
# SAMPLING AND DRILLING HAVE SHOWN CONTINUITY OF T2 / T4

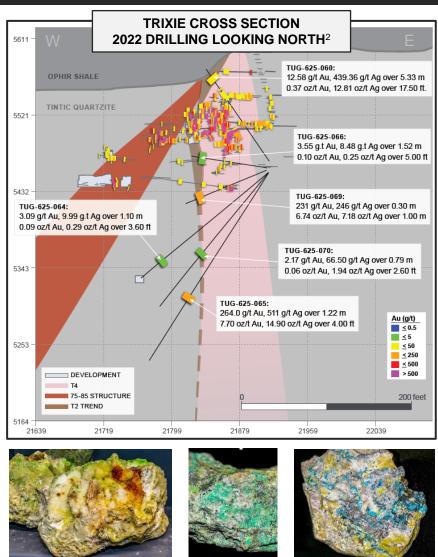


Only ~25% of assay results received from RC and DD drilling completed in 2022

High-grade gold results greater than 100 g/t are present throughout the entire sampled area, on all levels, including recent development

- Completed ~8,442 m (27,700 ft.) of RC Drilling (28 holes) and ~3,232 m (10,060 ft.) of underground diamond drilling (62 holes) with ~25% of results received to date
- 4,550 chip samples (average length weighted grade of 74.2 g/t Au and 95.65 g/t Ag)
- High-grade drilling results include 264 g/t Au and 511 g/t Ag over 1.22 m
- Two underground diamond drill rigs are in operation showing greatly improved core recovery and drill production challenges faced early in the 2022 program











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<sup>1.</sup> Refer to ODV news release dated November 30, 2022. 2. Refer to ODV news release dated January 11, 2023.

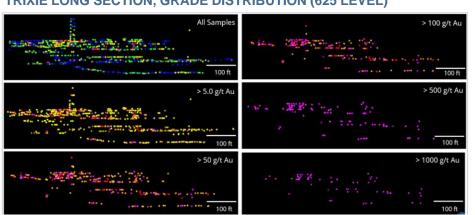
# RECENT CHIP SAMPLING AND DRILLING HIGHLIGHTS



Most recent results have shown chip samples of up to ~67 oz/t (2,311 g/t) over 2.3 meters

- Drilling assays generally report lower grades than sampling assays due to the nuggety nature of the gold system
- Drill assays underscore the importance of "drilling for structure, drifting for grade"
- Wider bore HQ drill samples have shown more success in providing realistic assay results
- Existing underground development at Trixie allows fast tracking of drilling and exploration cross cuts
- Underground drill stations can be placed near the target zones with minimal additional mine development

### TRIXIE LONG SECTION, GRADE DISTRIBUTION (625 LEVEL)



## SELECT CHIP SAMPLING<sup>1,2</sup>

HOLE ID	WIDTH	GRAD	E (g/t)
(CH)	(m)	SILVER	GOLD
1187	0.73	209.8	1,017.0
1180	0.55	-	4,186.5
1163	0.61	6,699.0	5,197.8
1114	1.52	1,224.9	1,553.1
including	0.82	2,263.4	2,873.1
1110	2.07	316.0	2,800.1
including	1.22	528.9	4,757.4
1105	0.40	102.4	1,769.3
1102	0.37	1,560.0	2,202.9
1011	0.55	911.1	2,352.2
1007	1.01	2,546.1	1,381.6
1351	2.29	1,146.5	2,311.2
1256	0.91	78.7	3,901.3
1326	0.82	1,587.6	3,419.9

## SELECT DRILLING<sup>2</sup>

HOLE ID	WIDTH	WIDTH GRADE (	
(TUG)	(m)	SILVER	GOLD
625-029	3.81	21.48	25.95
including	1.52	41.80	43.80
625-050	2.47	113.85	14.97
including	1.07	90.00	25.50
625-060	5.33	439.26	12.58
625-065	1.22	511.00	264.00
625-069	1.22	84.30	65.50
including	0.30	246.00	231.00
625-028	0.37	155.00	10.70

High grade gold exists along strike, at depth down dip and down plunge and along fault zones known to be fluid pathways for gold mineralization

<sup>1.</sup> Refer to ODV news release dated November 30, 2022.

<sup>2.</sup> Refer to ODV news release dated January 11, 2023.

# EAST TINTIC REGIONAL EXPLORATION POTENTIAL



Highly prospective 5 km long corridor with 23 historic mines, extensive legacy datasets



Epithermal vein / breccia systems hosted primarily within the basal Tintic Quartzite host rock, found at the Trixie, Eureka Standard and the deeper levels of North Lily mines



## CARBONATE REPLACEMENT ("CRD") Ag-Pb-Zn 2



Replacement of reactive limestone more distal from causative porphyry centers on the margins of district

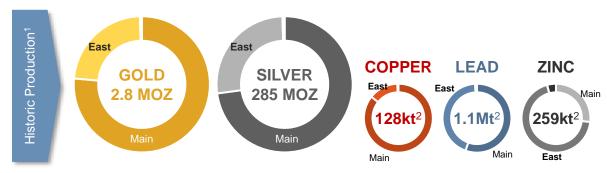
Accounts for most historical production within Tintic, including Burgin, Tintic Standard, and North Lily mines

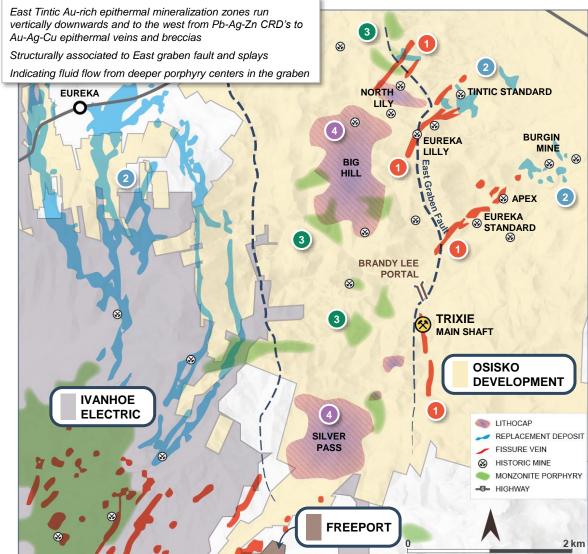


## PORPHYRY Cu-Au-Mo POTENTIAL 3



Advanced argillic alteration in a NNE trend of remnant lithocaps 4 potentially marks a lineament of porphyry centers at depth. Historic drill testing intersected low grade porphyry mineralization





# **REGIONAL TARGETS: EPITHERMAL HIGH-GRADE Au-Ag**



Targets identified based on 3D geological modelling completed to date

## **EUREKA STANDARD**

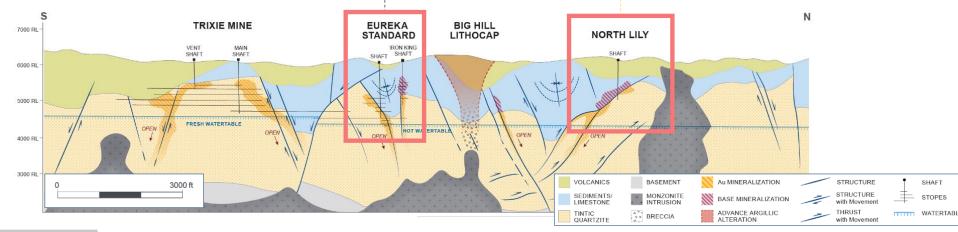
- Epithermal Au-Ag along trend NNE of Trixie
- Mineralization hosted in the brittle Tintic Quartzite with structural control along the East Tintic thrust fault and pebble dikes
- The main high-grade mineralized shoot plunges into the water table at 1,400 ft. (426 m) and remains open at depth
- Old grades averaged >45 g/t Au (1.3 oz/t Au) into the water table
- O Approx. historic production 360,000 tons 24 g/t Au and 319 g/t Ag
- STATUS: Geologic model complete and drilling is proposed;
   Potential to rehab workings from Trixie to Eureka Standard

### **NORTH LILY**

- North Lily operated between 1927 and 1940s
- Endline Dike Fissure produced 375,000 tons, 151 koz gold at an average grade of 45 g/t Au (1.33 oz/t) and 3.5 Moz Ag
- Zones of characteristic high-sulfidation mineral associations (enargite/tetrahedrite, barite, Au +- sphalerite) exist in the deeper parts of the mine at the Endline Fissure and in the Baltimore/7A51 zone
- NE trending dyke swarm emanating from Big Hill lithocap / porphyry
- STATUS: Data compilation and drillholes proposed along NE strike of Endline and structures parallel to Endline

Eureka Standard Ore Pile Hand Sample





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# REGIONAL TARGETS: CARBONATE REPLACEMENT Ag-Pb-Zn

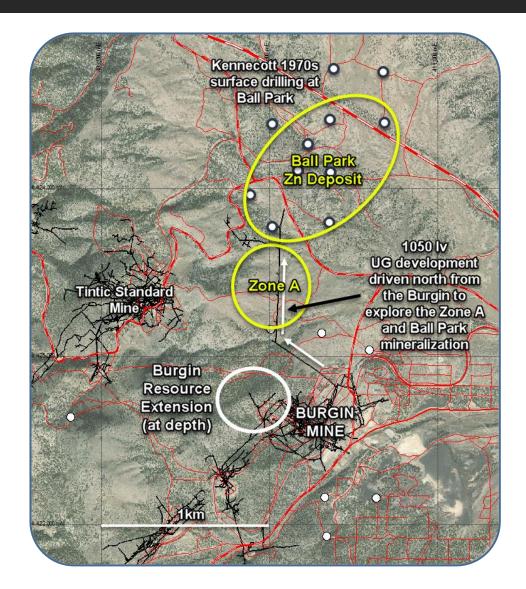


Data compilation and geologic modelling ongoing

## **HISTORIC BURGIN MINE**

- Mined by Kennecott until 1978, with the "Burgin Extension" discovered from drilling undertaken in 1980
- The Burgin mine hosts a significant Pb-Zn-Ag-Au replacement style deposit
- Ball Park target (Zn-Pb) is located 5000 ft. (1.5 km) north of the Burgin mine (Kennecott surface drilling in 1970s intersected significant Zn-Pb mineralization at Ball Park)
  - During the 1970's Kennecott developed the 1050 level north of Burgin to explore this area, with underground drilling intersecting significant base and precious metals mineralization associated with the Tintic Thrust, in a similar structural setting to the Burgin deposit
- STATUS: Early stages of data compilation, core relogging. Significant potential exists for addition CRD mineralization throughout the property

	Historic Burgin Extension Resource – 2011 NI 43-101 PEA <sup>1</sup>											
Class	Cut-off (oz AgEq/t)	Tons (000's)	oz Ag/t	koz Ag	oz Au/t	koz Au	% Pb	klbs Pb	% Zn	klbs Zn		
Indicated	3.81	920	7.28	6,694	0.025	23	9.27	170,461	3.45	63,497		
Inferred	1.52	1,357	8.71	11,823	0.013	17	14.43	391,589	5.19	140,846		



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# **REGIONAL TARGETS: PORPHYRY Cu-Au-Mo POTENTIAL**



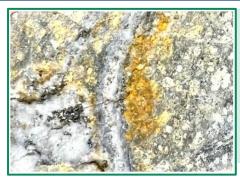
Strong evidence for multiple potential porphyry centers within the district

## **BIG HILL PORPHYRY TARGET**

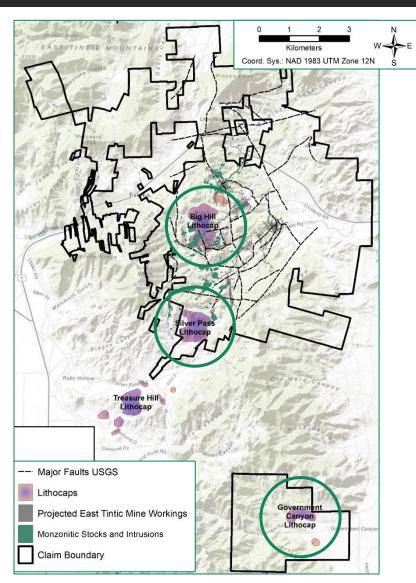
- O Located 65 km south of Bingham Canyon Mine, which has produced 19 Mt of copper since 1906
  - District Endowment of 24.6 MT copper and 43 Moz Au, 425 Moz Ag
- Indicator clay assemblages and elevated Mo and/or Cu geochem anomalies at Big Hill, Silver Pass and Government Canyon
- Limited drilling from previous operators (8 holes) intersected low grade porphyry mineralization; Multiple lithocaps mapped in the area
- Abundant stocks and intrusions throughout the district overlap the timing of mineralization
- Geochemical data indicating favorable alteration and metal assemblages
- Evidence for pre- and post-mineral normal faulting which could reduce local depth from surface to the porphyry level
- STATUS: Integration of geology, geophysics and geochemistry as well as surface mapping and relogging of drill core from previous operators has identified Big Hill as a target

Biotite rim retrograde to skarnified wall rock clast in intrusion breccia





B-type quartz veinlet with molybdenite along margins cutting intermineral monzonite porphyry, Big Hill







# **CARIBOO GOLD PROJECT**

British Columbia, Canada 100% ODV ownership

# **CARIBOO GOLD PROJECT: ASSET SNAPSHOT**



District scale exploration upside potential in an under-explored Cariboo gold belt

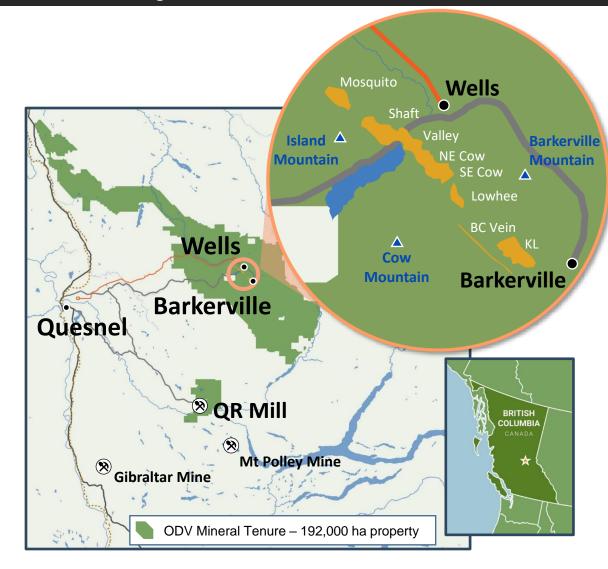
OWNERSHIP	LOCATION / LAND PACKAGE	MINE TYPE	METALS	STAGE	
100% ODV	BC, Canada 192,000 ha	Underground	Gold Silver	Feasibility Study (Jan-23)	

#### **DEVELOPING A MINING CAMP**

- Two prospective mineralized trends over 83 km strike (192,000 ha property) with 700 km drilled over the last 7 years
- Completed a Feasibility Study envisioning a phased 12-year mine life with a C\$502M NPV5% and producing up to 223 koz/yr of gold
- Brownfield site with year-round access, infrastructure and work force, and strong support from the BC government
- O Upcoming catalysts: EA Certificate (Q3 2023); Permits receipt (Q1 2024)

### RESERVES & RESOURCES<sup>1</sup>

Classification	<b>Tonnes</b> (000's)	Gold Grade (g/t)	Contained Gold (000's oz)
Probable reserves	16,703	3.78	2,031
Measured resources	47	5.06	8
Indicated resources	14,635	3.32	1,564
Measured & indicated	14,682	3.33	1,571
Inferred resources	15,470	3.44	1,712



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<sup>1.</sup> Refer to the full text of the Cariboo FS technical report for the assumptions, qualifications and limitations relating to disclosure about the Feasibility Study on the Cariboo Gold Project. Mineral resources include in the measured category, 8 koz Au (47 kt grading 5.06 g/t Au); in Indicated, 1.564 Moz Au (14.635 Mt grading 3.32 g/t Au); in Inferred, 1.712 Moz Au (15.470 Mt grading 3.44 g/t Au). M&I resources are exclusive of mineral reserves.

# CARIBOO FEASIBILITY STUDY AT A GLANCE<sup>1</sup>



## **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 RECOVERED<sup>1</sup>

1.87 MOZ

2.03 Moz Probable Reserves

## **PRODUCTION**

(LOM Avg.)

~164,000 oz/yr

## LOM AISC<sup>2</sup>

US\$968/oz

US\$886/oz (Phase 2)

# NPV5% | IRR

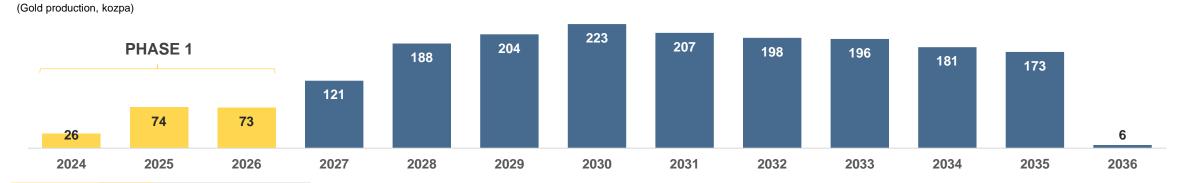
(US\$1,700/oz Au, after-tax)

C\$502 M | 20.7%

## **RESOURCES**<sup>1</sup>

1.57 MOZ M&I 1.71 MOZ Inferred

## SCALABLE PRODUCTION PROFILE WITH POTENTIAL FOR INCREMENTAL GROWTH



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<sup>1.</sup> Refer to the full text of the Cariboo FS technical report for the assumptions, qualifications and limitations relating to disclosure about the Feasibility Study on the Cariboo Gold Project. The Probable mineral reserve consists of 2.031 Moz Au (16.703 Mt grading 3.78 g/t Au). Mineral resources include in the measured category, 8 koz Au (47 kt grading 5.06 g/t Au); in Indicated, 1.564 Moz Au (14.635 Mt grading 3.32 g/t Au); in Inferred, 1.712 Moz Au (15.470 Mt grading 3.44 g/t Au). M&I resources are exclusive of mineral reserves. 2. This is a non-IFRS measure. Refer to "Non-IFRS Financial Measures" on page 3.

# CARIBOO 2023 FEASIBILITY STUDY HIGHLIGHTS<sup>1</sup>



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

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)

O 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

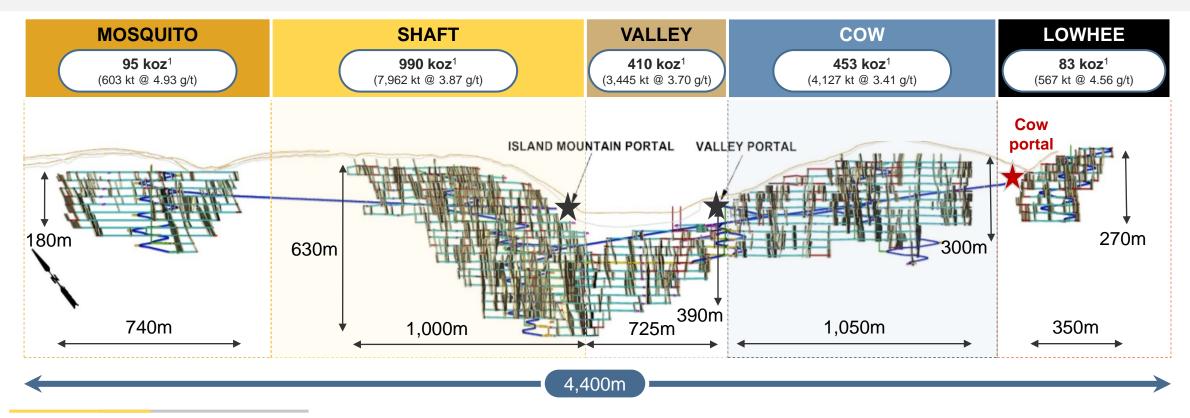
- Average depth of defined mineralization ~350 meters and remains open at depth anomalous gold values at current depth of ~800 meters
- Potential to convert additional inferred resources located adjacent to reserve blocks at minimal incremental developmental cost

# 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

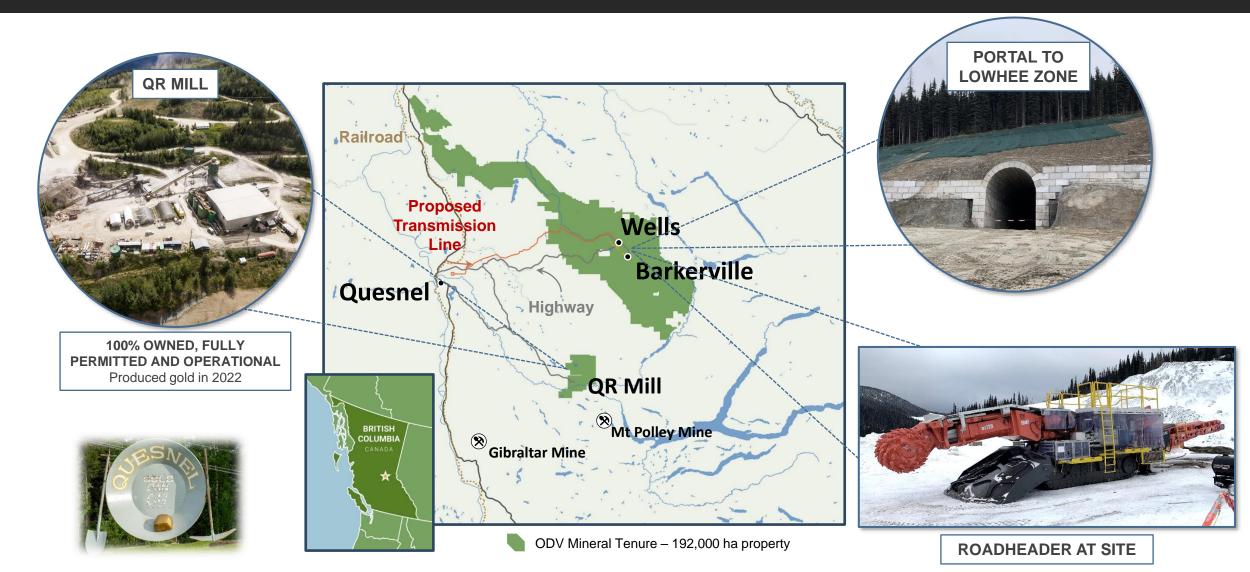


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<sup>1.</sup> Cariboo contained probable mineral reserves, which formed the basis of the Cariboo FS. Refer to the full text of the Cariboo FS technical report for the assumptions, qualifications and limitations relating to disclosure about the Feasibility Study on the Cariboo Gold Project.

# LOCATION, LOCATION, LOCATION ...



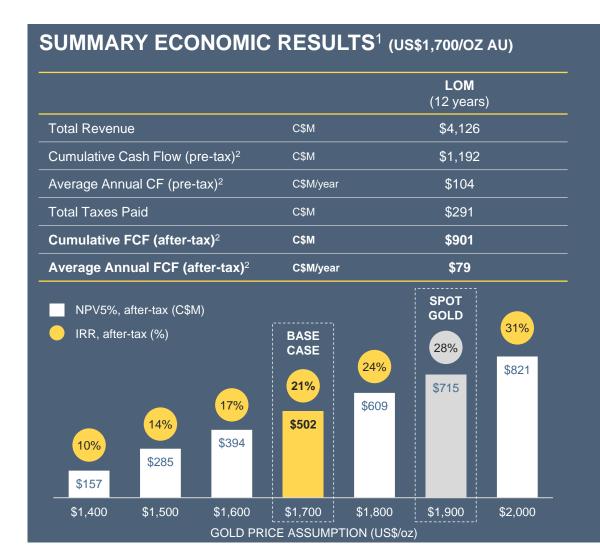


# **CARIBOO 2023 FEASIBILITY STUDY SUMMARY**



## **SUMMARY OPERATING RESULTS<sup>1</sup>**

		<b>Phase 1</b> (2024 – 2026)	<b>Phase 2</b> (2027 – 2036)	<b>LOM</b> (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 <sup>2</sup>	US\$/oz	\$1,149	\$748	\$792
AISC <sup>2</sup>	US\$/oz	\$1,634	\$886	\$968



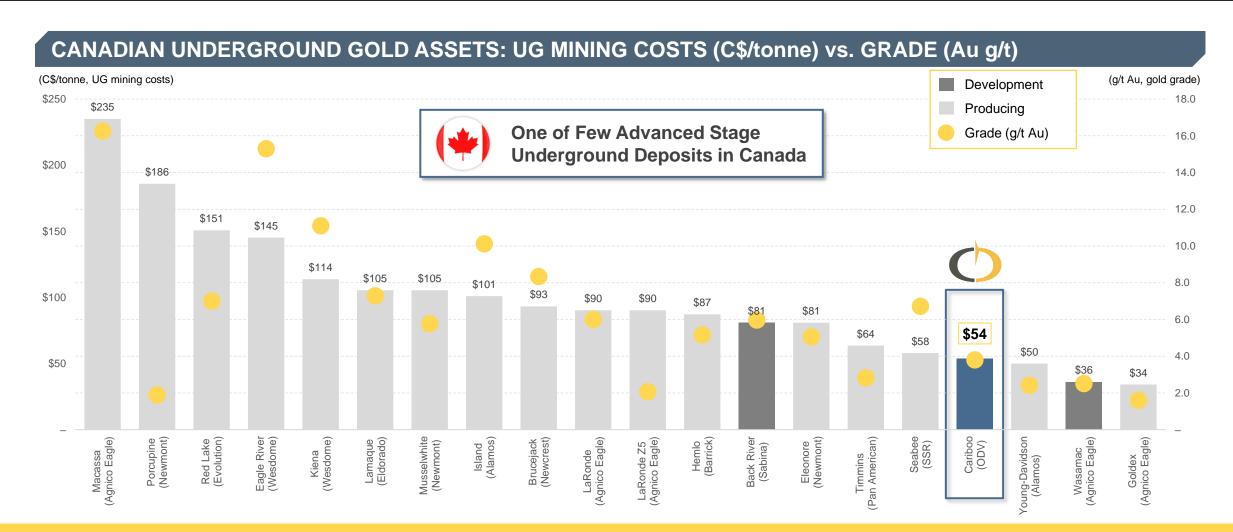
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<sup>1.</sup> Refer to the full text of the Cariboo FS technical report for the assumptions, qualifications and limitations relating to disclosure about the Feasibility Study on the Cariboo Gold Project.

<sup>2.</sup> This is a non-IFRS measure. Refer to "Non-IFRS Financial Measures" on page 3.

# **CARIBOO BENCHMARKING: CANADIAN UNDERGROUND MINES**

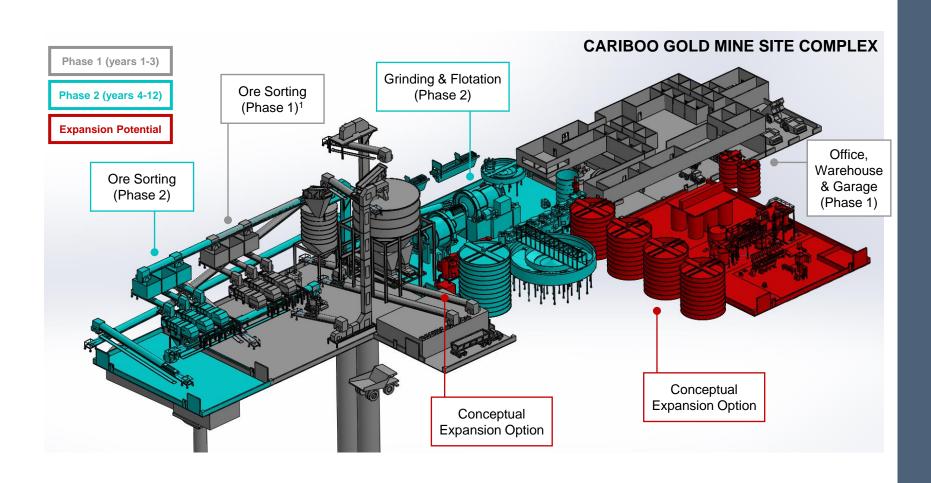




## MAJORITY OF PRODUCING UNDERGROUND MINES IN CANADA OWNED BY MAJORS

# PROCESSING CAPACITY EXPANSION POTENTIAL





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

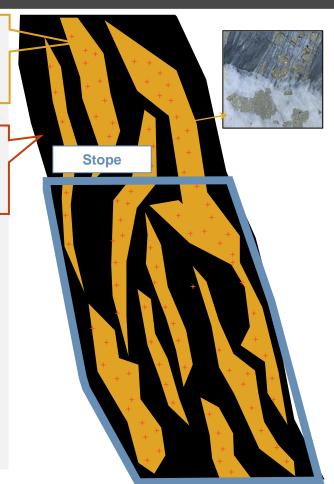
Ore Sorting Separates Gold Rich (11.0 g/t1) Host Rock From Unmineralized Sandstone

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

#### Sandstone

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

- 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 date



**481 VEIN CORRIDORS** 

2 M MINIMUM WIDTH OF VEIN CORRIDORS

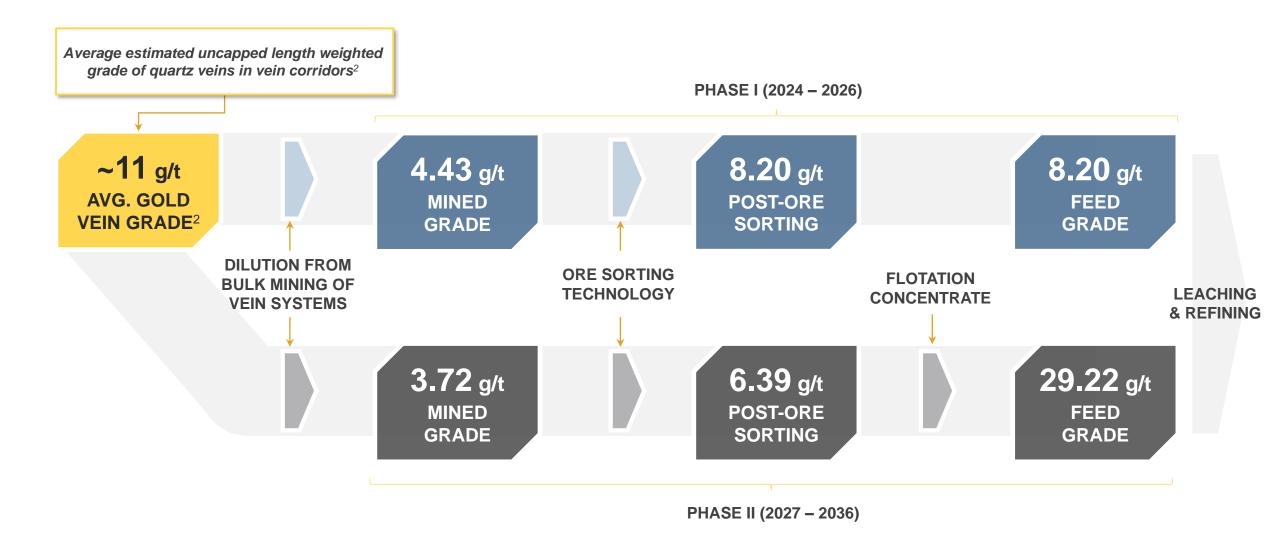
6.7 KM MODELLED STRIKE LENGTH

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 CORRIDORS<sup>1</sup>

# **UP "GRADE" PROCESS**<sup>1</sup>





<sup>1.</sup> Estimates based on LOM average estimated processed grades as defined in the Cariboo FS.

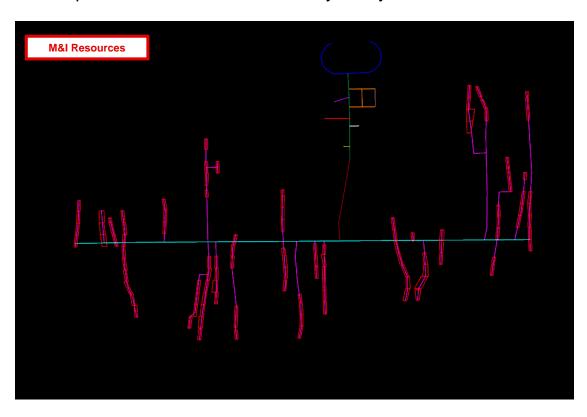
<sup>2.</sup> Average estimated uncapped length weighted grade based upon work completed to date by ODV and verified by ODV QP Maggie Layman. The Cariboo FS does not include references to estimated average uncut gold vein grade.

# CARIBOO UPSIDE POTENTIAL THROUGH RESOURCE CONVERSION



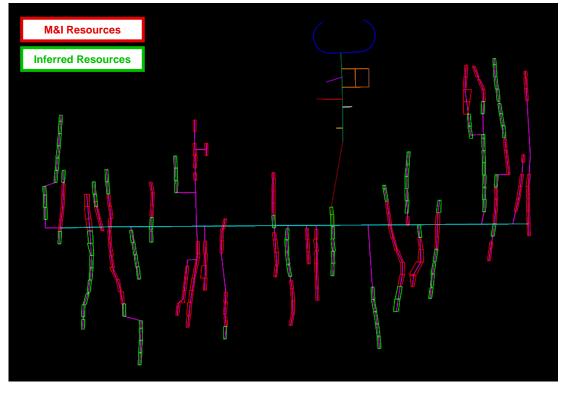
### FEASIBILITY STUDY - M&I RESOURCES ONLY1

 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 RESOURCES<sup>1</sup>

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

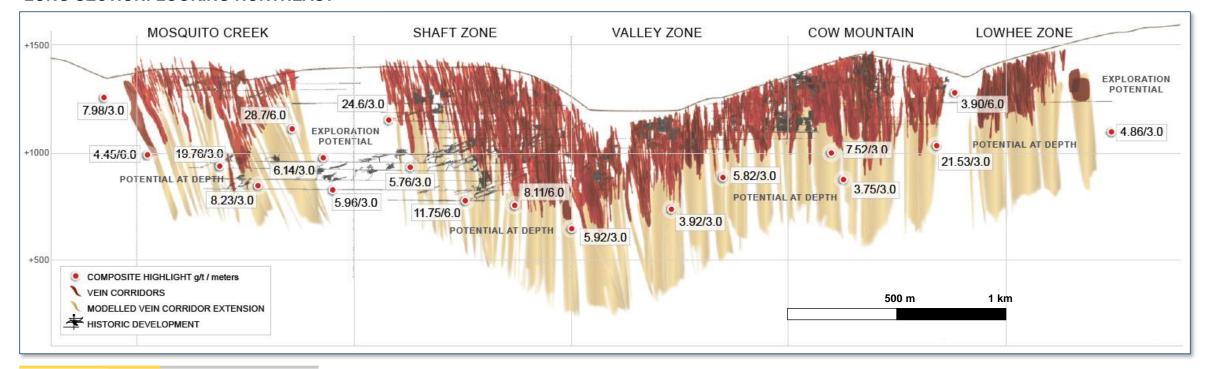


# CARIBOO EXPLORATION POTENTIAL AT DEPTH



- 2.03 Moz Au at 3.8 g/t Au in Probable Reserves<sup>1</sup>
- 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 converted<sup>1</sup>
- >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

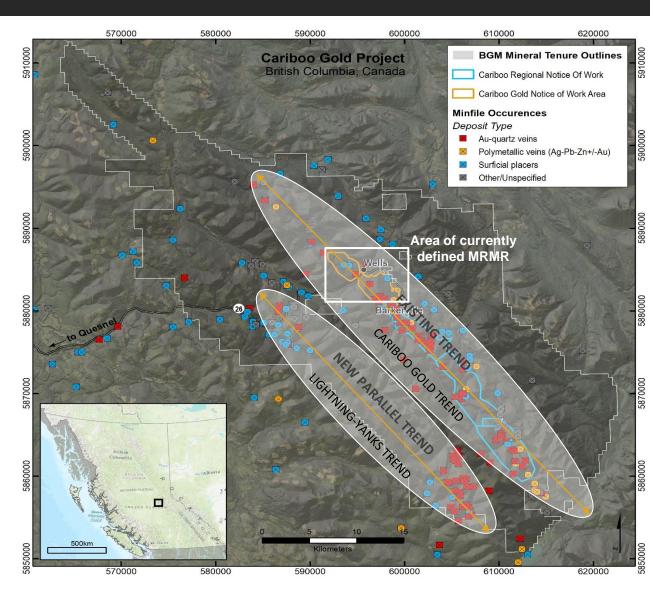
#### LONG SECTION: LOOKING NORTHEAST



# **DEVELOPING A MINING CAMP**



- 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 ~80% of drill holes
- 155,000 ha property with 83 kilometers strike of gold targets
- ~700,000 meters drilled in the last seven years
- Strong support from the BC government
- Year-round exploration and access, infrastructure and work force





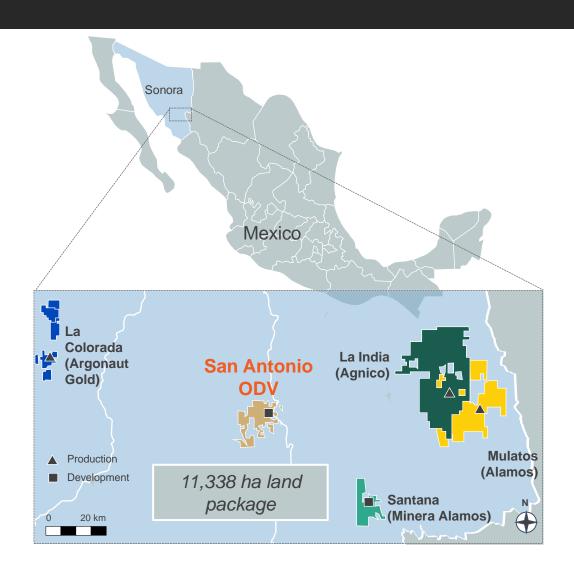


# **SAN ANTONIO PROJECT**

Sonora, Mexico 100% ODV ownership

# **SAN ANTONIO: PROJECT OVERVIEW**





## **ASSET HIGHLIGHTS**

- Located 160 km from airport and towns of Hermosillo and Obregon in mining-friendly Sonora
- Constructed a heap leach pad and a carbon in column plant at the end of 2021 to process stockpiled mineralized material
  - 1.1 Mt stockpile grading 0.58 g/t Au placed on the leach pad
  - 11,863 ounces sold as at December 31, 2022
- Gold mineralization identified over 10 km strike
- Permitted for mining (permit amendment for gold in progress)
- Mine infrastructure and water on site
- 27,000 meters drilled in 2021

## MINERAL RESOURCES<sup>1</sup>

MATERIAL		INDICATED		INFERRED			
	Tonnes	Grade	Contained	Tonnes	Grade	Contained	
	(Mt)	(g/t Au)	(koz Au)	(Mt)	(g/t Au)	(koz Au)	
Oxide	2.7	0.89	77	4.6	0.74	111	
Transitional	1.8	1.02	59	2.1	0.9	61	
Sulfide	10.4	1.31	441	9.8	1.18	371	
TOTAL	14.9	1.20	577	16.5	1.02	543	

# **SAN ANTONIO GOLD PROJECT**

OSISKO DEVELOPMENT

Stockpile placed on newly constructed heap leach pad









# **APPENDIX**

# **WORLD-CLASS LEADERSHIP**



#### **SEAN ROOSEN, CEO**

- Founding member of Osisko Mining Corporation (2003-2014)
- Responsible for developing the strategic plan for the discovery, financing and development of the Canadian Malartic Mine
- Led the efforts for the maximization of shareholders' value in the sale of Osisko Mining Corporation, that resulted in the creation of Osisko Gold Royalties
- Former Chairman of Osisko Mining Corp. partner in the development of Windfall

#### **CHRIS LODDER, PRESIDENT**

- 30 years' experience working on and managing Greenfields exploration, Brownfields exploration, and mine development
- Led teams responsible for discoveries of 34+ Moz of gold
- President and CEO of Barkerville Gold Mines until its acquisition by Osisko Gold Royalties in 2019.

#### LUC LESSARD, COO, P.ENG.

- 30+ years of experience designing, building and operating mines
- Previously COO of the Canadian Malartic Partnership
- Responsible for the design, construction and commissioning of the world class Canadian Malartic gold mine
- Worked on 11 open pit and underground mine builds prior to Osisko

#### ALEXANDER DANN, CFO, CPA, CA

- 25 years of experience leading finance operations and strategic planning for companies in the mining and manufacturing sectors
- He obtained his Chartered Accountant designation in 1995, and holds a Bachelor degree in Business Administration from L'Universite Laval in Quebec

# FRANÇOIS VÉZINA, Senior VP Project development, TECHNICAL services and environment, ing., P.ENG., MBA

- 20 years' experience in OP and UG operations in Canada, Mexico and Finland
- Responsible for overseeing the completion of the feasibility studies of LaRonde II, Pinos Altos and Kittilä
- Participated in the construction and commissioning of Pinos Altos and Kittilä and the construction of the Canadian Malartic Mine

#### MAGGIE LAYMAN, VP EXPLORATION, P.GEO

- 18 years of experience in greenfield and brownfield exploration
- Previously Barkerville's Exploration Manager

#### LAURENCE FARMER, GENERAL COUNSEL & VP STRATEGIC DEVELOPMENT

- Over 10 years of experience in investment banking & corporate law with RBC Capital Markets and Norton Rose Fulbright LLP
- Previously Senior Counsel of Osisko Gold Royalties

#### PHILIP RABENOK, DIRECTOR, INVESTOR RELATIONS

- Over 10 years of transactional, capital markets, and corporate experience in the resources sector, most recently in an Investor Relations role at IAMGOLD Corp.
- Previously worked in mining investment banking and equity research at Société Générale and Scotiabank

### CHRIS PHARNESS, VP SUSTAINABILITY

- 25 years of environmental and resource management experience in British Columbia
- Involved with the Cariboo project since 2013 developing long-term personal and professional relationships with indigenous and local communities and regulatory agencies

#### **BOARD OF DIRECTORS**

- Sean Roosen –
   Executive Chair
- Charles Page
- Michèle McCarthy
- DuncanMiddlemiss
- Éric Tremblay
- Marina Katusa
- David Danziger

# **BEST IN CLASS ESG**



Committed to responsible mining practices, strong relationships, and mutual support with all partners OSISKO DEVELOPMENT

OSISKO DEVELOPMENT

## **ENVIRONMENT**

- Osisko Development constructed two water treatment plants to treat contact water and effluent
- Reclamation underway for the Mosquito Creek legacy tailings disposal
- Collaboration agreement sign with BC Government for the reclamation of the Jack of Club lake tailings disposal area
- Open and transparent dialogue with the Ministry of Energy, Mines and Low Carbon Innovation, and Ministry of Environment and Climate Change Strategy

### **INDIGENOUS NATIONS**



- Participation agreement sign with the Williams Lake First Nation in July 2022
- Positive relationship with Xatsull First Nation Indian Band since 2016

## **PERMITTING**

- Positive permitting climate in central BC given dearth of highquality jobs from logging industry slowdown
- Completed the Application Review process in January 2022
- On track for completing the Environmental Assessment Certificate process in Q3 2023
- Anticipating receipt of final permits by Q1 2024

## **COMMUNITY**



- Actively involved in the Wells community
- Provided funding to local organizations in support of various initiatives, including: Wells Community Foundation; Island Mountain Arts; Wells and Area Community Association and others
- Involved in the various activities in the Barkerville Historic Town (initiated the collection of funds in support of the development of an underground mining exhibit)

NYSE: ODV | TSXV: ODV

# CARIBOO MINERAL RESERVES & RESOURCES



(Measured and Indicated Resources are exclusive of Reserves)

MINERAL RESOURCES	M	EASURED		II	IDICATED		MEASUR	ED & INDIC	ATED	11	NFERRED	
Deposit	Tonnes (000's)	<b>Grade</b> (g/t)	Ounces (000's)	Tonnes (000's)	<b>Grade</b> (g/t)	Ounces (000's)	<b>Tonnes</b> (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	<b>Grade</b> (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	PROBABLE RESERVES			
Deposit	<b>Tonnes</b> (000's)	<b>Grade</b> (g/t)	Ounces (000's)	
Cow	4,127	3.41	453	
Valley	3,445	3.70	410	
Shaft	7,962	3.87	990	
Mosquito	603	4.93	95	
Lowhee	567	4.56	83	
TOTAL RESERVES	16,703	3.78	2,031	

#### MINERAL RESERVES

- Totals may not add up due to rounding.
- 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.
- 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.

# MINERAL RESOURCE ESTIMATE – SAN ANTONIO PROJECT<sup>1</sup>



DEPOSIT	CATEGORY	TONNES	GRADE (g/t)		CONTAINED METAL	
		(Mt)	SILVER	GOLD	SILVER (Moz)	GOLD (koz)
CALIFORNIA	Indicated	3.9	2.5	1.22	0.31	153
	Inferred	1.6	3.3	1.10	0.17	58
GOLFO DE ORO	Indicated	5.7	2.5	1.44	0.46	262
	Inferred	6.4	2.5	1.24	0.52	254
HIGH LIFE	Indicated	_	_	_	_	-
	Inferred	0.8	4.9	0.83	0.13	22
SAPUCHI	Indicated	5.4	3.5	0.93	0.61	162
	Inferred	7.6	3.8	0.85	0.94	208
CALVARIO	Indicated	_	_	_	_	-
	Inferred	0.1	0.0	0.53	-	2
TOTAL	Indicated	14.9	2.9	1.20	1.37	576
	Inferred	16.6	3.3	1.02	1.76	544

# TRIXIE MINERAL RESOURCES ESTIMATE – January 10, 2023



DOMAIN	CATEGORY	TONNES	GRADE (AU G/T)	CONTAINED GOLD (OZ)	GRADE (AG G/T)	CONTAINED SILVER (OZ)
T1	Measured	_	_	_	-	-
	Indicated	34,470	16.39	18,159	30.55	33,856
	M+I	34,470	16.39	18,159	30.55	33,856
	Inferred	134,665	16.59	71,832	38.51	166,716
T2	Measured	10,938	190.61	67,029	195.53	68,757
	Indicated	6,705	138.30	29,815	107.95	23,272
	M+I	17,643	170.73	96,844	162.24	92,029
	Inferred	25,181	101.37	82,070	146.32	118,457
Т4	Measured	_	_	-	-	-
	Indicated	178,825	16.64	95,667	43.65	250,941
	M+I	178,825	16.64	95,667	43.65	250,941
	Inferred	128,038	9.10	37,460	21.64	89,063
75-85	Measured	_	_	-	-	-
	Indicated	4,870	14.10	2,207	51.77	8,106
	M+I	4,870	14.10	2,207	51.77	8,106
	Inferred	96,962	16.58	51,691	49.89	155,530
TOTAL	Measured	10,938	190.61	67,029	195.53	68,757
	Indicated	224,870	20.17	145,849	43.73	316,175
	M+I	235,808	28.08	212,878	50.77	384,932
	Inferred	384,845	19.64	243,053	42.82	529,766

#### **NOTES**

- 1. Effective date of the Trixie MRE is January 10, 2023.
- Each of Mr. William Lewis P.Geo, of Micon International Limited and Alan S J San Martin, AusIMM(CP), of Micon International Limited (i) has reviewed and validated the Trixie MRE, (ii) is considered to be independent of the Company for purposes of Section 1.5 of NI 43-101, and (iii) is a "qualified person" for purposes of NI 43-101.
- 3. The Trixie MRE is comprised of five zones within the greater Trixie area: T1, T2, T3, T4 and 75-85. No blocks in the T3 meet the cut off grade used for the Trixie MRE.
- 4. The Trixie MRE disclosed in this presentation were estimated using the CIM standards on mineral resources and reserves definitions, and guidelines prepared by the CIM standing committee on reserve definitions and adopted by the CIM council.
- 5. Mineral Resources are reported when they are within potentially mineable shapes derived from a stope optimizer algorithm, assuming an underground longhole stoping mining method with stopes of 6.1 m x 6.1 m x minimum 1.5 m dimensions.
- 6. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
- Geologic modelling was completed by Osisko Development senior production geologist Courtney Kurtz, P.G. of Utah, USA
  using Leapfrog Geo software. The Trixie MRE was completed by Osisko Development Chief Resource Geologist, Daniel
  Downton, P.Geo. using Datamine Studio RM Pro 1.12. The Trixie MRE was reviewed and verified by William Lewis and Alan
  San Martin of Micon International Ltd.

- 8. The estimate is reported for an underground mining scenario and with USD assumptions. The cut-off grade of 4.85 g/t Au was calculated using a gold price of US\$1,750 per ounce, a CAD:USD exchange rate of 1.30; total mining, processing and G&A costs of US\$226.62 per imperial ton a combined royalty of 4.5% and an average metallurgical recovery of 95%.
- Average bulk density values in the mineralized domains were assigned to the T1 (2.616 T/m3), T2 (2.955 T/m3), T3 (2.638 T/m3), T4 (2.621 T/m3), and 75-85 (2.617 T/m3) domains.
- 10. Inverse Distance Squared interpolation method was used with a parent block size of 1.2 m x 1.2 m x 1.8 m.
- 11. The results of the Trixie MRE are presented in-situ. Calculations used metric units (metres, tonnes, g/t). The number of tonnes is rounded to the nearest thousand. Any discrepancies in the totals are due to rounding effects.
- 12. Neither the Company nor Micon International Limited is aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issue that could materially affect the mineral resource estimate other than disclosed herein.



# OSISKO DEVELOPMENT

PHILIP RABENOK, DIRECTOR, INVESTOR RELATIONS

prabenok@osiskodev.com | +1 (437) 423 3644