OSISKO DEVELOPMENT

REVIVING HISTORICAL MINING CAMPS IN NORTH AMERICA

INVESTOR PRESENTATION – MARCH 2024



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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, long-life and profitable gold mine (or any of those things); capital cost estimates; operating cost estimates; operating cost estimates; perating estimate; perating estimate; perating estimate; perating estimate; perating estimate; perating estima

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 relating to the 2024 Trixie MRE; the ability of exploration activities (including drill results) to accurately predict mineralization; the ability or soluce 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 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 and regulations, and regulations and regulations and regulations and regulations 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 and forward-looking statements 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 and future events could differ materially from those anticipated in such statements. Investors are cautioned that forward-looking statements

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, 2022 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+ (<u>www.sedarplus.ca</u>) and EDGAR (<u>www.sec.gov</u>) under Osisko Development's issuer profile. The forward-looking statements in this presentation reflect management's expectations 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 15, 2024. 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 of the Company date January 3, 2022 and the Cariboo FS (as defined herein), which are available on SEDAR+ (www.sec.agov) under Osisko Development's issuer profile, and on Osisko Development's corporate website (<u>https://osiskodev.com/cariboo-gold-project/</u>).

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 resources is not comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements of the SEC.



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 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. 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 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 or 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 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 mineral resources will lead to mineral reserves that can be mineral resources will lead to mineral reserves that can be mineral resources will lead to mineral reserves that can be mineral resources will lead to mineral reserves that can be mineral resources and function.

CAUTION REGARDING TEST MINING WITHOUT FEASIBILITY STUDY

The Company cautions that its prior decision to commence small-scale underground mining activities and batch vat leaching at the Trixie test mine was made without the benefit of a feasibility study, or reported mineral resources or mineral reserves, demonstrating economic and technical viability, and, as a result there may be increased uncertainty of achieving any particular level of recovery of material or the cost of such recovery. The Company cautions that historically, such projects have a much higher risk of economic and technical failure. Small scale test-mining at Trixie was suspended in December 2022 and resumed in the second quarter of 2023. Even with the resumption of small scale test-mining at Trixie, the production will continue as anticipated or at all or that anticipated production costs will be achieved. The failure to continue production may have a material adverse impact on the Company's ability to generate revenue and cash flow to fund operations. Failure to achieve the anticipated production costs may have a material profitability. In continuing current operations at Trixie, the Company has not based its decision to continue such operations on a feasibility study, or reported mineral resources or mineral resources or mineral reserves demonstrating economic and technical viability.

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 as a current resource as a current resource 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. Please see the full text of the Cariboo FS for assumptions, qualifications and limitations relating to the disclosure about the Feasibility Study on the Cariboo Gold Project. An electronic copy of the Cariboo FS is available on SEDAR+ (www.sedarplus.ca) and EDGAR (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. Therefore, the Cariboo PEA") as the current technical report in respect of the Cariboo Project for purposes of NI 43-101. Therefore, the Cariboo PEA") as the current technical report in respect of the Cariboo Project for purposes of NI 43-101. Therefore, the Cariboo PEA") as the current technical report in respect of the Cariboo Project for purposes of NI 43-101.

On March 15, 2024, Osisko Development announced by news release a mineral resource estimate for Trixie (the "**2024 Trixie MRE**"), within the Company's wider Tintic project, located in the historic East Tintic Mining District in Central Utah, U.S.A. The Company intends to file a technical report (the "**Trixie MRE Report**") in respect of the 2024 Trixie MRE, in accordance with NI 43-101 on SEDAR+ (www.sec.gov) under Osisko Development's issuer profile within 45 days of the date of the news release announcing the 2024 Trixie MRE. Please see the full text of the 2024 Trixie MRE news release for assumptions, qualifications and limitations relating to the 2024 Trixie MRE. The 2024 Trixie MRE supersedes the 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 "**2023 Trixie MRE**") prepared, reviewed, and approved by William J. Lewis, P. Geo, Ing. Alan J. San Martin, MAusIMM (CP) and Richard Gowans, P. Eng.

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"). 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 is corporate website (https://osiskodev.com/san-antonio/Project, Antonio Project) under Osisko Development's corporate website (https://osiskodev.com/san-antonio/).

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"), troy ounces ("oz"), grams per tonne ("g/t"), gold ("Au"), silver ("Ag"), copper ("Cu"), lead ("Pb"), zinc ("Zn").

INVESTMENT HIGHLIGHTS



High-Quality Advanced Brownfield Projects in Tier 1 Jurisdictions

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

Advancing the Cariboo Gold Project toward Shovel Ready Status in Canada

Feasibility production ~164 kozpa (peak >220 kozpa) over 12-year LOM; C\$502M NPV_{5%} and 20.7% IRR; 2.0 Moz Reserves¹

Developing the Historic Tintic Project in Utah, USA

Fast-tracking Trixie high-grade gold discovery while advancing prospective Cu-Au-Mo porphyry, epithermal and CRD exploration targets

World-class Team Led by CEO Sean Roosen with Strong Focus on Sustainable Mining

Successfully discovered, developed and operated Canadian Malartic, one of the world's largest gold mines Large, Highly-Prospective Exploration Properties in North America

Land package at Cariboo Gold Project alone exceeds the entire footprint of the prolific Val d'Or Mining Camp

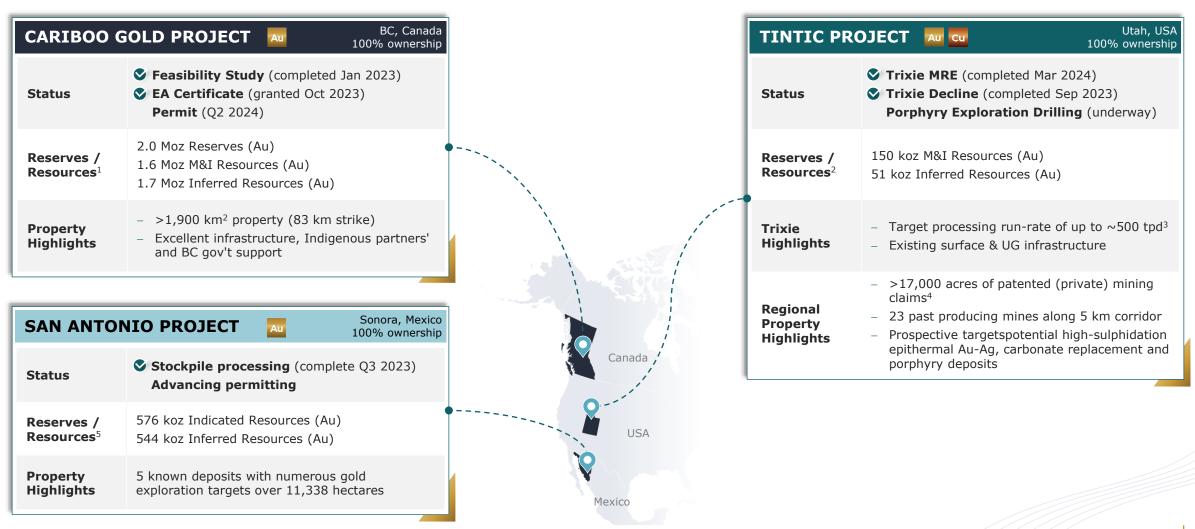
Building Toward Becoming a Premier North American Mid-tier Gold Mining Company

1. 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. Reserves consist of Probable Mineral Reserve of 2.031 Moz Au (16.703 Mt grading 3.78 g/t). Project economics base case gold price assumption of US\$1,700/oz.

MINING FRIENDLY JURISDICTIONS



Brownfield properties with existing accessible infrastructure and meaningful exploration upside



1. Refer to the full text of the Cariboo F5 technical report for the assumptions, qualifications and limitations relating to disclosure about the Feasibility Study on the Cariboo Gold Project. Mileral reserves 1.031 Moz Au (16.703 ME yading 3.32 g/t Au), in Inferred reserves include in the measured category, 8 koz Au (47 kt grading 3.06 g/t Au); in Life Ado Zau (14.635 Mt grading 3.32 g/t Au), in Inferred 1.5.470 Mt grading 3.32 g/t Au). M&L resources and with the sources and with the sources and with the sources and the source about the feasibility Study on the Cariboo Gold Project. Mileral reserves 2.031 Moz Au (16.703 ME was diacabed mineral resources include in the 2024 (DOV Announces Mineral resource Update For The Trixie Deposit, Tintic Project). M&L resources consist of: (i) measured mineral resources (120 kt grading 27.36 g/t Au) and 51.73 g/t Ag); and (ii) indicated mineral resources (125 kt grading 1.1.7 g/t As). Inferred mineral resources for the Trixie Deposit, Tintic Project). M&L resources of a sources of overwhelmingly leased patented mining claims. 4. Refer to the full text of San Antonio Gold Project. And the San Antonio Technical Report. Indicated resources 54 koz (16.5 Mt grading 1.02 g/t Au).

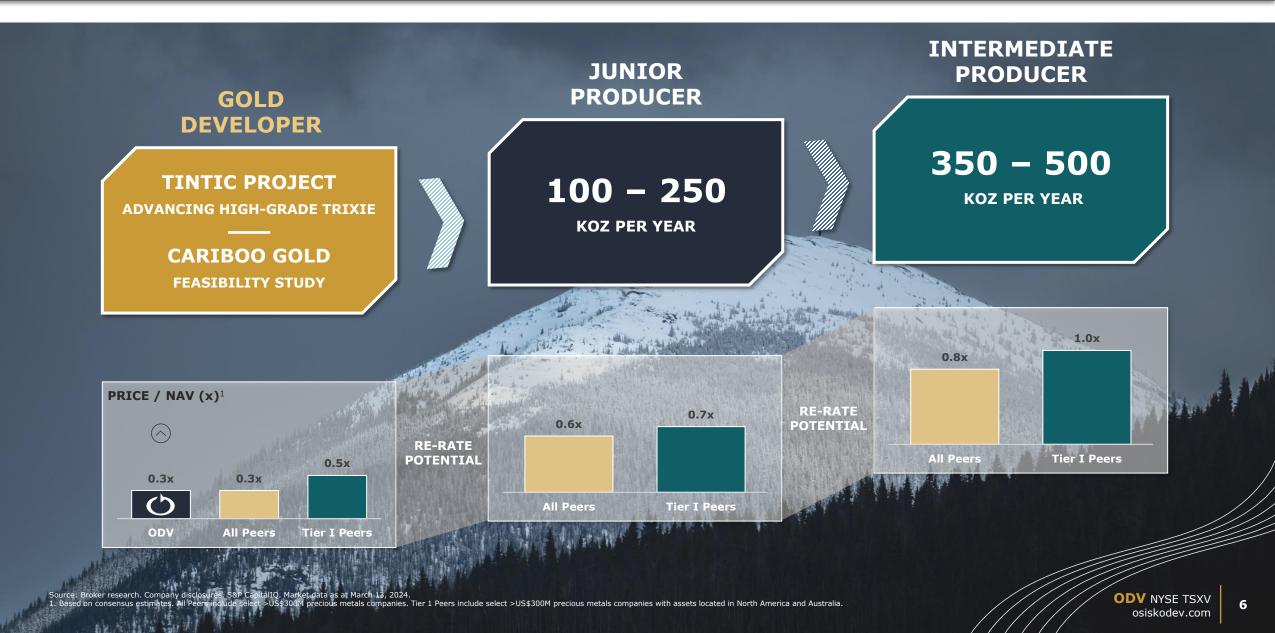
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EXECUTING ON VISION & STRATEGY







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7

Osisko Development Corp. ^{1,2}		
Current Share Price (closing price on March 13, 2024)	C\$3.39	/share
Basic Shares Outstanding	84.1	million
Options, DSUs, and RSUs	4.1	million
Warrants ³	27.0	million
Fully Diluted Shares Outstanding	115.2	million
Market Capitalization – Basic	C\$285.2	million
Cash & Cash Equivalents	C\$71.5	million
Investment Holdings (marketable securities)	C\$28.4	million
Total Debt ⁴	C\$19.7	million
Enterprise Value – Basic	C\$205.0	million

0.4x 0.3x

SKE

SGD

0.3x 0.3x 0.3x

LGD

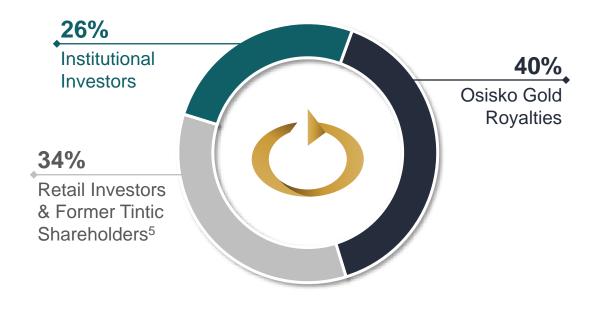
≡o

0.3x 0.3x

SEA

BRVO

Shareholder Ownership



Analyst Coverage



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

OSK

0.6x

0.4x

PRB

0.8x

Mid-tier Prod. 0.7x

Junior Prod. 0.6x

NFG

1. Market data, including share price and share count, as at March 13, 2024. 2. Financial information presented as at Sep 30, 2023. 3. 33.9M warrants outstanding exercisable into 24M equivalent shares + 7.8M warrants issued as part of the March 2023 public offering. 4. Includes long-term debt and lease liabilities pertaining to equipment financing. 5. Refer to ODV news release dated May 30, 2022 (ODV Completes Acquisition of Tintic Consolidated Metals, Finalizes Binding Stream Terms And Satisfies Escrow Release Condition For Brokered Subscription Receipt Financing).

0.2x

ГG

0.2x

ITR

(PNAV, x)

0.2x

H

Relative Valuation: Price / NAV

RYM

0.4x 0.4x 0.4x

PPTA

RGD



CARIBOO GOLD PROJECT

British Columbia, Canada 100% Ownership





CARIBOO GOLD PROJECT: ASSET SNAPSHOT

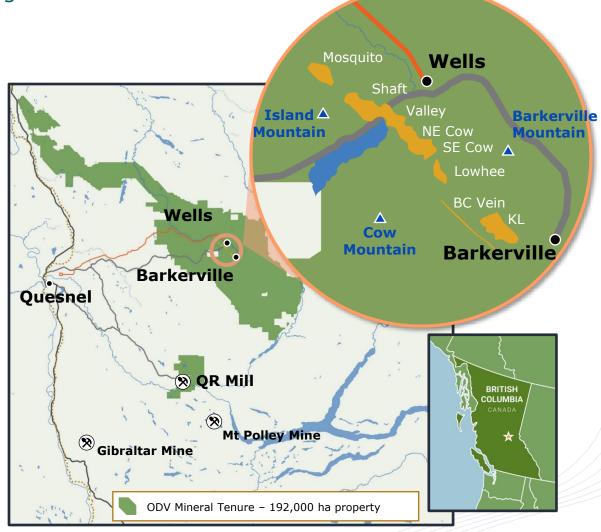


Developing a mining camp in the under-explored Cariboo gold belt

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

- 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 NPV_{5%} and production up to 223 koz/yr of gold
- Brownfield site with year-round access, infrastructure and work force, and strong support from the BC government and Indigenous partners
- **Upcoming catalysts:** EA Certificate (granted) **S**; Permits (Q2 2024)

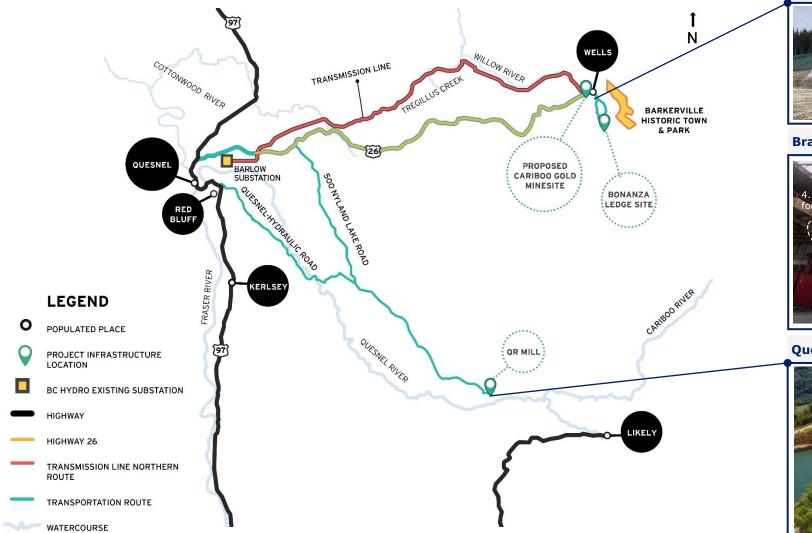
Reserves & Resources ¹								
Classification	Tonnes (000's)	Gold Grade (g/t)	Contained Gold (000's oz)					
Probable reserves	16,703	3.78	2,031					
Measured resources	47	5.06	8					
Indicated resources	14,635	3.32	1,564					
Measured & indicated	14,682	3.33	1,571					
Inferred resources	15,470	3.44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



1. 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.

EXCELLENT INFRASTRUCTURE, ACCESSIBLE PROJECT LOCATION

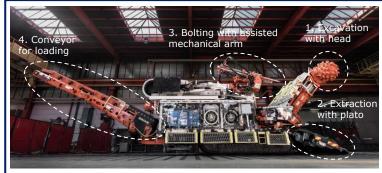




Cow Portal to Lowhee Zone



Brand New Roadheader



Quesnel River Mine (QR Mill) Site



100% owned, fully permitted and operational produced gold in 2022

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Significant progress made in de-risking the project through the permitting process



CARIBOO FEASIBILITY STUDY AT A GLANCE¹

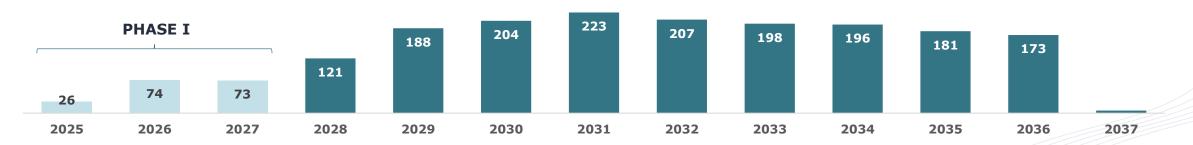






Scalable Production Profile with Potential for Incremental Growth

(Gold production, kozpa)

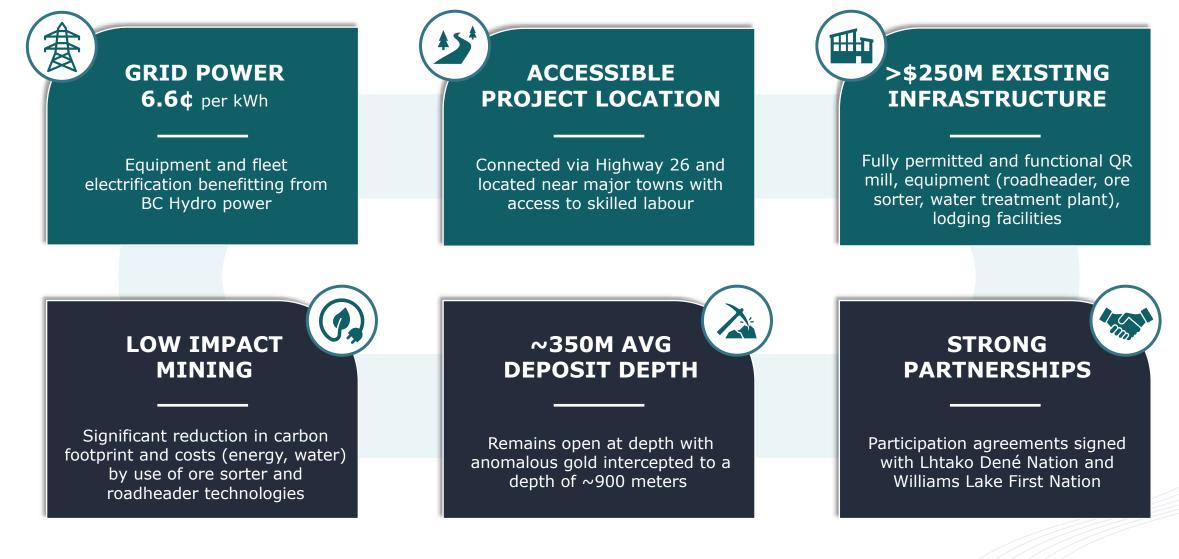


1. Refer to the full text of the Cariboo FS technical report for the assumptions, qualifications and limitations relating to disclosure about the Feasibility Study on the Cariboo Gold Project. The Probable mineral reserve consists of 2.031 Moz Au (16.703 Mt grading 3.78 g/t Au). Mineral resources include 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. Life-of-mine (LOM) average. 3. This is a non-IFRS measure. Refer to "Non-IFRS Financial Measures" on page 3.

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CARIBOO IS A HIGH-QUALITY PROJECT IN A TIER 1 JURISDICTION



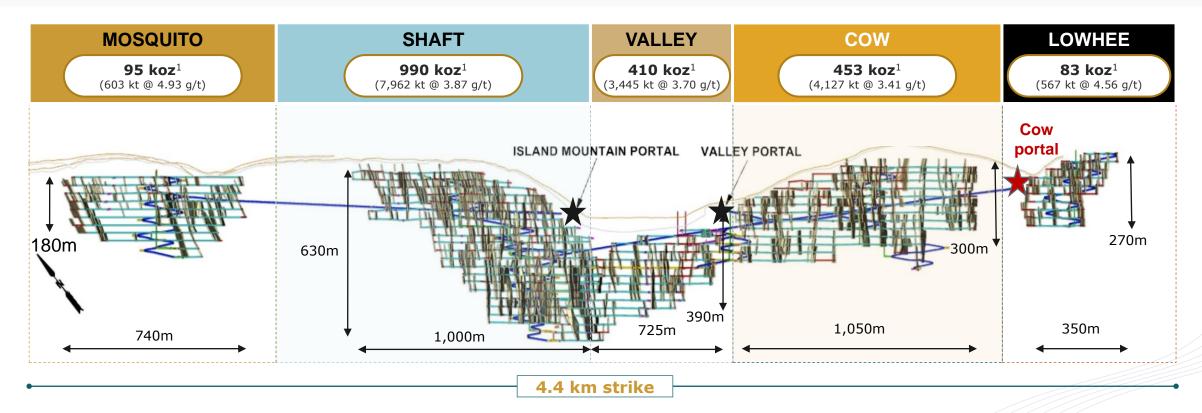


MINE DESIGN SUMMARY



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



Phase 2

(2028 - 2037)

15.2

4,900

3.72

91.8%

1,663

194

\$96

\$451

\$332

\$748

\$886

Phase 1

(2025 - 2027)

1.5

1,500

4.43

93.6%

205

73

\$170

\$137

\$134

\$1,149

\$1,634

LOM

(12 years)

16.7

4,056

3.78

92.0%

1,869

164

\$103

\$588

\$467

\$792

\$968

Summary Operating Metrics¹

Mt

tpd

g/t Au

%

koz

C\$/t

mined

C\$M

C\$M

US\$/oz

US\$/oz

Ore Mined

Throughput

Average Grade

Average Recovery

Gold Production

Operating Costs

Sustaining Capex

Total Cash Costs²

AISC²

Initial / Expansion Capex

Avg. Gold Production koz/yr

Feasibility Study



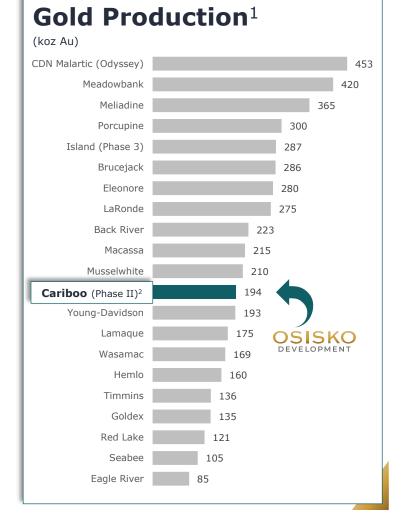
SUMMARY ECONOMIC RESULTS¹ (US\$1,700/oz Au)

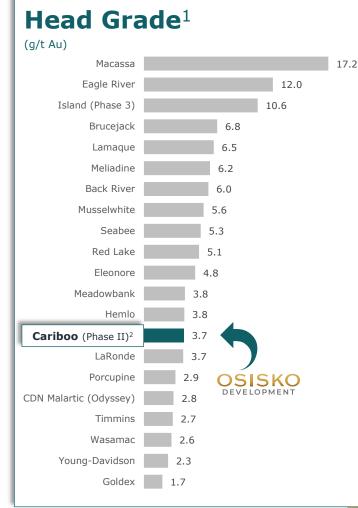
		LOM (12 year	·s)
Total Revenue	C\$M	\$4,126	5
Cumulative Cash Flow (pre-tax) ²	C\$M	\$1,192	2
Average Annual CF (pre-tax) ²	C\$M/year	\$104	
Total Taxes Paid	C\$M	\$291	
Cumulative FCF (after-tax) ²	C\$M	\$901	
Average Annual FCF (after-tax) ²	² C\$M/year	\$79	
			SPOT
 NPV5%, after-tax (C\$M) IRR, after-tax (%) 1RR, after-tax (%) 17% 14% \$285 \$157 	BASE CASE 21% \$502	24% \$715 \$609	SPOT GOLD ³ 31% \$821

1. 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 2. This is a non-IFRS measure. Refer to "Non-IFRS Financial Measures" on page 3. 3. Spot gold of \$2,035/oz as at February 8, 2024.



Cariboo compares favourably relative to existing underground gold operations and projects in Canada





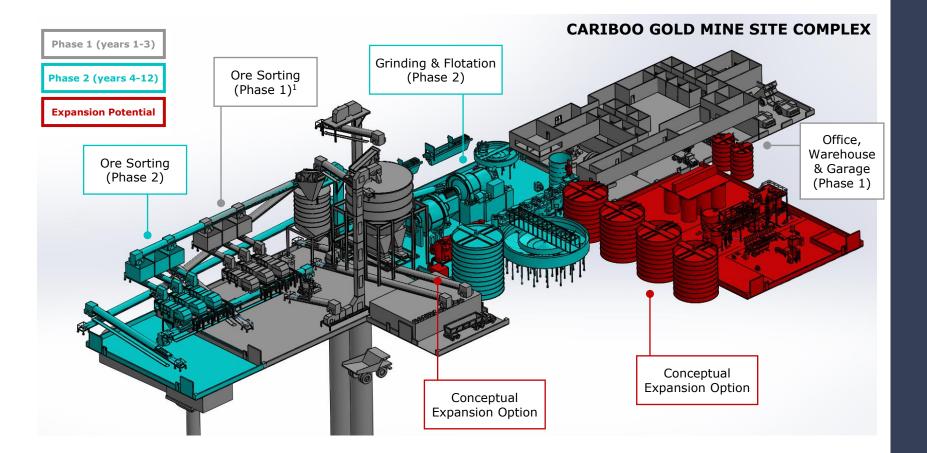


Source: Company disclosures. Gold production ("prod"); Head Grade ("HG"); All-in sustaining costs ("AISC"). 1. Based on the midpoint of 2023 Company guidance: Eagle River (prod/HG), <u>Seabee</u> (prod/HG), <u>Seabee</u> (prod/HG), <u>Seabee</u> (prod/HG), <u>Seabee</u> (prod/HG), <u>Musselwhite</u> (prod), <u>Macassa</u> (prod), <u>LaRonde</u> (prod), <u>Heliadine</u> (prod), <u>Meliadine</u> (HG/AISC), <u>Meliadine</u> (Pacisibility Study Study): <u>Wassed</u> (Meliadine), add (Meliadi

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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

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. 1. Ore sorting activities during Phase 1 will initially be conducted at the Bonanza Ledge Site, before moving to Mine Site Complex in Phase 2.

NATURE OF MINERALIZATION FAVORABLE TO ORE SORTING

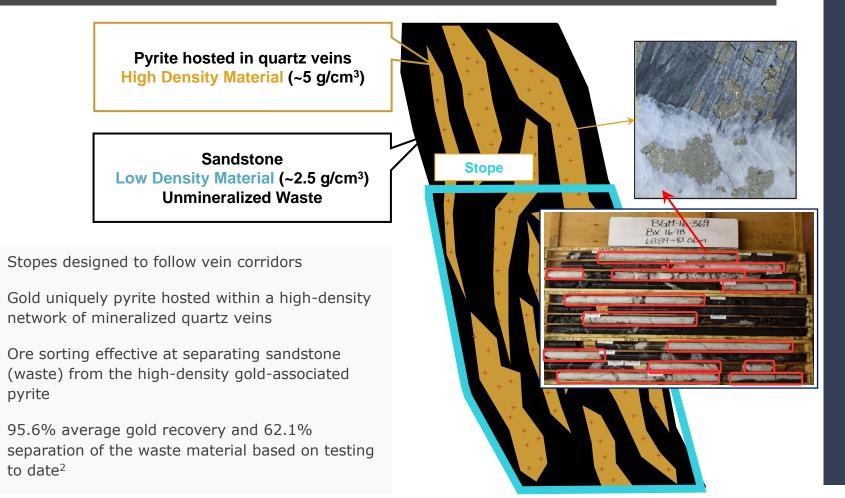


Metallurgical testing to date indicates that Cariboo mineralization is well suited for ore sorting

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

pyrite

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

1. 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. 2. 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

ORE SORTER TECHNOLOGY: CARIBOO FEASIBILITY STUDY



View the ore sorter technology

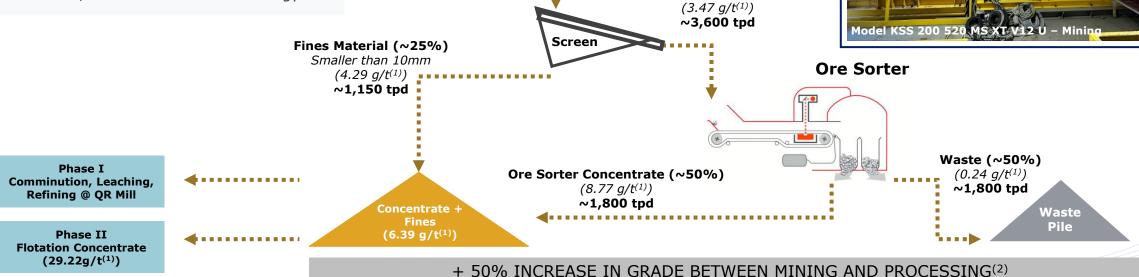
Ore sorting provides significant benefits at low opex of ~\$1.00 per tonne feed

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







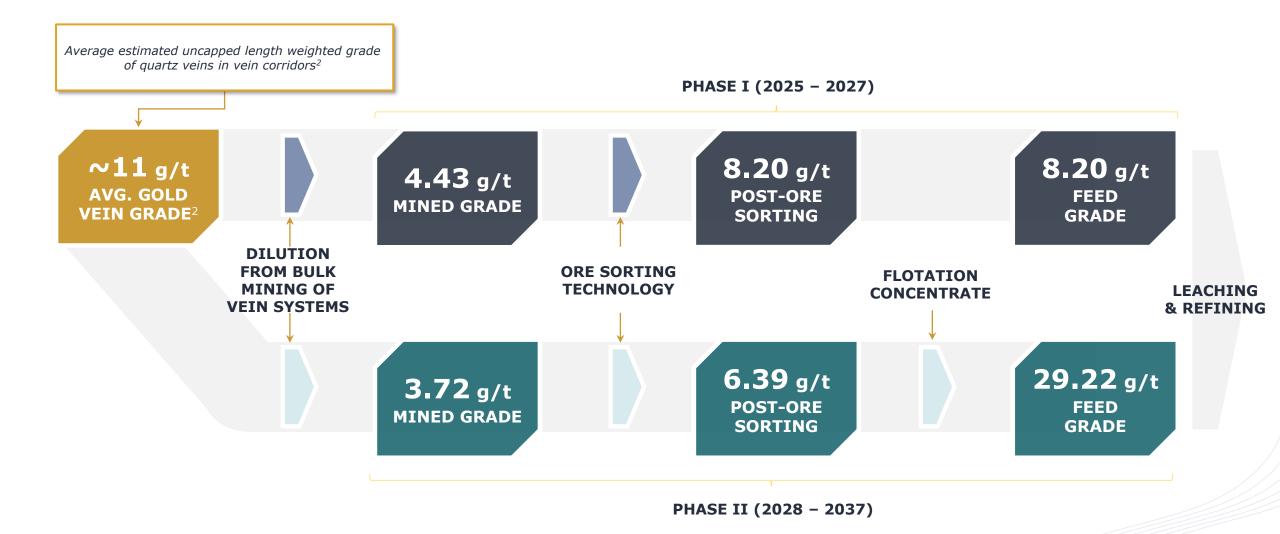
Crushina

Coarse Material (~75%)

10 to 30mm

1. Cariboo FS average grade for Phase 2 at 4,900 tpd from 2027 to 2035. 2. Based on testing conducted to date. 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 FS defined in the Cariboo FS technical report for the assumptions, qualifications and limitations relating to disclosure about the Feasibility Study on the Cariboo FS defined in the Cariboo FS. 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 any references to estimated average uncut gold vein grade.



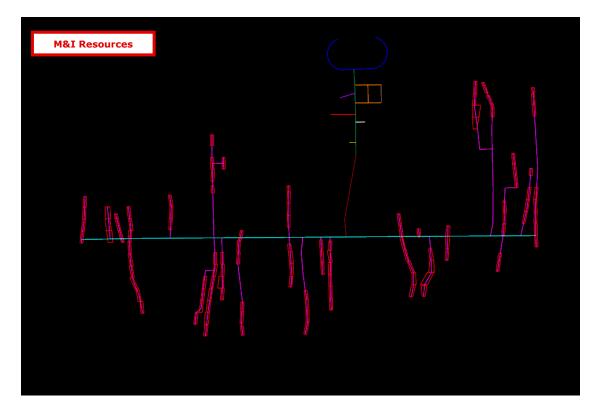


1. Estimates based on LOM average estimated processed grades as defined in the Cariboo FS. Refer to the full text of the Cariboo FS technical report for the assumptions, qualifications and limitations relating to disclosure about the Feasibility Study on the Cariboo Gold Project. 2. Average estimated 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.



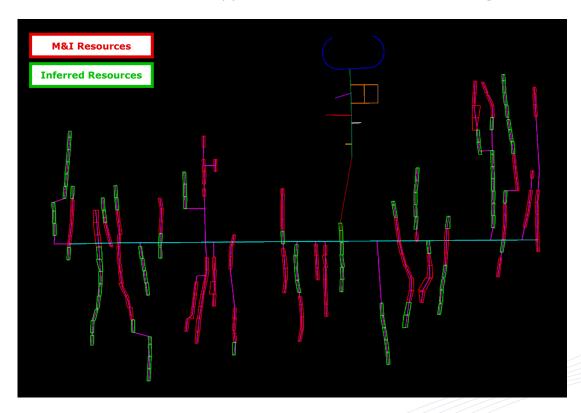
Feasibility Study – M&I Resources Only¹

 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

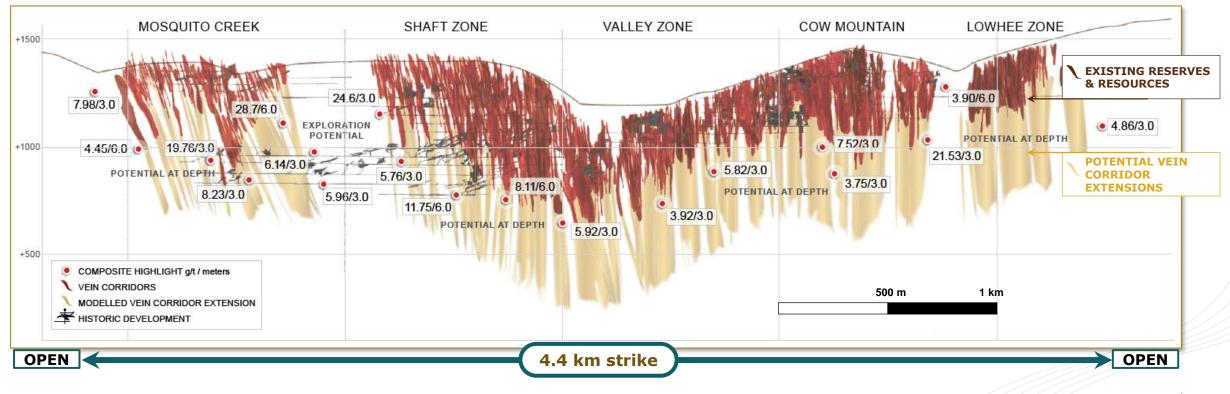
- Potential to convert inferred resources near mined ounces at minimal additional development capex
- ▼ Inferred resources appear to be extensions of existing veins



CARIBOO EXPLORATION POTENTIAL AT DEPTH



- 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 ~900 m and still open
- Average deposit depth is ~350 m



LONG SECTION: LOOKING NORTHEAST

1. 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.

A POTENTIAL GENERATIONAL DISTRICT



Long Section of Selected Canadian Operating Underground Mines vs. Cariboo Gold

	C	X		\
	OSISKO DEVELOPMENT Cariboo Deposit ¹	ALAMOS GOLD Young-Davidson ²	AGNICO EAGLE Goldex ^{3,4}	AGNICO EAGLE LaRonde Zone 5 ^{3,5}
Head Grade (Au)	3.78 g/t	2.15 – 2.35 g/t	1.72 g/t	3.66 g/t
Gold Production	194 koz (Phase II)	185 – 200 koz	130 – 140 koz	265 – 285 koz
AISC (US\$/oz)	\$886 / oz	\$1,175-1,225 / oz	~\$936 / oz	~\$1,191 / oz
Reserves	2.03 Moz	3.34 Moz	0.96 Moz	0.71 Moz
M&I Resources	1.57 Moz	1.01 Moz	1.78 Moz	0.65 Moz
1,000 m	4.4 km strike			

Cariboo's deposit has only been drilled to an average depth of ~350 m and remains open along strike and at depth

Source: Company disclosures. 1. 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. Reserves consist of Probable mineral reserve of 2.031 Moz Au (16.703 Mt grading 3.78 g/t Au). M&I resources consist of measured 8 koz Au (47 kt grading 5.06 g/t Au) at (14.635 Mt grading 3.32 g/t Au). 2. Head grade, production and AISZ based on 2023E Alamos Gold guidance (<u>Young-Davidson</u>); reserves consist of proven reserves 1.477 Moz (19.312 Mt grading 2.38 g/t). M&I resources consist of measured 0.547 Moz (5.554 Mt grading 3.32 g/t) and indicated 1.654 Moz (4.827 Mt grading 3.03 g/t). 3. Production based on 2023E Agnico Eagle guidance). Head grade based on <u>0.32023 YTD results</u> for total cash costs per ounce plus sustaining capex divided by Q3 2023 YTD production. 4. <u>Reserves</u> consist of proven reserves 0.056 Moz (0.607 Mt grading 2.89 g/t). Mult and probable reserves 0.906 Moz (17.820 Mt grading 1.58 g/t). M&I resources consist of proven reserves 0.327 Moz (4.904 Mt grading 1.86 g/t) and indicated 1.036 Moz (21.257 Mt grading 1.52 g/t). 5. LaRonde Zone 5 <u>reserves</u> consist of proven reserves 0.383 Moz (5.490 Mt grading 2.17 g/t), M&I resources consist of proven reserves 0.327 Moz (4.904 Mt grading 2.08 g/t). MgI grading 2.08 g/t) and indicated 1.036 Moz (5.17.801 Mt grading 1.52 g/t). 5. LaRonde Zone 5 <u>reserves</u> consist of proven reserves 0.327 Moz (4.904 Mt grading 2.08 g/t) and probable reserves 0.383 Moz (5.490 Mt grading 2.17 g/t), M&I resources consist of proven reserves 0.327 Moz (4.904 Mt grading 2.08 g/t) and probable reserves 0.383 Moz (5.490 Mt grading 2.17 g/t), M&I resources consist of proven reserves 0.327 Moz (4.904 Mt grading 2.08 g/t). Mult resources 0.655 Moz (9.098 g/t).

CARIBOO HIGH GRADE DRILL RESULTS



HOLE ID	FROM (M)	ТО (М)	LENGTH (M)	AU (G/T)	TARGET
BGM-16-461 ¹	166.80	172.00	5.20	52.59	Cow
BGM-16-553 ²	119.60	123.70	4.10	56.31	Mosquito
BM-21-047 ³	121.00	128.75	7.75	158.40	Lowhee
BM-21-072 ⁴	213.45	220.95	7.50	50.11	Lowhee
CM-21-097 ⁵	255.05	265.55	10.50	164.92	Valley
IM-17-107 ⁶	55.15	63.20	8.05	49.79	Mosquito
IM-17-131 ⁷	426.00	437.55	11.55	53.26	Shaft
IM-17-139 ⁷	417.00	420.00	3.00	72.34	Shaft
IM-17-145 ⁸	458.00	463.30	5.30	87.66	Shaft
IM-17-151 ⁹	395.20	407.25	12.05	72.23	Shaft
IM-17-177 ¹⁰	510.00	516.00	6.00	46.50	Shaft
IM-17-249 ¹¹	538.50	548.45	9.95	48.17	Shaft
IM-20-002 ¹²	157.60	160.80	3.20	63.20	Shaft
IM-21-009 ¹³	206.00	221.00	15.00	23.32	Mosquito
IM-21-024 ¹⁴	94.00	105.00	11.00	35.25	Mosquito

1. Refer to BGM news release dated Aug 31, 2016 (Barkerville Gold Mines Intersects 10.02 G/T (0.29 oz/t) Au Over 22.20 Metres including 13.01 g/t (0.38 oz/t) Au Over 11.50 Metres In cow Mountain Phase I Drilling). 2. Refer to BGM news release dated Dec 15, 2016 (Barkerville Intersects 11.36 g/t Au over 12.36 Metres and 56.31 g/t Au over 4.10 Metres in Island Mountain Phase I Drilling). 3. Refer to DDV news release dated Dat 26, 2021 (Osisko Development Intersects 158.40 G/T Au Over 7.75 Meters Including 2,420 G/T Au Over 7.50 Meters including 630 G/T Au Over 0.55 Meter At Lowhee Zone). 5. Refer to DDV news release dated Jan 12, 2022 (Osisko Development Intersects 50.11 G/T Au Over 7.50 Meters at Indoor Over 0.55 Meter At Lowhee Zone). 5. Refer to DDV news release dated Jan 12, 2022 (Osisko Development Intersects 54.413 g/t Au Over 12.70 Metres at Mosquito Creek). 7. Refer to BGM news release dated Sep 6, 2017 (BGM Intersects 54.13 g/t Au Over 11.55 Metres At Shaft Zone). 8. Refer to BGM news release dated Sep 6, 2017 (BGM Intersects 20.53 G/T AU Over 12.05 Metres at Shaft Zone). 10. Refer to BGM news release dated Sep 6, 2017 (BGM Intersects 20.53 g/t Au Over 12.05 Metres at Shaft Zone). 10. Refer to BGM news release dated Nov 20, 2017 (BGM Intersects 20.53 g/t Au Over 12.05 Metres at Shaft Zone). 10. Refer to BGM news release dated Apr 4, 2018 (BGM Intersects 48.17 g/t Au Over 9.95 Meters on Island Mountain). 12. Refer to ODV news release dated Mar 3, 2021 (ODV Announces Continued High Grade Drill Results At Cariboo With 63.20 Meters). 13. Refer to ODV news release dated Jane 2, 2021 (ODV Intersects 32.32 g/t OVer 15.0 MON Island Mountain At Cariboo And Announces The Grant Of Replacement Restricted Share Units). 14. Refer to ODV news release dated Mountain At Cariboo And Announces The Grant Of Replacement Restricted Share Units). 14. Refer to ODV news release dated Mountain At Cariboo And Announces The Grant Of Replacement Restricted Share Units). 14. Refer to ODV news release dated Mountain At Cariboo And Mou

DEVELOPING A MINING CAMP



BGM Mineral Tenure Outline

Cariboo Regional Notice Of Work Cariboo Gold Notice of Work Area

Polymetallic veins (Ag-Pb-Zn+/-Au)

620000

610000

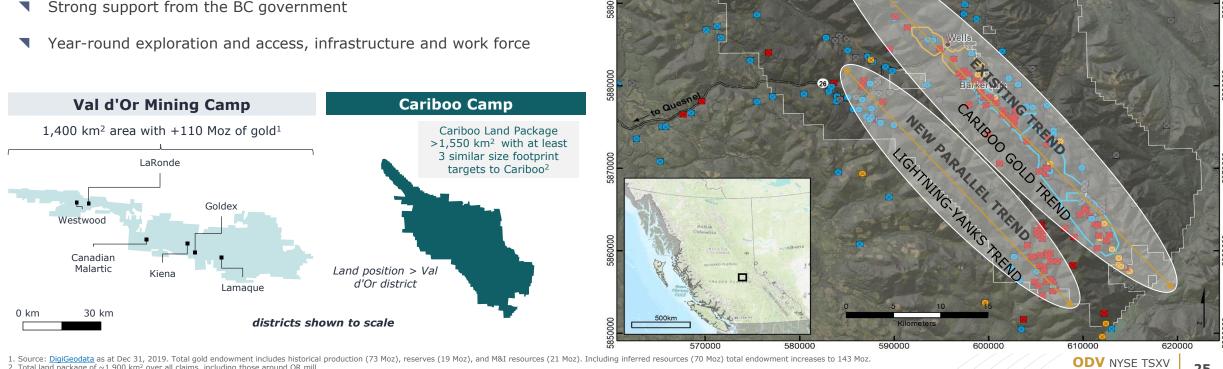
Minfile Occurences

Surficial placers Other/Unspecified

Deposit Type Au-quartz veins

Cariboo hosts two main trends over 86 km in combined strike length

- 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
- ~700,000 meters drilled in the last seven years
- Strong support from the BC government



580000

590000

Cariboo Gold Project

British Columbia, Canada

600000

1. Source: DigiGeodata as at Dec 31, 2019. Total gold endowment includes historical production (73 Moz), reserves (19 Moz), and M&I resources (21 Moz). Including inferred resources (70 Moz) total endowment increases to 143 Moz. 2. Total land package of ~1,900 km² over all claims, including those around QR mill

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TINTIC PROJECT

Utah, USA 100% Ownership





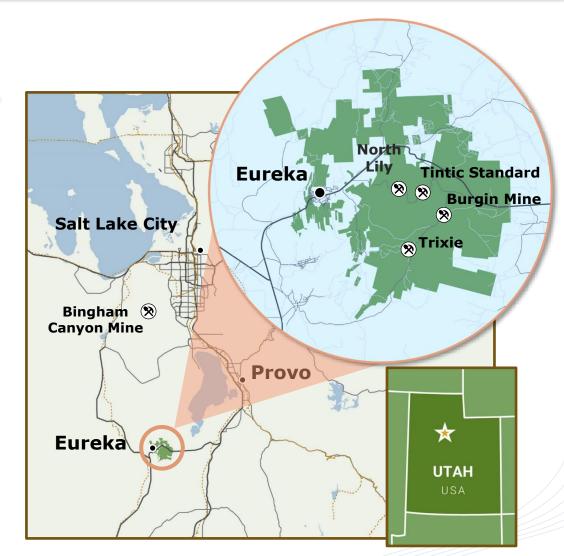
Highly Productive Historical Mining District

OWNERSHIP	LOCATION / LAND PACKAGE	MINE TYPE	METALS	STAGE
100% ODV	Utah, USA >17,000 acres of patented claims ¹	Underground	Gold, Silver Cu, Pb, Zn	Trixie MRE (Q1 2024)

- 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 past-producing mines located within Tintic property
- Upcoming catalysts: 2024 Trixie MRE (Q1 2024) V; Decline to Trixie main level (complete) V; Surface porphyry drilling (underway); Target processing capacity up to 500 tons per day



1. 14,200 acres of patented mining claims and a further approximately 3,000 acres of overwhelmingly leased patented mining claims.







RESOURCE	TONNES	METAL	GRADE	CONTAIN	ED METAL
CATEGORY	(000's)	(g/t Au)	(g/t Ag)	(000's oz Au)	(000's oz Ag)
MEASURED	120	27.36	61.73	105	238
INDICATED	125	11.17	59.89	45	240
MEASURED & INDICATED	245	19.11	60.80	150	478
INFERRED	202	7.80	48.55	51	315



Deposit reasonably stable to COG variation

HIGH-GRADE DEPOSIT

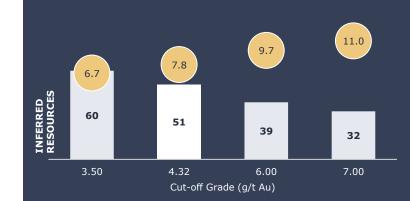
MRE comprises small footprint (440 m length x 60 m width x 195 m depth)¹

MEANINGFUL UPSIDE

 ${\sim}10\%$ of the main Trixie area explored to date

+57% MEASURED RESOURCES

Contained gold ounces in measured resources increased to 105 koz vs. 2023 Trixie MRE

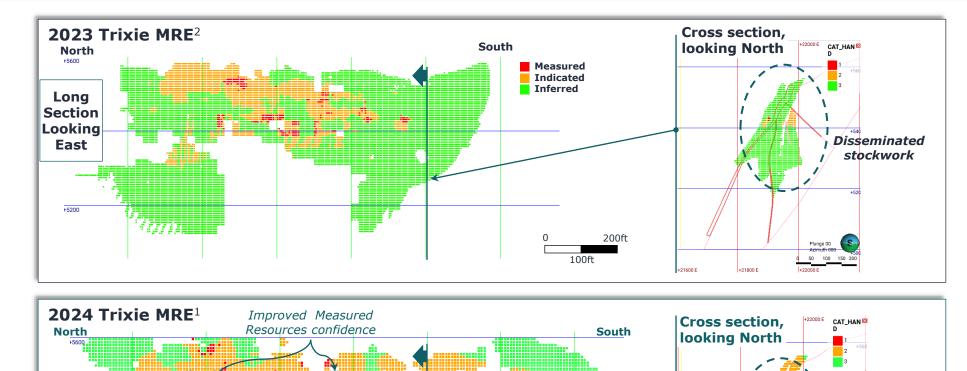


1. The 2024 Trixie MRE was disclosed in ODV's news release dated March 15, 2024 (ODV Announces Mineral Resource Update For The Trixie Deposit, Tintic Project). The Company intends to file a technical report in respect of the 2024 Trixie MRE, in accordance with NI 43-101 on SEDAR+ (www.sedarplus.ca) and EDGAR (www.sec.gov) under Osisko Development's issuer profile within 45 days of the date of the news release announcing the 2024 Trixie MRE. The 2024 Trixie MRE comprises six mineralized zones within the greater Trixie deposit, including T2, T3, T4, Wild Cat, 40 Fault and 75-85 over a strike length of 530 m, a maximum width of 105 m and to a maximum depth of 195 m for the deposit and is 350 m from surface. These dimensions are for the overall size of the mineralized zone structures, with the 2024 Trixie MRE blocks contained within a smaller 440 m strike length, 60 m total width and 195 m depth footprint.



2024 vs. 2023 TRIXIE MRE DSO COMPARISON¹





- Drill results and underground mapping from the 2023 exploration program improved the knowledge of the extent and distribution of mineralization, resulting in modeling improvements to both mineralization and the historical mine shape model
- 2024 Trixie MRE models more discrete high-grade structures rather than stockwork zones of disseminated mineralization in the 2023 Trixie MRE
- The model now incorporates tight search parameters around these structures, increasing confidence within the zone, while also including the quartz-barite-sulphosalt disseminated stockwork mineralization

Long Section Looking East Hore the structures Hore the structures

1. The 2024 Trixie MRE was disclosed in ODU's news release dated March 15, 2024 (ODV Announces Mineral Resource Update For The Trixie Deposit, Tintic Project). The Company intends to file a technical report in respect of the 2024 Trixie MRE, in accordance with NI 43-101 on SEDAR+ (www.sedarplus.ca) and EDGAR (www.sec.gov) under Osisko Development's issuer profile within 45 days of the date of the news release announcing the 2024 Trixie MRE. The 2024 Trixie MRE comprises six mineralized zones within the greater Trixie deposit, including T2, T3, T4, Wild Cat, 40 Fault and 75-85 over a strike length of 530 m, a maximum width of 105 m and to a maximum depth of 195 m for the deposit and is 350 m from surface. These dimensions are for the overall size of the mineralized zone structures, with the 2024 Trixie MRE blocks contained within a smaller 440 m strike length, 60 m total width and 195 m depth footprint. 2. Refer to the full text of the 2023 Trixie MRE technical report.

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TRIXIE UG RAMP DEVELOPMENT: 100% COMPLETE

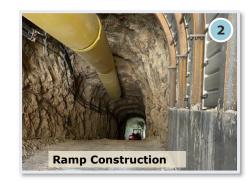


RAMP DEVELOPMENT: ~1,390 M (4,550 ft.)

Complete as of September 2023

- Enables bulk extraction at higher tonnage by providing underground access to a modern, mechanized fleet
- Accelerates potential development and exploration activities at lower levels
- Decline size 16x16 ft. (5x5 m), with muckbays excavated every 300 ft. (100 m) potential to use for UG exploration platforms

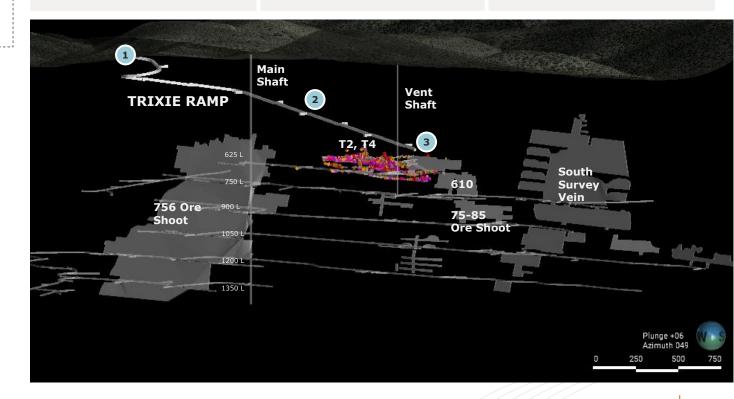






3	3 Historic Mineralized Zones Open at Depth and Strike									
	756 ORE SHOOT	610 ORE SHOOT		SOUTH SURVEY VEIN						
	Developed over 900 ft. (275 m) strike and 1,000 ft. (300	 Focus of 2001-2002 mining activity 	•	Mined by Kennecott in the 1980's						
	m) vertical Mined for flux by Kennecott	 Mined down to the 1,200 ft. level 	٦	Extends for 3,400 ft. (1,030 m) south of the main shaft						

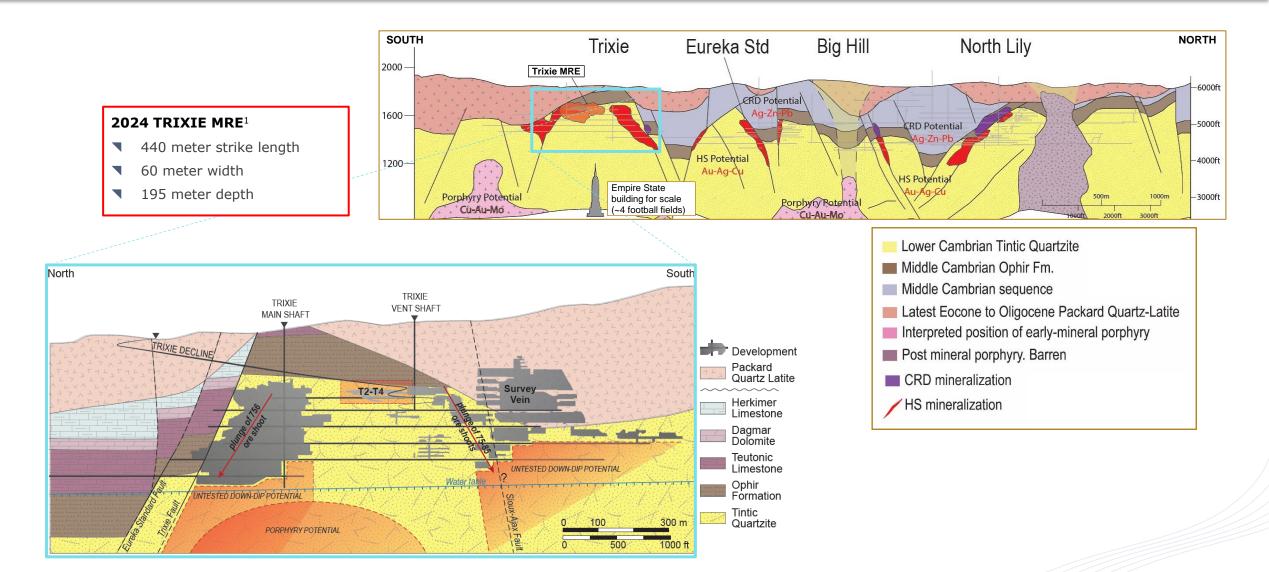
Average grades 6 to 8 g/t Au¹ Average grades 21 g/t Au¹



TRIXIE EXPLORATION POTENTIAL

2024 Trixie MRE represents a small footprint of the overall underground potential





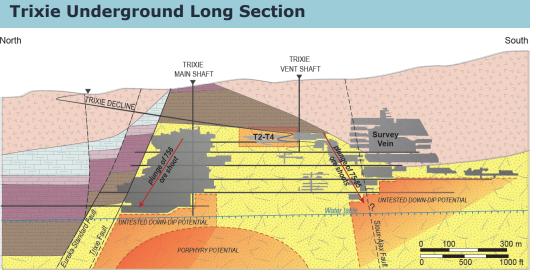
1. The 2024 Trixie MRE was disclosed in ODV's news release dated March 15, 2024 (ODV Announces Mineral Resource Update For The Trixie Deposit, Tintic Project). The Company intends to file a technical report in respect of the 2024 Trixie MRE, in accordance with NI 43-101 on SEDAR+ (www.sedarplus.ca) and EDGAR (www.sec.gov) under Osisko Development's issuer profile within 45 days of the date of the news release announcing the 2024 Trixie MRE. The 2024 Trixie MRE comprises six mineralized zones within the greater Trixie deposit, including T2, T3, T4, Wild Cat, 40 Fault and 75-85 over a strike length of 530 m, a maximum width of 105 m and to a maximum depth of 195 m for the deposit and is 350 m from surface. These dimensions are for the overall size of the mineralized zone structures, with the 2024 Trixie MRE blocks contained within a smaller 440 m strike length, 60 m total width and 195 m depth footprint.

ODV NYSE TSXV osiskodev.com



Completed a total of 6,028 m (19,776 ft) of Trixie exploration and delineation drilling in 2023

- In 2023, the Company completed a total of 6,028 m (19,776 ft) of underground drilling in 73 diamond drill holes at Trixie. Assays were finalized up to hole TRXU-DD-23-069 and were included in the 2024 Trixie MRE
- The new drilling, mapping and historical data compilation improved the interpretation and revealed significant potential for parallel high-grade gold fissure zones similar to T2 adjacent to existing mine development
- Much of the Trixie area remains unexplored



Select C	Select Chip Sampling				ing		
HOLE ID	WIDTH	GRADE	(g/t)	HOLE ID	WIDTH	GRADE	(g/t)
(CH)	(m)	SILVER	GOLD	HOLE ID	(m)	SILVER	GOLD
11871	0.73	209.8	1,017.0	TUG-625-029 ²	3.81	21.48	25.95
1180 ¹	0.55	-	4,186.5	Including	1.52	41.80	43.00
1163 ¹	0.61	6,699.0	5,197.8	TUG-625-060 ²	5.33	439.26	12.58
1114 ¹	1.52	1,224.9	1,553.1	TUG-625-065 ²	1.22	511.00	264.00
including	0.82	2,263.4	2,873.1	TUG-625-069 ²	1.22	84.30	65.50
1110 ¹	2.07	316.0	2,800.1	Including	0.30	246.00	231.00
including	1.22	528.9	4,757.4	TUG-625-087 ³	6.25	404.19	28.72
1105 ¹	0.40	102.4	1,769.3	TUG-625-086 ³	4.57	96.98	27.26
11021	0.37	1,560.0	2,202.9	TUG-625-0374	2.44	90.24	53.27
10111	0.55	911.1	2,352.2	TUG-625-0364	3.35	30.89	36.81
1007 ¹	1.01	2,546.1	1,381.6	TRXU-DD-23- 003⁵	6.86	231.46	62.82
1351 ²	2.29	1,146.5	2,311.2				
1256 ²	0.91	78.7	3,901.3				

3,419.9

1. Refer to ODV news release dated November 30, 2022 (Osisko Development Reports Underground Sampling Results At Trixie, Tintic Project). 2. Refer to ODV news release dated January 11, 2023 (Osisko Development Extends T2 Mineralization 55 Meters Down of At Trixie, Tintic Project). 3. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 4. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development Reports 2022 Drill Results At Trixie). 5. Refer to ODV news release dated May 4, 2023 (Osisko Development R

0.82

1,587.6

1326²

EAST TINTIC REGIONAL EXPLORATION POTENTIAL Highly prospective 5 km long corridor with 23 historic mines, extensive legacy datasets



Epithermal High-Grade Au-Ag

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

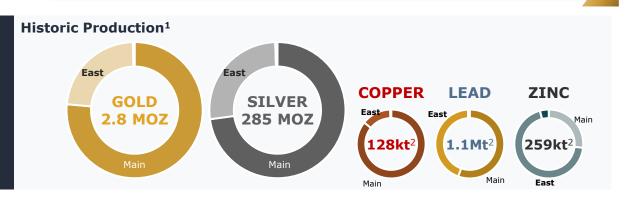
Carbonate Replacement ("CRD") Ag-Pb-Zn

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

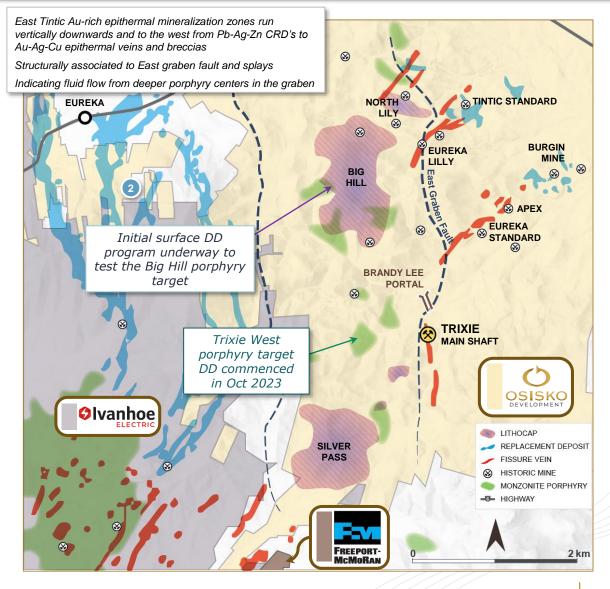
Accounts for most historical production within Tintic, including Burgin, Tintic Standard, and North Lily mines

PORPHYRY Cu-Au-Mo POTENTIAL

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



1. Source: History, Geology, and Production of the Tintic Mining District, Juab, Utah and Tooele Counties; K. Krahulec, D. F. Griggs; 2006. 2. Short tons



REGIONAL TARGETS: EPITHERMAL AU-AG



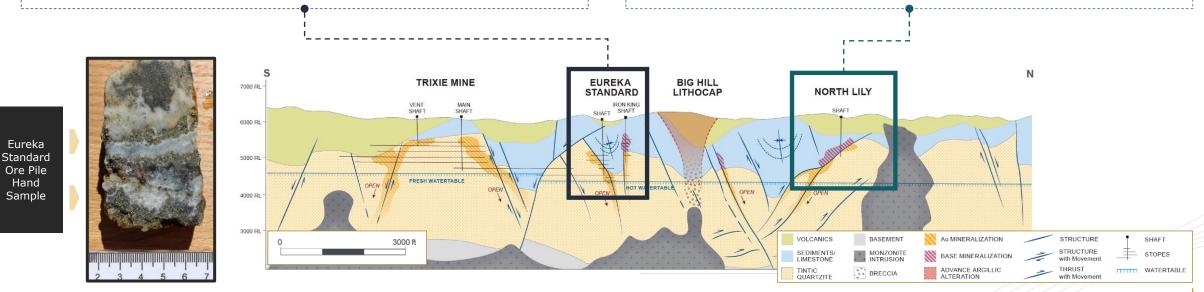
Targets identified based on 3D geological modelling completed to date

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
- Approx. historic production 360,000 tons 24 g/t Au and 319 g/t Ag¹
- 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
- All of North Lily produced 375,000 tons, at an average grade of 0.4 oz/t Au (13.728 g/t) and 9.23 oz/t Ag (316.621 g/t) (Kildale (1957))
 - Endline Dike fissure was 1.326 oz/t (45.47 g/t) gold, 4.75 oz/t (155.56 g/t) silver, and 1.37% copper¹
- Zones of characteristic high-sulfidation mineral associations 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



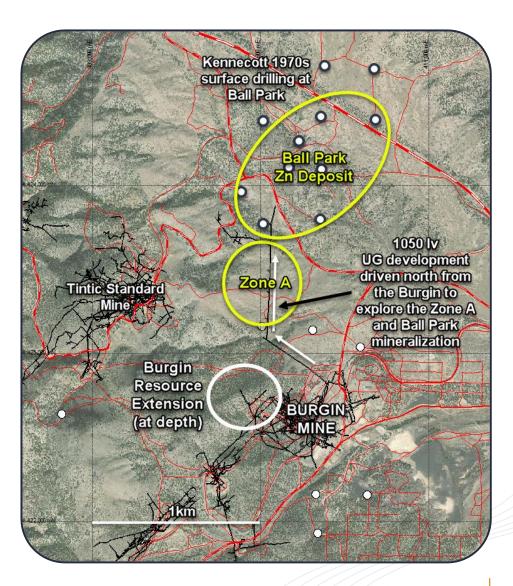
1. Morris, H. T. & Lovering, T. S. General geology and mines of the East-Tintic mining district, Utah and Juab counties, Utah. U.S. Geological Surv. Prof. Pap. 1024, (1979)



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 ¹										
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



REGIONAL TARGETS: PORPHYRY CU-AU-MO POTENTIAL



Big Hill Porphyry Target

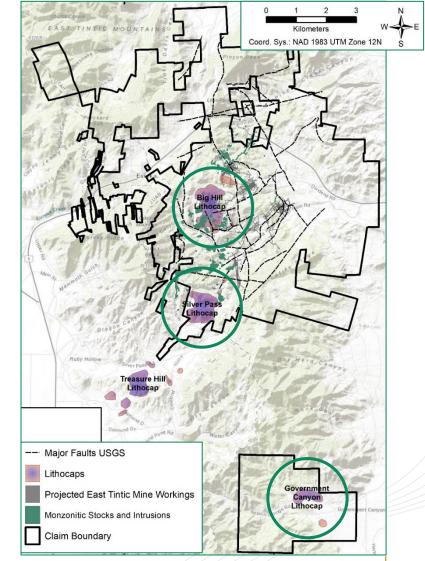
- **Located 65 km south of Bingham Canyon Mine operated by Rio Tinto since 1906**
 - To date produced over ~25 MT copper, ~1.5 MT molly, ~43 Moz gold, and ~425 Moz silver¹
- Indicator clay assemblages and elevated Mo and/or Cu geochem anomalies at Big Hill, Silver Pass and Government Canyon
- Limited 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:** Initial surface diamond drilling program underway

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



1. Krahulec, Ken, Production History of the Bingham Mining District, Salt Lake County, Utah – an Update, Utah Geological Survey https://www.researchgate.net/publication/328676854_Production_history_of_the_Bingham_mining_district_Salt_Lake_County_Utah___an_update



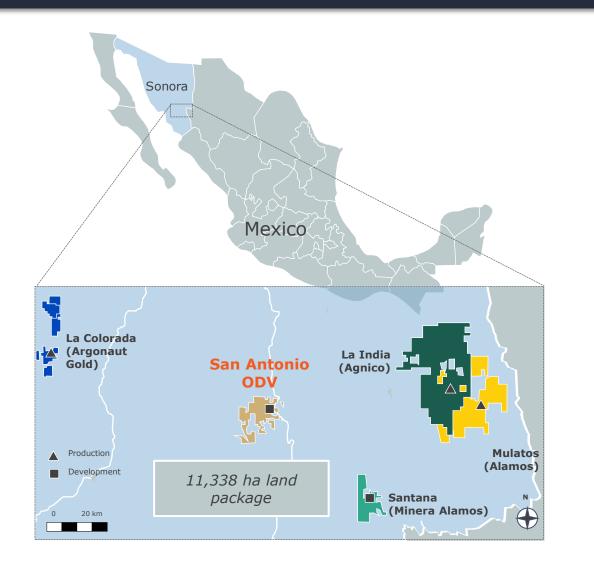
SAN ANTONIO PROJECT

Sonora, Mexico 100% Ownership



SAN ANTONIO PROJECT: ASSET SNAPSHOT





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
 - 13,591 ounces sold as at Sep 30, 2023 (complete)
- Gold mineralization identified over 10 km strike
- Mine infrastructure and water on site
- 27,000 meters drilled in 2021
- Awaiting next steps from the Mexican government on permitting

Mineral Resources¹

MATERIAL		INDICATED		INFERRED			
MATERIAL	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	

OSISKO DEVELOPMENT

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APPENDIX

ODV NYSE TSXV osiskodev.com

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

ÉRIC TREMBLAY, INTERIM COO, DIRECTOR

- More than 25 years' of mine building and mine operations experience, mostly at underground mining operations, culminating in his current position as Chief Operating Officer of Dalradian Resources Inc.
- Previously General Manager at Canada's largest gold mine, Canadian Malartic. Previously, General Manager at IAMGOLD's Westwood Project, where he participated in closure of the Doyon Mine and construction of the Westwood Project
- Mr. Tremblay graduated from Laval University with a B.Sc. in mining engineering and mineral processing

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

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

BOARD OF DIRECTORS

- Sean Roosen (Executive Chair)
- Charles Page
- Michèle McCarthy
- Duncan Middlemiss
- Éric Tremblay
- Marina Katusa
- David Danziger

BEST IN CLASS ESG



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

DEVELOPMEN

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

PERMITTING

- Positive permitting climate in central BC given dearth of high-quality jobs from logging industry slowdown
- Completed the Application Review process in January 2022
- Environmental Assessment Certificate granted in October 2023
- Anticipating receipt of permits by Q2 2024

INDIGENOUS NATIONS

- Positive relationship with Lhtako Dené Nation since 2015. Agreements include engagement protocol (signed in 2016), relationship agreements (2016) and life of project agreement (2020)
- Participation agreement sign with the Williams Lake First Nation in July 2022
- Positive relationship with Xatsull First Nation Indian Band since 2016

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)

(Measured and Indicated Resources are exclusive of Reserves)



IINERAL RESOURCES MEASURED		INDICATED		MEASURED & INDICATED			INFERRED					
Deposit	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	PROBABLE RESERVES				
Deposit	Tonnes (000's)	Grade (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

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1. 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.
- 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

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.
- 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 \$45.32(t; processing and transport cost of \$22.29/t; G&A plus Environmental cost of \$1.27; global mining cost of \$51.31/t). The cut-off grade for the Bonanza Ledge deposits was calculated using a gold price of US\$1,700/oz; USD:CAD exchange rate of 1.27; global mining cost of \$55.51.5/t. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rate, mining cost, etc.).

 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. Highgrades 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.



DEPOSIT	CATEGORY	TONNES	GRADE	(g/t)	CONTAINED METAL		
DEPOSIT	CATEGORY	(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	

1. Refer to the full text of San Antonio Technical Report for the assumptions, qualifications and limitations relating to the San Antonio Gold Project and the San Antonio Technical Report.

2024 TRIXIE MINERAL RESOURCES ESTIMATE



DOMAIN	CATEGORY	TONNES	GRADE (AU G/T)	CONTAINED GOLD (OZ)	GRADE (AG G/T)	CONTAINED SILVER (OZ)
T2	Measured	22,678	106.27	77,484	115.99	84,572
	Indicated	11,939	23.19	8,902	51.07	19,602
	M+I	34,617	77.62	86,387	93.60	104,173
	Inferred	1,996	9.82	630	61.38	3,938
	Measured	2,385	9.46	725	75.34	5,776
	Indicated	970	5.47	171	57.32	1,787
Т3	M+I	3,355	8.30	896	70.13	7,564
	Inferred	139	6.27	28	63.14	282
T4 + Wild Cat + 40 FLT	Measured	94,784	8.93	27,227	48.41	147,520
	Indicated	51,827	6.48	10,795	37.59	62,637
	M+I	146,611	8.07	38,023	44.58	210,156
	Inferred	104,676	6.57	22,127	38.57	129,792
75-85	Measured	-	-	-	-	-
	Indicated	60,008	12.93	24,943	80.95	156,185
	M+I	60,008	12.93	24,943	80.95	156,185
	Inferred	94,793	9.12	27,784	59.28	180,666
TOTAL	Measured	119,847	27.36	105,437	61.73	237,868
	Indicated	124,743	11.17	44,811	59.89	240,211
	M+I	244,590	19.11	150,248	60.80	478,078
	Inferred	201,603	7.80	50,569	48.55	314,678

NOTES

and Mineral Reserves' adopted by the CIM council. 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. 4

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stoping mining method with stopes of 6.1 m x 6.1 m x minimum 1.5 m dimensions. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Geologic modelling was completed by Osisko Development modeling geologist Jody Laing, P.Geo, using Leapfrog Geo software. The 2024 Trixie MRE was completed by Osisko Development chief resource geologist, Daniel Downton, P.Geo using Datamine Studio RM 2.0 software. William Lewis and Alan J. San Martin of Micron International Limited independently reviewed and validated the mineral resource model. The estimate is reported for an underground mining cenario and with USD assumptions. The cut-off grade of 4.32 g/t Au was calculated using a gold price of US\$1,750/oz, a CAD:USD exchange rate of 1.30; total mining, processing and G&A costs of US\$168.04/imperial ton; a refining cost of US\$2.65/ounce; a combined movely, of 4.50%: and a sverzame metalluperical odd reconversion of 90% 6.

7. royalty of 4.50%; and an average metallurgical gold recovery of 80%.

The stope optimizer algorithm evaluated the resources based on a gold equivalent grade which incorporates the silver grade estimate and assumes a silver price of 8

US\$23/oz and metallurgical silver recovery of 45%.

The 2024 Trixie MRE is comprised of six zones within the greater Trixie area: T2, T3, T4, Wild Cat, 40 Fault and 75-85. Average bulk density values in the mineralized domains were assigned to the T2 (2.955 T/m3), T3 (2.638 T/m3), T4(2.618 T/m3), Wild Cat, and 40 Fault (2.621

9. 10. T/m3), and 75-85 (2.617 T/m3) domains.

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Thress Distance Squared interpolation method was used with a parent block size of 1.2 m x 2.4 m x 2.4 m. The Company intends to file a technical report (the "Technical Report") in respect of the 2024 Trixie MRE in accordance with NI 43-101 on SEDAR+ (www.sedarplus.ca) and on EDGAR (www.sec.gov) under Osisko Development's issuer profile within 45 days of the date of this news release. The 2024 Trixle MRE results are presented in-situ. Calculations used metric units (metres, tonnes, g/t). The number of tonnes is rounded to the nearest thousand. 13.

Any discrepancies in the totals are due to rounding effects. 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 in this news release. 14.

Technical information differs from similar information made public by U.S. companies subject to the reporting and disclosure requirements of the U.S. Securities and Exchange Commission. Refer to "Cautionary Statement to U.S. Investors". 15.

Effective date of the 2024 Trixie MRE is March 14, 2024. Each of Mr. William Lewis, P.Geo., of Micon International Limited and Alan J. San Martin, MAusIMM(CP), of Micon International Limited (i) has reviewed and validated the 2024 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" within the meaning of NI 43-101.

The mineral resources were estimated using the Canadian Institute of Mining ("CIM"), Metallurgy and Petroleum's "CIM Definition Standards on Mineral Resources 3

OSISKO DEVELOPMENT

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