



O3 Mining

AN **OSISKO** GROUP COMPANY

Corporate Presentation

February 3rd, 2021

TSX.V: OIII OTCQX:OIII.F

Cautionary Statement

This presentation (the "Presentation") contains "forward-looking information" and "forward-looking statements" (collectively, "forward-looking statements") within the meaning of the applicable Canadian securities legislation. 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 preliminary economic assessment for the Marban project (the "PEA"); the numerous assumptions underlying the PEA, including the mine plan and economic model; the after-tax internal rate of return and net present value modeling of the Marban project; the capex, life-of-mine and production modeling of the Marban project; the potential for brownfield value creation; grade estimates; the speculative geology of inferred mineral resources; gold prices; project scope, including mining methodology and infrastructure; processing methodology; the ability, if any, to achieve the project economics described in this Presentation; the mining and processing strategy; the projected infrastructure; the ability, if any, to construct the required infrastructure; the ability, if any, to obtain the required economic and restoration approvals and permits; the current drill program on the Marban project and the significance of new drill results; potential mineralization; the ability to realize upon any mineralization in a manner that is economic; the ability to complete any proposed exploration activities and the results of such activities, including the continuity or extension of any mineralization; and any other information herein that is not a historical fact may be "forward-looking information".

This "forward-looking information" involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of O3 Mining to be materially different from any future results, performance or achievements expressed or implied by such "forward-looking information". Such factors include, among others, risks relating to the ability of exploration activities (including drill results) to accurately predict mineralization; fluctuations in spot and forward prices of gold, silver, base metals or certain other commodities; fluctuations in currency markets (such as the Canadian dollar to United States dollar exchange rate); change in international, national and local government, legislation, taxation, controls, regulations and political or economic developments; relationships with and claims by local communities and indigenous populations; availability of increasing costs associated with mining inputs and

labour; the speculative nature of mineral exploration and development (including the risks of obtaining necessary licenses, permits and approvals from government authorities); access to capital; errors in management's geological modelling; the ability of O3 Mining to complete further exploration activities, including drilling; property interests in the Marban project; the ability of O3 Mining to obtain required approvals and complete transactions on terms announced; the results of exploration activities; risks relating to mining activities; the global economic climate; metal prices; exchange rates; dilution; environmental risks; and community and non-governmental actions.

Although the "forward-looking information" contained in this Presentation is based upon what management believes, or believed at the time, to be reasonable assumptions, O3 Mining cannot assure shareholders and prospective purchasers of securities of O3 Mining that actual results will be consistent with such "forward-looking information", as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither O3 Mining nor any other person assumes responsibility for the accuracy and completeness of any such "forward-looking information".

O3 Mining does not undertake, and assumes no obligation, to update or revise any such "forward-looking information" contained herein to reflect new events or circumstances, except as may be required by law.

Risks and uncertainties about O3 Mining's business are more fully discussed in the disclosure materials filed with the securities regulatory authorities in Canada, which are available on SEDAR (www.sedar.com) under O3 Mining's issuer profile. Readers are urged to read these materials and should not place undue reliance on any forward-looking statement and information contained in this Presentation.

Preliminary Economic Assessment

The PEA is based on the mineral resource estimate described in this Presentation, which has been prepared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") and will be available on SEDAR (www.sedar.com) under O3 Mining's issuer profile within 45 days. Please refer to the full text of the PEA for details regarding the key assumptions, parameters and methods associated with the foregoing.

The PEA is preliminary in nature and has made numerous assumptions about the Marban project referenced herein, including in relation to the mine plan and economic models of the project. In addition, the PEA includes inferred mineral resources, which are considered to be too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no guarantee that any inferred mineral resource can be converted to an indicated mineral resource or measured mineral resource, and as such, there is no guarantee the project economics described herein will be achieved.

Mineral Resources

This Presentation contains information regarding mineral resources estimated at the projects referenced herein. Mineral resources are not mineral reserves and do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, socio-political, marketing or other relevant issues. In particular, the quantity and grade of reported inferred mineral resources in the estimates referenced in this Presentation are uncertain in nature and there is insufficient exploration to define these inferred mineral resources as an indicated or measured mineral resource in all cases. It is uncertain in all cases whether further exploration will result in upgrading the inferred mineral resources to an indicated or measured mineral resource category.

Qualified Person

The scientific and technical information contained in this Presentation has been reviewed, prepared and approved by Mr. Louis Gariépy, P.Geo (OIQ #107538), Vice President Exploration of O3 Mining, who is a "qualified person" within the meaning of NI 43-101.

Unless otherwise noted, this Presentation has been prepared based on information available as of February 3rd, 2021.

References in this Presentation to "O3 Mining" includes O3 Mining Inc. and its subsidiaries.

Canadian Developer growing through Exploration

TSX.V: OIII

OTCQX: OIIF

MCap³: C\$198.7M

Experienced mine-building group
(Osisko Group)

Well-funded with C\$149.6M¹

Focused on mineral resource growth -
3.9Moz² Au added in Québec

Marban PEA with C\$423M NPV (5%, US\$1450/oz)

Delivering on Exploration upside
(150,000m resource expansion program)

Exposure to Timmins camp in Ontario
through Partnership with Moneta Porcupine

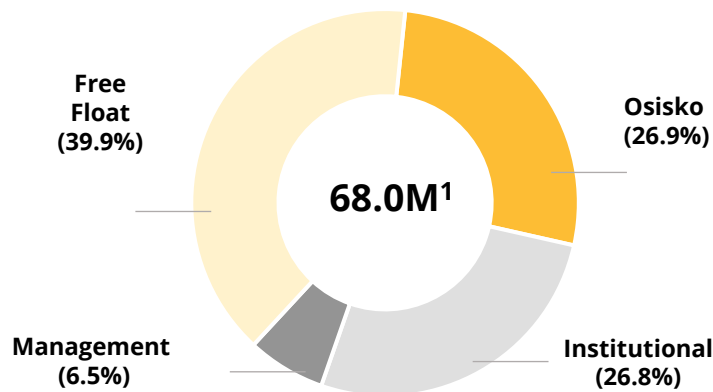


1/ Cash and Investments as of September 30, 2020 + Moneta's investment (As of February 3rd, 2021) + C\$35.0M Financing

2/ Mineral Inventory (Appendix)

3/ As of February 3rd, 2021

Corporate Structure



Key Financials

C\$198.7M
Market Capitalization¹

C\$149.6M
Cash & Investments²

3.9Moz
Total Resources³

C\$49.1M
Enterprise Value¹

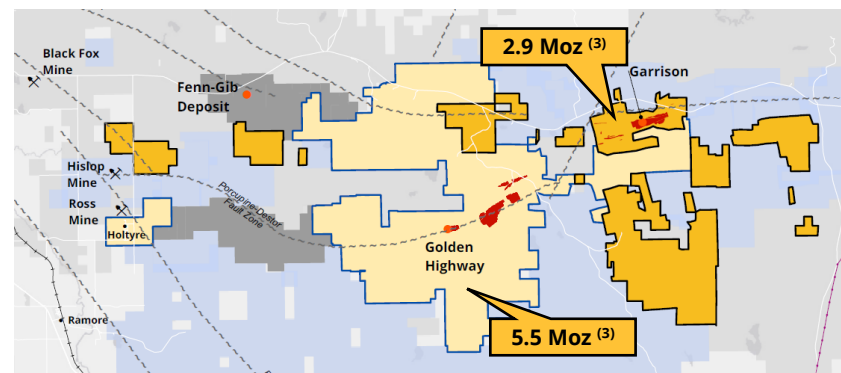
US\$9.8
EV/oz Au¹

68.0M
Shares Outstanding¹

Analyst Coverage

Current Price¹	C\$2.92
Cormark Securities	Buy: C\$6.50
CIBC Capital Markets	Outperformer: C\$6.00
Sprott Capital Partners	Buy: C\$5.75
Canaccord	Speculative Buy: C\$5.25
Stifel GMP	Buy: C\$4.90
National Bank	Outperform: C\$4.75
VIII Capital	Buy: C\$4.75
Red Cloud Securities	Buy: C\$4.30
Average	C\$5.27

Partnership in Timmins



O3 Mining's ownership totals ~30%

1/ As of February 3rd, 2021 - Exchange Rate (\$C:\$US): 0.7821

2/ Cash and Investments as of September 30, 2020 + Moneta's investment (As of February 3rd, 2021) + C\$35.0M Financing

3/ See N.I. 43-101 technical report Golden Highway dated on December 10, 2020, and Garrison Resources Update dated on December 14, 2020

January 14th, 2021

H1-2021

4 Drills

Complete drilling campaign at Golden Highway 30,000m

H2-2021

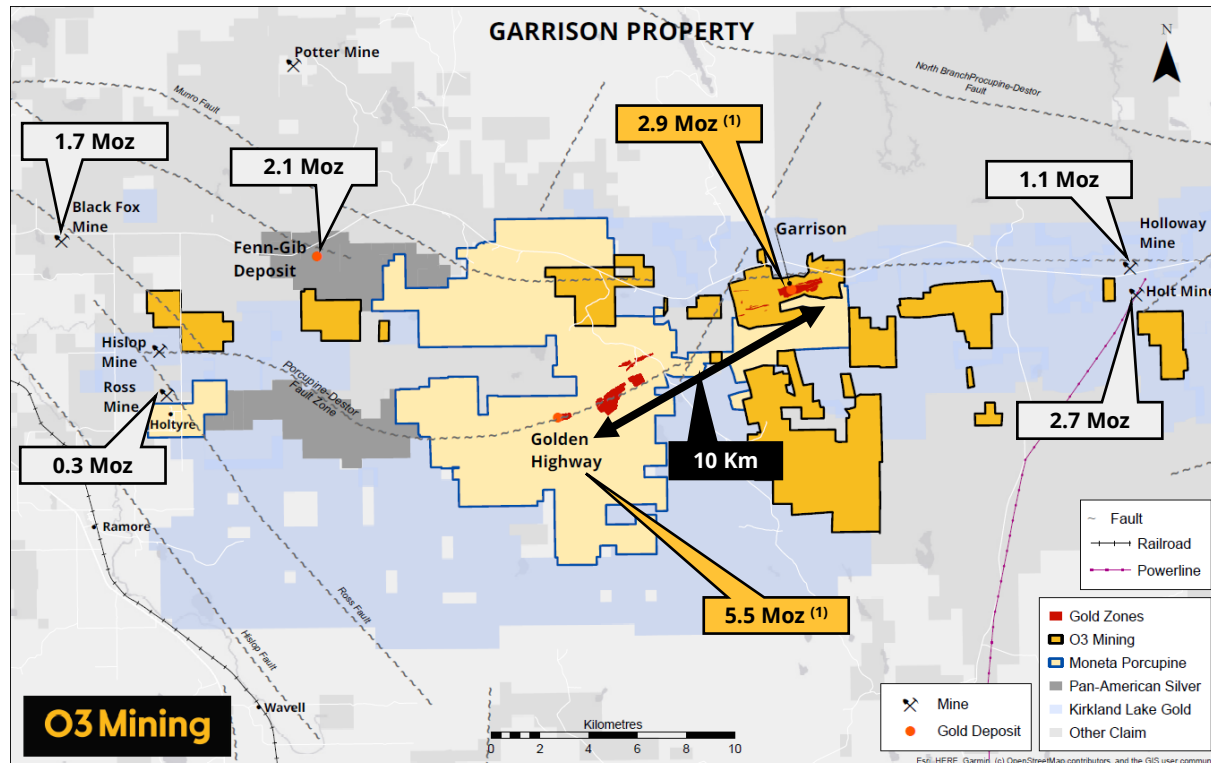
PEA

40,000m drilling program
Combined PEA & expanded resources update

H1-2022

Resources

New resource estimate for combined project



O3 Mining will own approximately 30% of New Moneta retaining exposure to the upside

1/ See N.I. 43-101 technical report Golden Highway dated on December 10, 2020, and Garrison Resources Update dated on December 14, 2020

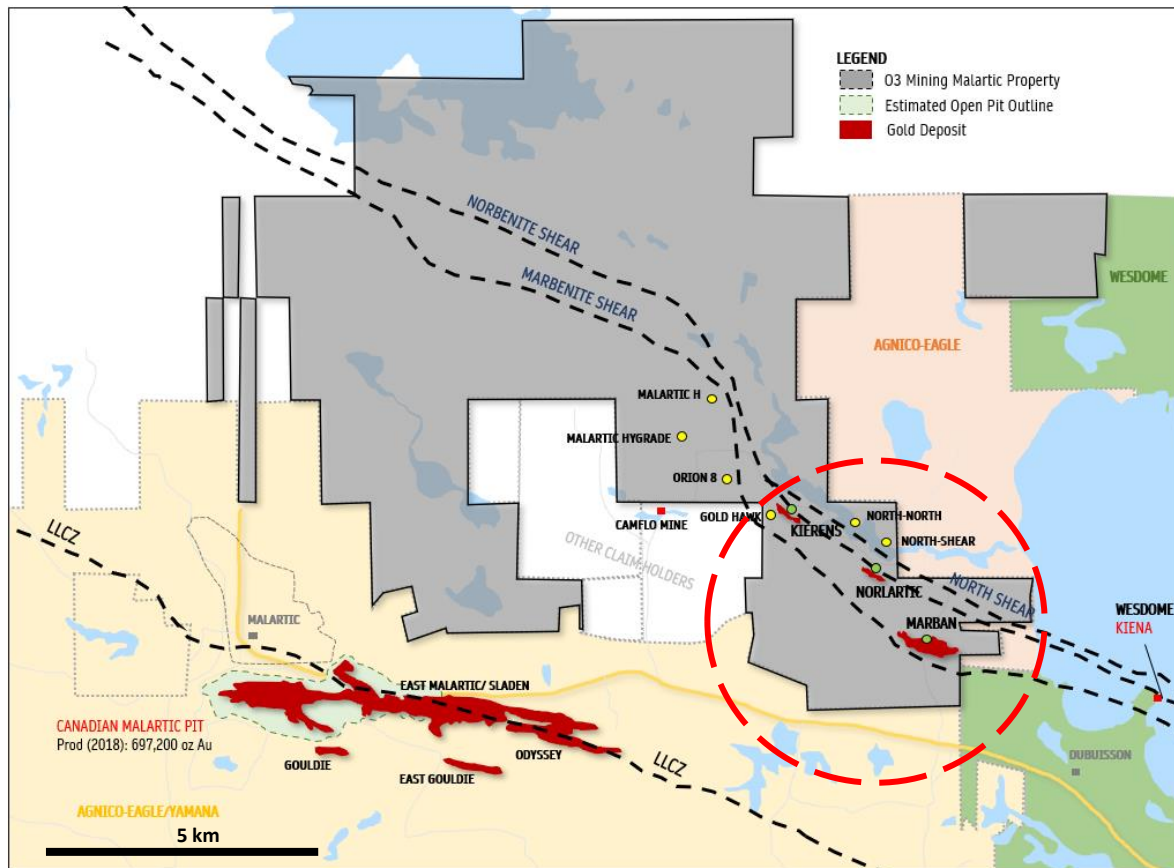


Val-d'Or Advantage

- 66,000 ha in Val-d'Or
- 150,000 metres Drill Program

Project Overview

- **100% ownership**
- **12km** from **Canadian Malartic mine** and **8km** from **Kiena mine**
- **+600,000m drilling** completed, **C\$60M invested** in the ground
- M+I is **75%** of total resources
- **50,000m resource expansion** drilling program underway
- **Tier 1** mining jurisdiction with Québec **flow-through** exploration financing advantage
- **Key infrastructure:** road, power, experienced local labour force and technical services



Categories	Tonnage (kt)	Au Grade (g/t)	Gold (oz)
Measured	515	1.07	17,662
Indicated	53,636	1.10	1,896,587
Total M+I	54,151	1.10	1,914,249
Inferred	13,187	1.44	610,827
Total Resources	67,338	1.16	2,525,076

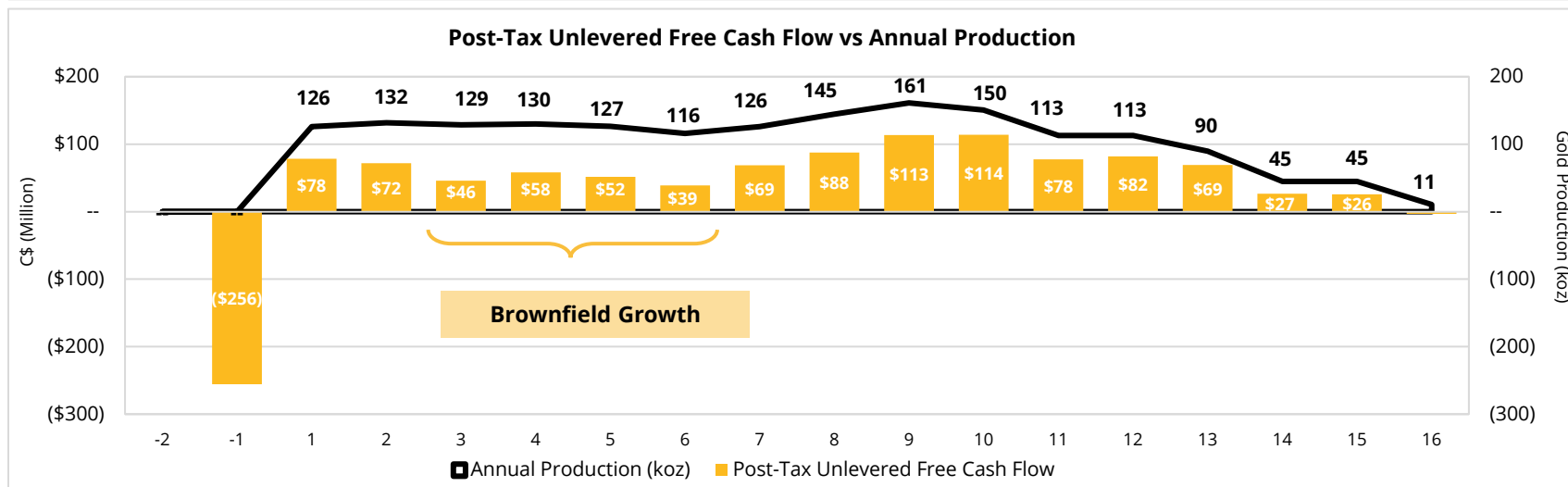
Robust Project Economics and Tangible Enhancement Potential

US\$1,450/oz
Base Case

Post-tax NPV _{5%}	C\$423M
Post-tax IRR	25.2%
CAPEX	C\$256M
Life of Mine	15.2 years
Total Production	1.8Moz
Avg. Annual Production	115,000oz
AISC	US\$822/oz

MCap¹: C\$199M

		PEA Base Case Price	Consensus Price ²	Spot Price ¹
Gold Price	US\$/oz	US\$1,450	US\$1,770	US\$1,850
Post-Tax	NPV (5%)	C\$423M	C\$725M	C\$800M
	IRR	25.2%	39.4%	42.9%
	Payback	4.0 years	2.4 years	2.2 years



1/ As of February 3rd, 2021

2/ Consensus Commodity Prices as of January 04, 2021

Marban – Brownfield Growth Opportunity

O3 Mining

Kierens-Nolartic Pit

14,900oz Au (450KT @ 1.03g/t) Meas
246,430oz Au (6.6MKT @ 1.15g/t) Ind
286,724oz Au (6.3MT @ 1.42g/t) Inf

Kierens-Nolartic UG

58,504oz Au (510KT @ 3.57g/t) Ind
11,560oz Au (119KT @ 3.02g/t) Inf

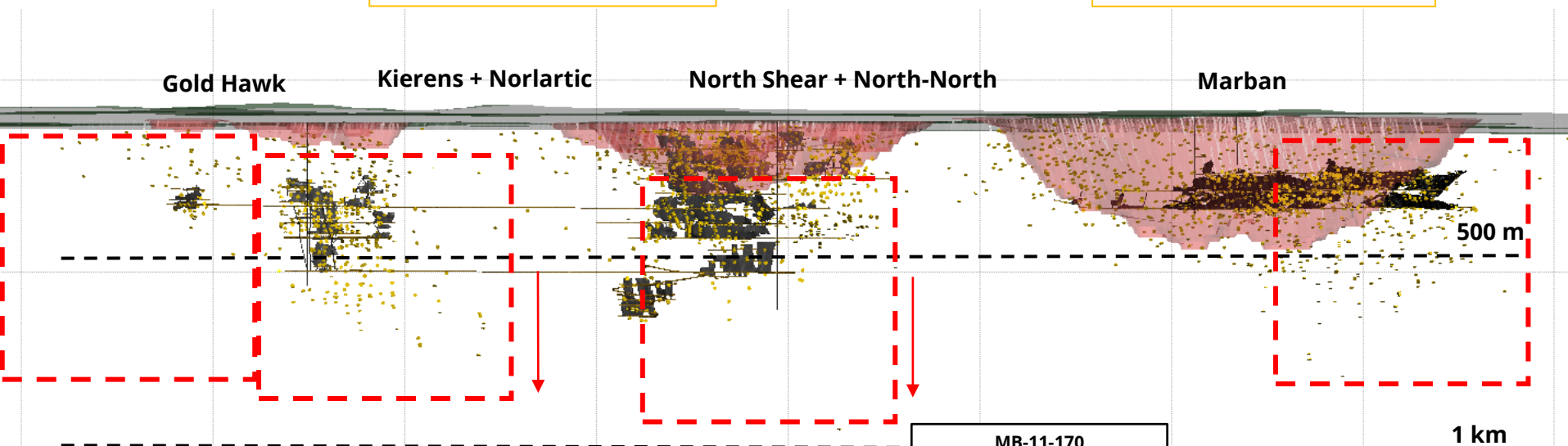
50,000m brownfield
resource expansion
drilling at Marban

Marban Pit

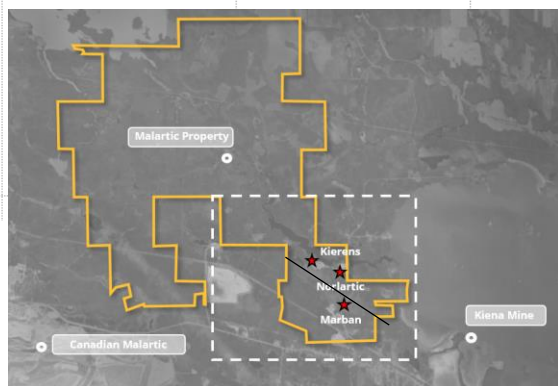
2,762oz Au (65KT @ 1.32g/t) Meas
1,537Moz Au (46.3MT @ 1.03g/t) Ind
227,226oz Au (6.5MT @ 1.09g/t) Inf

Marban UG

54,982oz Au (220KT @ 7.77g/t) Ind
85,317oz Au (304KT @ 8.73g/t) Inf



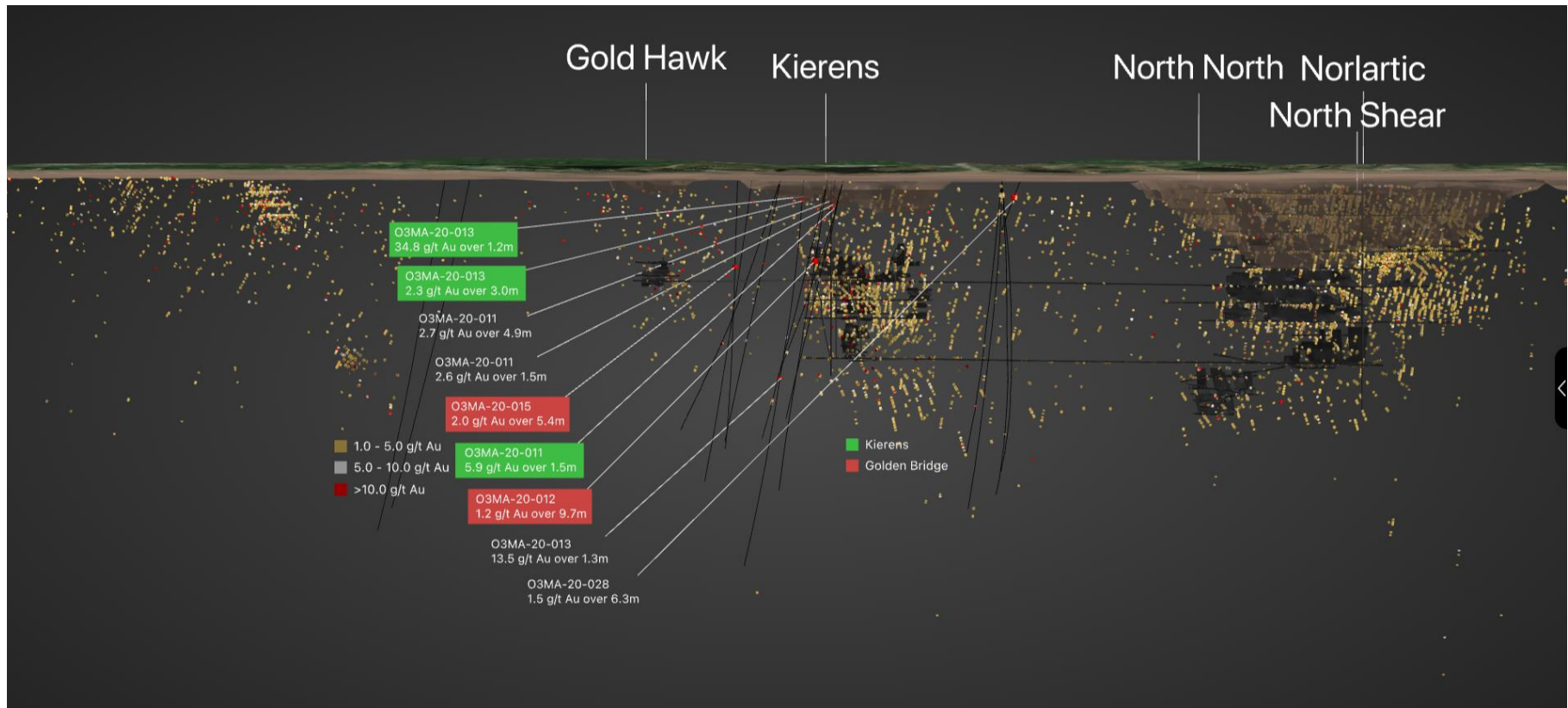
MB-11-170
30,100 g/t Au over 0.5m

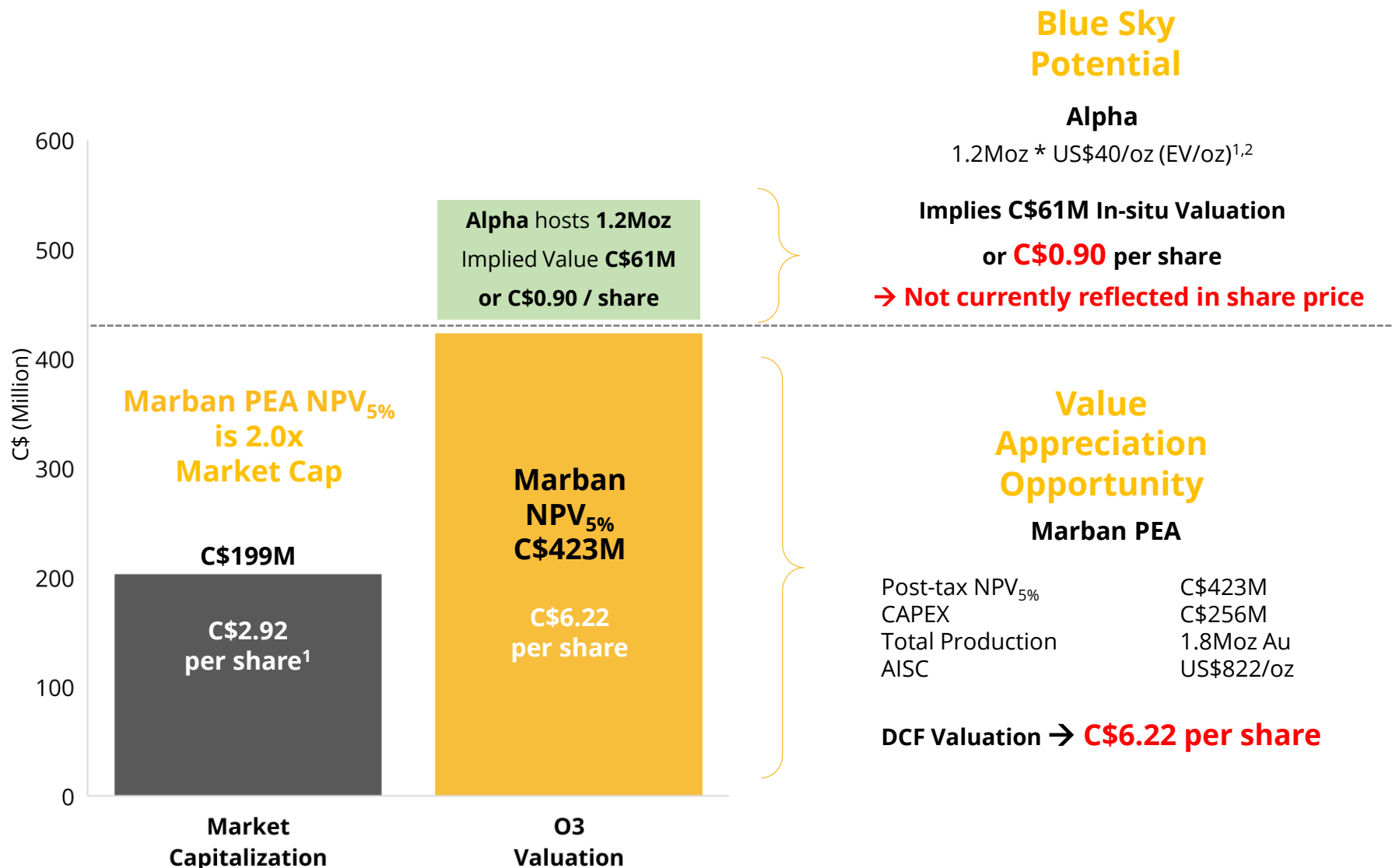


Plunge 00
Azimuth 019

0 125 250 375 500

Potential to Generate New Open Pit Resource



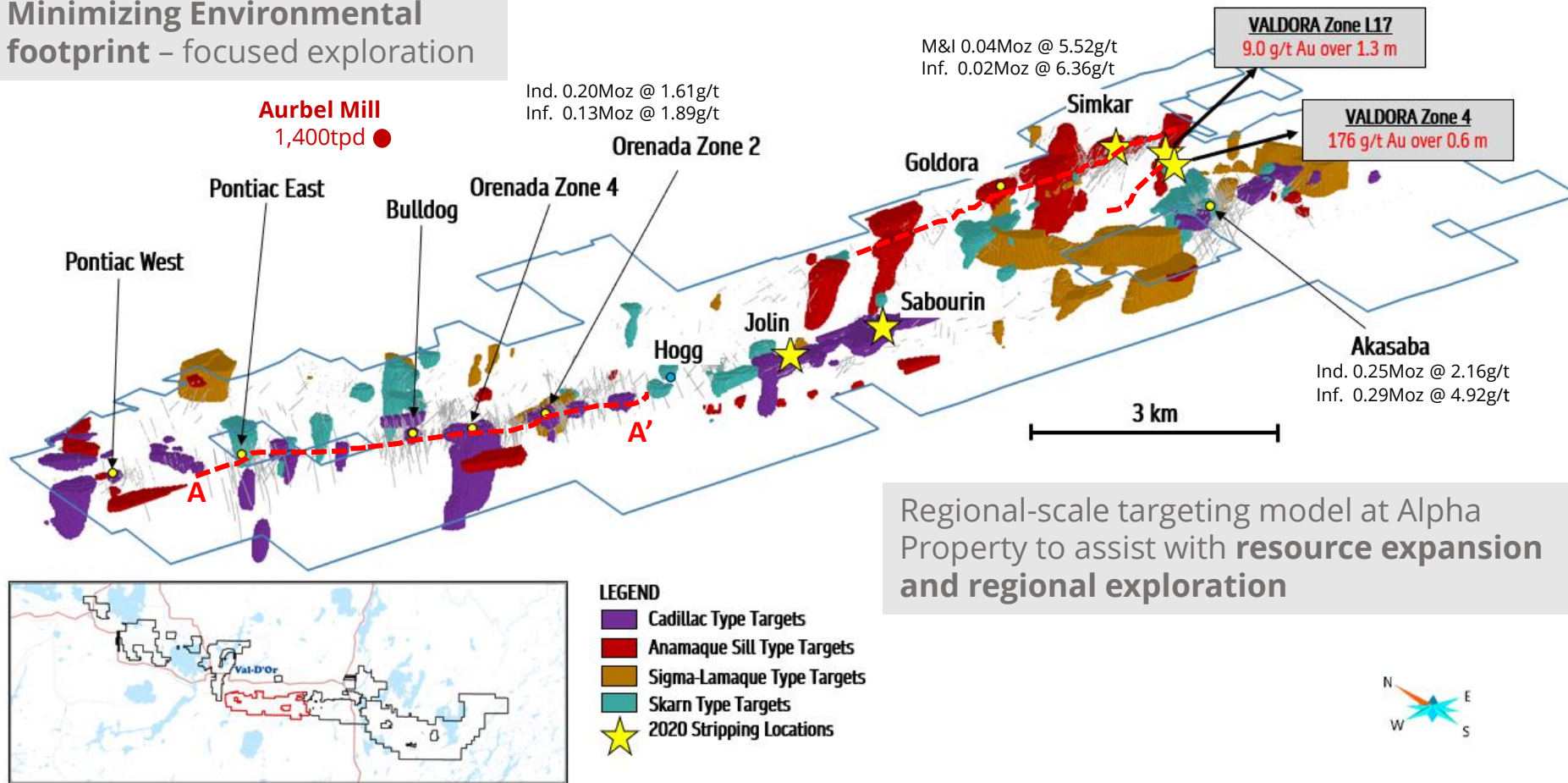


1/ As of February 3rd, 2021

2/ Conservative EV/oz multiple below average US\$77/oz - Exchange Rate (\$C:\$US): 0.7821

Over 25 targets identified using artificial intelligence

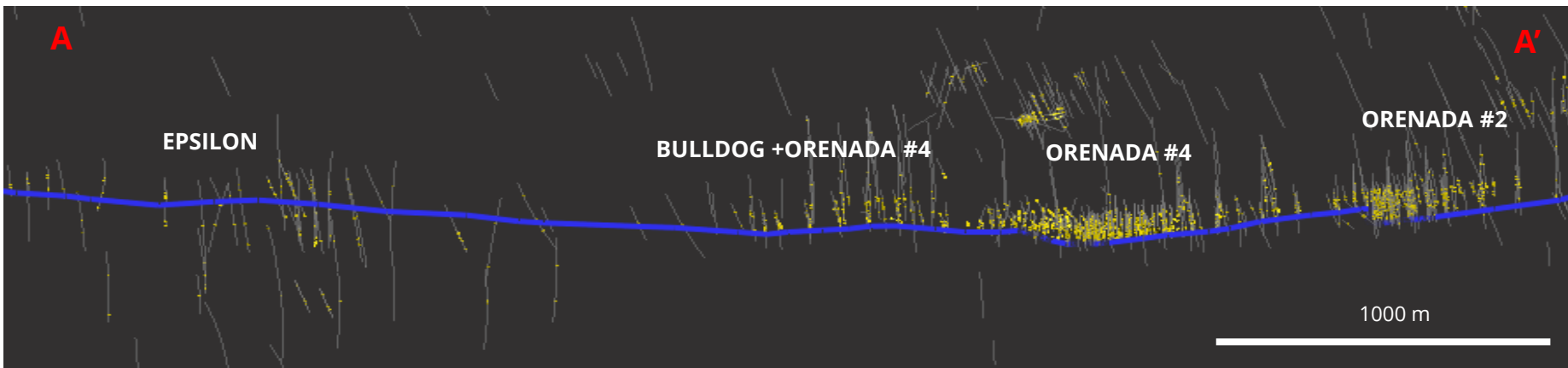
Minimizing Environmental footprint – focused exploration



Mineral Prospectivity Indices (MPI) Map of Alpha Property

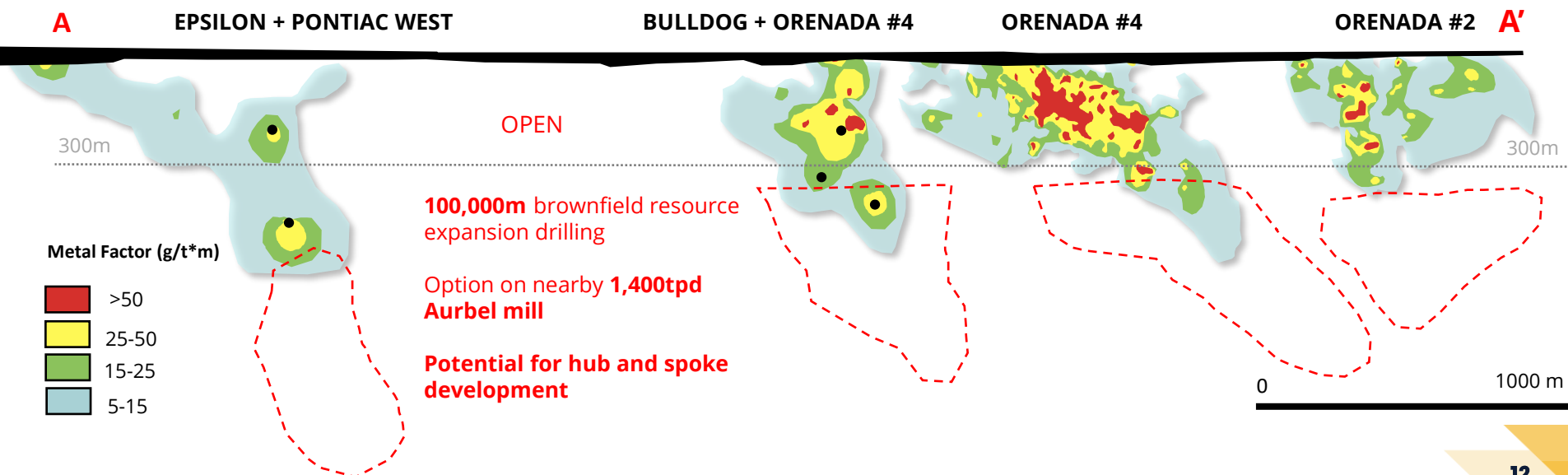
Mineralized Footprint

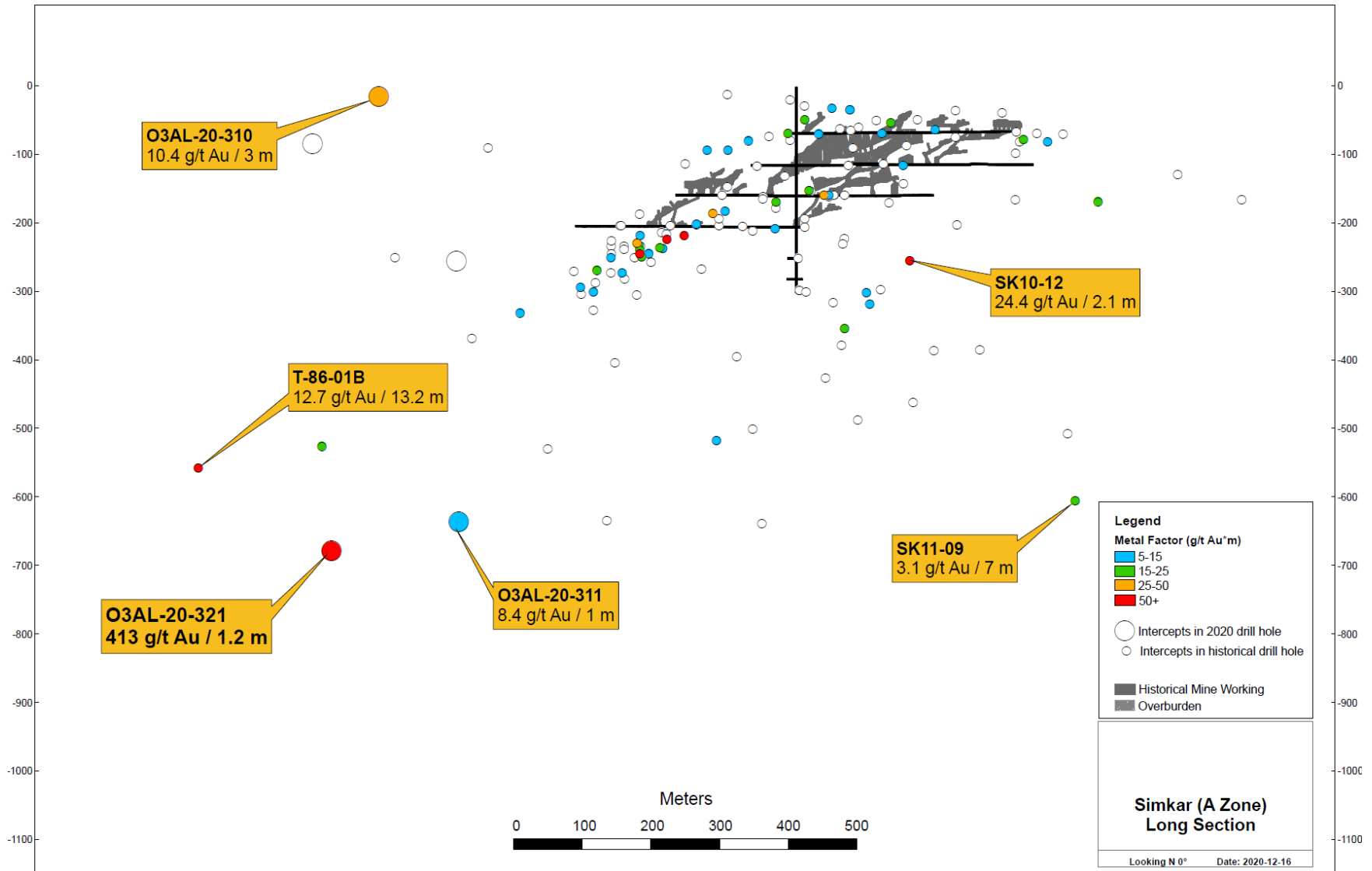
4 km



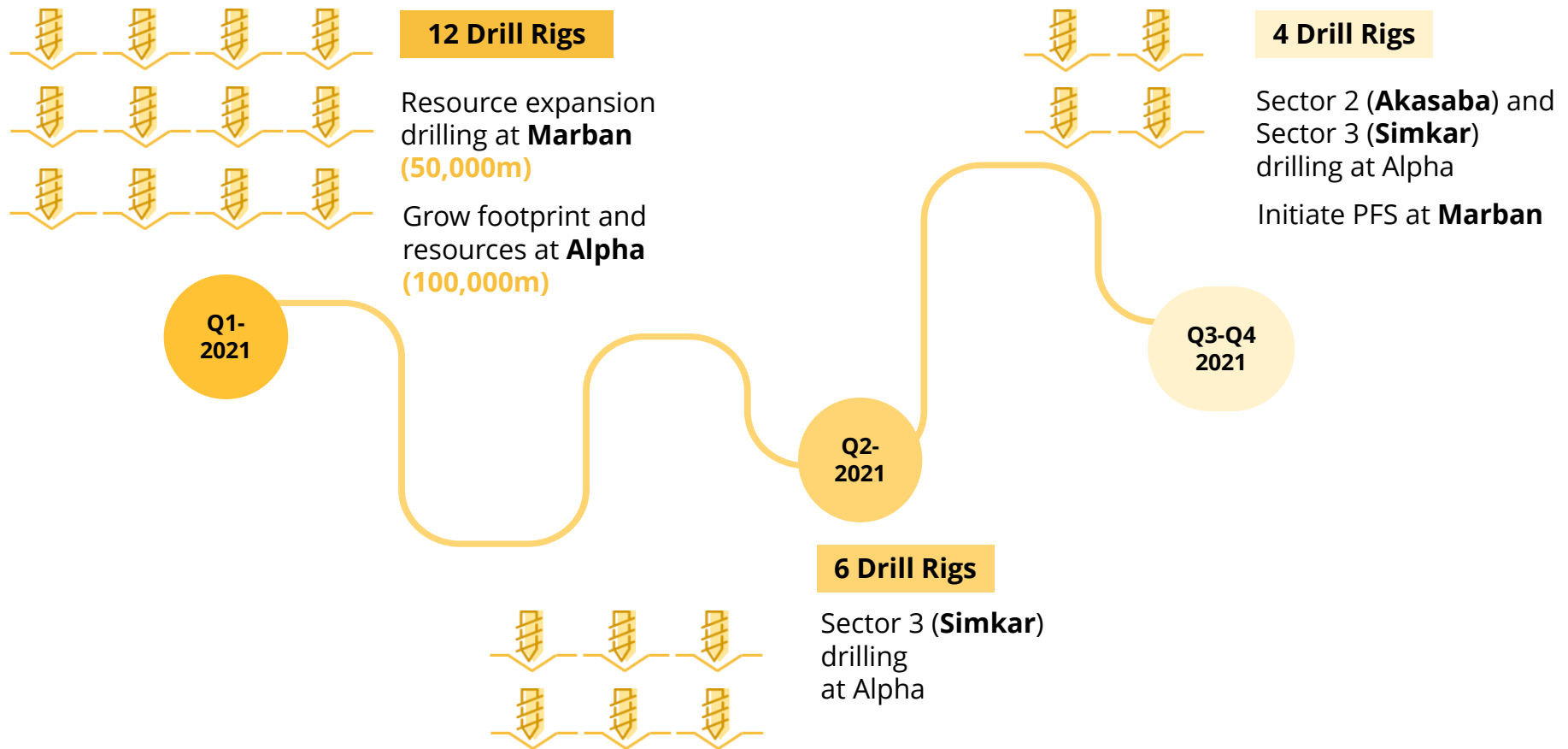
Longitudinal Section – Looking NNE

ORENADA 4 & 2
 194 522 oz Au (3.75 MT @ 1.61 g/t) Ind.
 126 259 oz Au (2.08 MT @ 1.89 g/t) Inf.





Unlocking Value in Val-d'Or – 150,000m drill program



Continuous news flow every 2-3 weeks

What we have accomplished



2020 Milestones

- ✓ Completed Positive **PEA** for **Marban** with **NPV_{5%} C\$423M**
- ✓ Assembled **66,000 ha** prospective land package in **Val-d'Or**
- ✓ Built a **3.9Moz Au** portfolio
- ✓ Completed **68,080m** of drilling
- ✓ Optioned **1,400 tpd Aurbel mill** located 10km from **Alpha**
- ✓ **Non-core assets** divested for a total of **C\$5.3M** retaining royalties
- ✓ Listed on **OTCQX Market**

Next Steps



2021 Plan Ahead

- ⊕ Grow **footprint** and **resources** with **150,000m** drilling campaign using **12 rigs**
- ⊕ Continue **50,000m brownfield** resource expansion drilling at **Marban**
- ⊕ Continue to **grow resources** at **Alpha** with **100,000m** systematic drilling
- ⊕ Initiate a **Pre-Feasibility Study** on Marban
- ⊕ Maintain exposure to Timmins camp through **Moneta Porcupine** partnership

Appendix

Governance

- **Committed to continuous improvement corporate governance practices**

Current policies include:

- Business Conduct and Ethics
- Anti-bribery and anti-corruption
- Corporate Disclosure
- Whistleblower
- Confidentiality and Insider Trading



Environment

- **Committed to protecting the environment and designing projects that minimize carbon footprint**

Social

- **Integrate social and environmental goals into our operations**
- **Manage the interests of a broad spectrum of stakeholders to create maximum economic and social benefit and sustainably**

Current policies include:

- Active engagement on FN IBA'S
- Health & Safety
- Diversity Policy
- Compensation Policy
- Psychological and sexual harassment Policy

Jose Vizquerra

President, Chief Executive Officer & Director

Mr. Vizquerra is President and Chief Executive Officer, and a director of O3 Mining Inc. ("O3 Mining"). Prior to his appointment at O3 Mining, Mr. Vizquerra was Executive Vice President of Strategic Development for Osisko Mining Inc. ("Osisko Mining"). Mr. Vizquerra joined Osisko Mining from Oban Mining Corporation ("Oban"), where, as President and Chief Executive Officer, he played a leading role in the combination of Oban, Corona Gold Corporation, Eagle Hill Exploration Corporation, and Ryan Gold Corporation to form Osisko Mining. Through ambitious drilling and prudent capital raising, Osisko Mining has become the highly valued proponent of the world-class Windfall gold project. Before that, Mr. Vizquerra was Head of Business Development for Compañía de Minas Buenaventura. Previously, he was a production and exploration geologist at the Red Lake gold mine in Ontario.

Mr. Vizquerra currently serves as a director of Osisko Mining, and Sierra Metals Inc., and as an advisor to the boards of Discovery Metals Corporation and Palamina Resources. The Young Mining Professionals recognized Mr. Vizquerra as one of their Young Mining Professionals of the year with the 2019 Peter Munk Award.

Mr. Vizquerra is an alumni of the General Management Program at the Wharton School of Business. He holds an MSc in Mineral Exploration from Queens University and a B.Sc in Civil Engineering from UPC Universidad Peruana de Ciencias Aplicadas. Mr. Vizquerra is a Qualified Person pursuant to National Instrument 43-101.

Blair Zaritsky

Chief Financial Officer

Mr. Zaritsky currently serves as the Chief Financial Officer of O3 Mining Inc., as well as the Chief Financial Officer of Osisko Mining Inc., since June 2011. Mr. Zaritsky possesses over ten years of Canadian public practice experience with exposure to various types of engagements and clients, gained through managing audit engagements of publicly listed companies traded on the Toronto Stock Exchange, TSX Venture Exchange, and Canadian Securities Exchange. He obtained his Chartered Professional Accountant designation in 2003 and holds dual Bachelor of Arts degrees in accounting and economics from Brock University and Western University, respectively. He is currently part of the Board of Directors for Talisker Resources Inc.

Louis Gariepy

Vice President Exploration

Mr. Gariepy currently serves as the Vice President of Exploration of O3 Mining. He is a geological engineer with over 30 years of international mining experience, including substantial experience in Québec and Latin America. Mr. Gariepy most recently served as Exploration Manager of Anglo American plc in Peru, during which time he was instrumental in the delineation of their exploration programs. Prior to his role at Anglo American plc, Mr. Gariepy served as Exploration Manager of IAMGOLD Corporation in Peru from 2005 to 2012, working on a wide array of projects in Latin America. Mr. Gariepy has also worked for Compañía Minera Milpo from 1999 to 2005, where he contributed in making of the Cerro Lindo VMS deposit a world-class mining asset. Mr. Gariepy began his career as a mining explorationist with Noranda Inc. in Québec from 1986 to 1997.

John Burzynski

Chairman

Mr. Burzynski is a Director and Chairman of the Board of O3 Mining Inc. He currently serves as Executive Chairman, Chief Executive Officer and Director of Osisko Mining Inc., having served in those capacities since August 2015, and has been a director of Osisko Mining Inc. (formerly Oban Mining Corporation) since incorporation in February 2010. Mr. Burzynski is currently a director of Osisko Gold Royalties Ltd. and, from June 2014 to August 2016, also served as the Senior Vice President, New Business Development. Mr. Burzynski holds a Bachelor of Science (Honours) degree in Geology from Mount Allison University and a Master of Science in exploration and mineral economics (MINEX) from Queen's University. He is a registered P.Geo. in the province of Québec, and has over 30 years of experience as a professional geologist on international mining and development projects.

Murray John

Lead Director

Mr. John currently serves as a Lead Director of O3 Mining Inc., Chair of the Board of Discovery Metals Corp., Chairman and Director of Prime Mining Corp. and as a Director of Osisko Gold Royalties Ltd. Mr. John is also a former director of Osisko Mining Inc. from August 2015 to June 2018. Prior to his retirement in December 2015, Mr. John was the President and Chief Executive Officer of Dundee Resources Limited, a private resource-focused investment company, and Managing Director and a Portfolio Manager with Goodman & Company, Investment Counsel Inc. Mr. John was also the former President and Chief Executive Officer of Corona Gold Corporation and Ryan Gold Corporation up to 2015. He has been involved with the resource investment industry since 1992 and has worked as an investment banker, buy-side mining analyst, sell-side mining analyst, and portfolio manager. Mr. John graduated from the Camborne School of Mines in 1980. He also received a Master of Business Administration from the University of Toronto in 1993.

Amy Satov

Director

Ms. Satov, B.A., LL.B., M.B.A., currently serves as a Director of O3 Mining Inc., Director of Osisko Mining Inc., Director of Osisko Metals Inc., and as a Director of Brunswick Exploration Incorporated. Ms. Satov is Senior Legal Counsel of Nuvei Technologies Corp. since April 2020. Formerly, Ms. Satov served as Chief Executive Officer of BL Solutions Inc., a national lighting distributor, from November 2019 to March 2020, a director and chair of the audit committee of Cannara Biotech Inc. up to January 2020, and Chief Executive Officer of Litron Distributors Ltd. up to April 2020. Prior to 2012, Ms. Satov was the Executive Vice President of Legal, Compliance and Distribution and Corporate Secretary of DundeeWealth Inc., a wealth management company with \$80 billion of assets under management that was acquired by The Bank of Nova Scotia in 2011. Ms. Satov oversaw all legal and compliance matters, was actively involved in DundeeWealth's expansion into Europe and the U.S. and sat on various subsidiary boards. Ms. Satov advised on all M&A activities as well as securities, regulatory and other corporate commercial matters. In 2010, Ms. Satov was recognized by Strathmore's "Who's Who" for excellence and achievement in her profession.

Keith McKay

Director

Mr. McKay currently serves as a director of O3 Mining Inc. and has been a director of Osisko Mining Inc. since August 2012. His current principal occupation is Chief Financial Officer of Dalradian Resources Inc. since June 2010. Mr. McKay is a Chartered Professional Accountant with extensive experience in the mining industry, including public company reporting requirements, financing, and merger and acquisition transactions. Mr. McKay received his C.A. designation in 1981 with Coopers & Lybrand (now PricewaterhouseCoopers LLP) and holds a Bachelor of Arts Degree from Western University.

Patrick Anderson

Director

Mr. Anderson currently serves as a director of O3 Mining Inc. He was appointed as a director of Osisko Mining Inc. in August 2012. He founded Dalradian Resources Inc. and has served as its Chief Executive Officer from October 2009 to present. Mr. Anderson is an exploration geologist, entrepreneur, and business executive with over 20 years of experience working in the resource sector. Previously, Mr. Anderson was a director, President, Chief Executive Officer and co-founder of Aurelian Resources Inc.

Elijah Tyshynski

Director

Mr. Tyshynski currently serves as a director of O3 Mining Inc. He has almost two decades of experience in International Capital Markets as a Structurer, Trader, and Portfolio Manager. Mr. Tyshynski was a Senior Principal (Portfolio Manager) for the Ontario Teachers' Pension Plan until 2019, where he managed the funds exposure to Emerging Markets. He has also served as Director, Head of Trading, for the Standard Bank of South Africa, in Johannesburg, where he gained considerable exposure to Infrastructure and Commodity Financing on the African Continent. Prior to this, he served as a VP at Morgan Stanley & The Royal Bank of Canada in London, England. Mr. Tyshynski graduated from McGill University with a Bachelor of Arts degree in Economics.

Bernardo Alvarez Calderon

Director

Mr. Calderon currently serves as a director of O3 Mining Inc, and is also a director of Osisko Mining Inc., since April 2014. He is also the Chief Executive Officer of Analytica Mineral Services, having served in that role since January 2005. Mr. Alvarez Calderon has taken the Owners/President Management Program at the Harvard Business School and holds a Bachelor of Science in geological engineering from the Colorado School of Mines.

Project	Tonnage (M)	Gold (M oz)	Au Grade (g/t)
M&I Resources			
Marban (1)	54.1	1.91	1.10
Orenada (2)	3.8	0.20	1.61
Akasaba (3)	3.7	0.25	2.16
Simkar (4)	0.2	0.04	5.52
East Cadillac (5)	0.2	0.03	4.17
Inferred Resources			
Marban (1)	13.2	0.61	1.44
Orenada(2)	2.1	0.13	1.89
Akasaba (3)	1.8	0.29	4.92
Simkar (4)	0.1	0.02	6.36
East Cadillac (5)	1.1	0.15	4.09
Sleepy (6)	1.9	0.28	4.70

Notes:

(1) See Marban Technical Report 2020 (2) See Orenada Technical Report 2018 (3) See Akasaba Technical Report 2014 (4) See Simkar Gold Technical Report 2015 (5) See East Cadillac Technical Report 2017 (6) See Sleepy Technical Report 2014

General	LOM Total / Avg.
Gold Price (US\$/oz)	\$1,450
Exchange Rate (\$C:\$US)	C\$1.00 : US\$0.74
Mine Life (years)	15.2
Total Waste Tonnes Mined (kt)	355,627
Total Mill Feed Tonnes (kt)	60,356
Strip Ratio	5.89:1
Production	LOM Total / Avg.
Mill Head Grade Y1-Y10 (g/t)	1.13
Mill Head Grade LOM (g/t)	0.97
Mill Recovery Rate (%)	93.7%
Total Mill Ounces Recovered (koz)	1,757
Total Average Annual Production (koz)	115
Operating Costs	LOM Total / Avg.
Mining Cost (C\$/t Mined)	\$2.7
Mining Cost (C\$/t Milled)	\$17.9
Processing Cost (C\$/t Milled)	\$9.6
G&A Cost (C\$/t Milled)	\$0.7
Total Operating Costs (C\$/t Milled)	\$28.2
Refining & Transport Cost (C\$/oz)	\$2.5
*Cash Costs (US\$/oz Au)	\$741
**AISC (US\$/oz Au)	\$822

Capital Costs	LOM Total / Avg.
Initial Capital (C\$M)	\$256
Sustaining Capital (C\$M)	\$189
Closure Costs (C\$M)	\$10
Salvage Costs (C\$M)	\$7
Financials - Pre Tax	LOM Total / Avg.
NPV (5%) (C\$M)	\$715
IRR (%)	31.5%
Payback (years)	3.7
Financials - Post Tax	LOM Total / Avg.
NPV (5%) (C\$M)	\$423
IRR (%)	25.2%
Payback (years)	4.0

* Cash costs consist of mining costs, processing costs, mine-level G&A and refining charges and royalties

** AISC includes cash costs plus sustaining capital, closure cost and salvage value

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