O3 Mining

AN OSISKO GROUP COMPANY

Corporate Presentation

May 14th, 2021

TSX.V: OIII OTCQX:OIIIF

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 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 May 13th , 2021.

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

Vision : To Become Best-in-class Gold Producer

O3 Mining

Mission

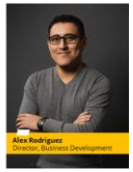
To be a premier gold exploration and mine development company by delivering superior returns to our shareholders and long-term benefits to our stakeholders.

Quality Assets

Marban

Alpha

Strong Management



Financial Strength

C$164.7M
Market Capitalization[1]

C$141.4M
Cash & Investments[2]

ESG Commitment

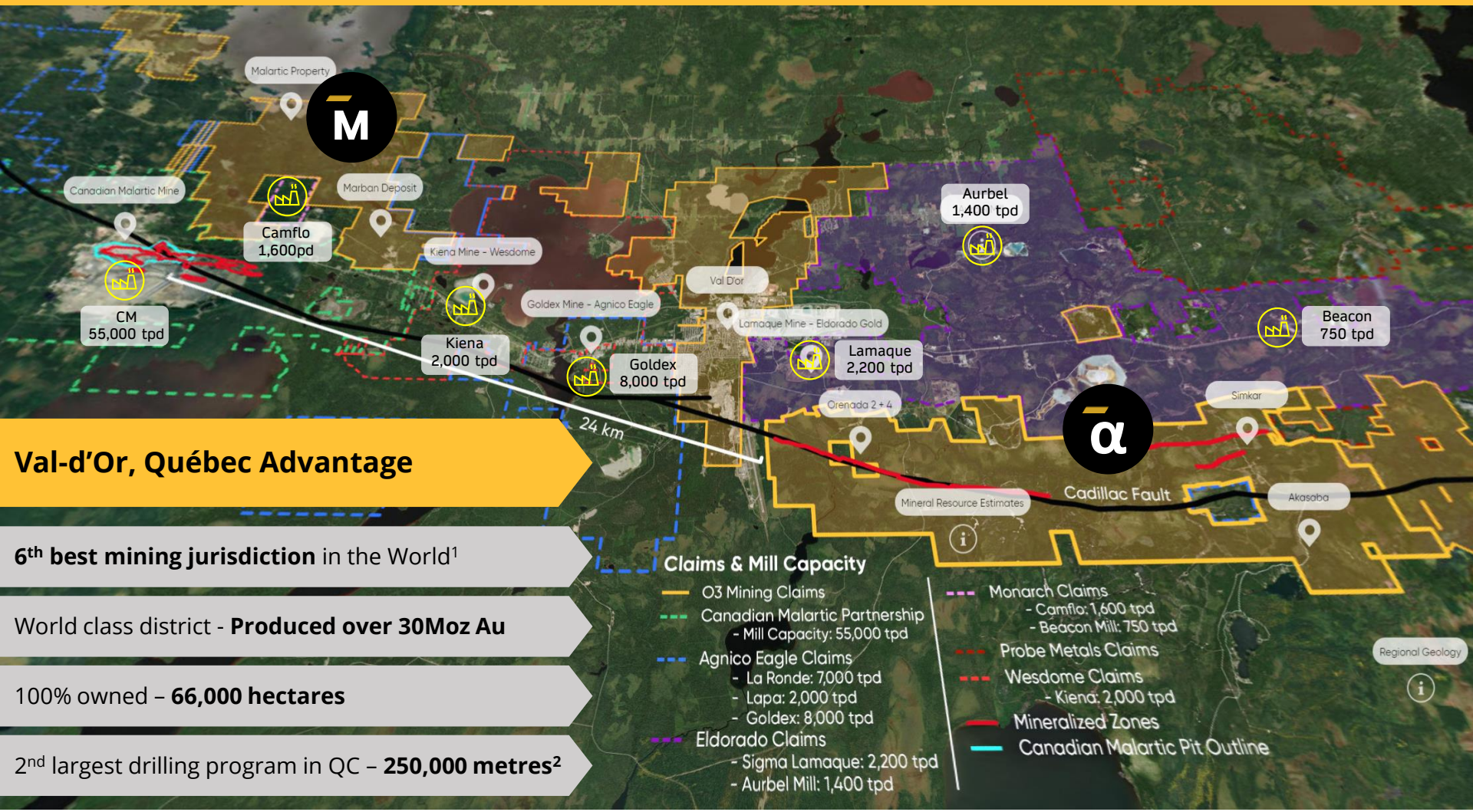
The Environment
Our
Health & Safety
Community
Governance & Ethics

1/ As of May 13th, 2021
2/ Cash and Investments as of December 31, 2020 + Moneta's investment (As of May 13th, 2021) + C$35.0M Financing

Val-d'Or Consolidation

O3 Mining

Focused on mineral resource growth - 3.9Moz[3] Au added in Québec



Val-d'Or, Québec Advantage

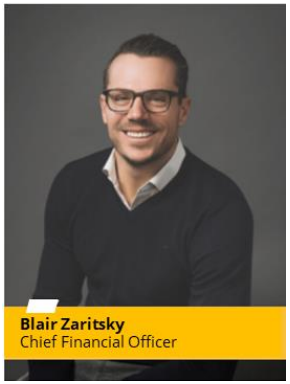
- **6th best mining jurisdiction** in the World[1]
- World class district - **Produced over 30Moz Au**
- 100% owned – **66,000 hectares**
- 2nd largest drilling program in QC – **250,000 metres[2]**

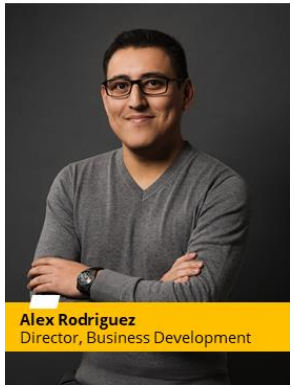
1/ Fraser Institute 2020 – Investment attractiveness index
2/ 2021-2022 Drilling program
3/ Mineral Inventory (Appendix)

Experienced Management & Board of Directors

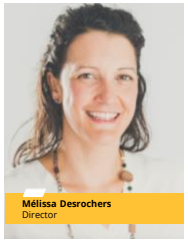
O3 Mining

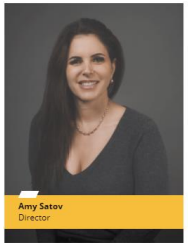
Management Team

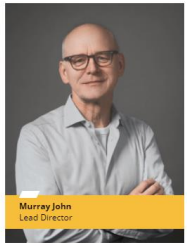


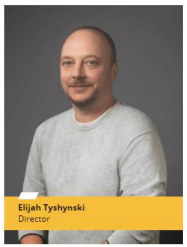


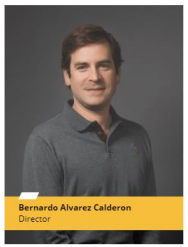
Board of Directors



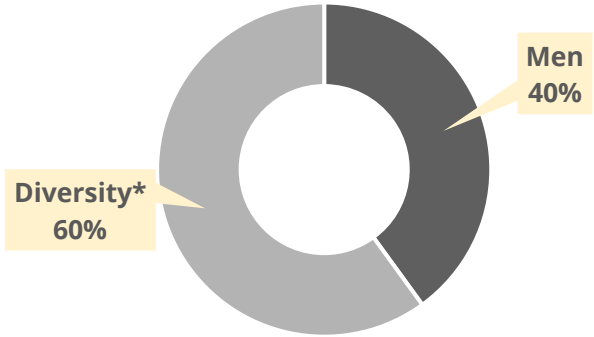








Management Team

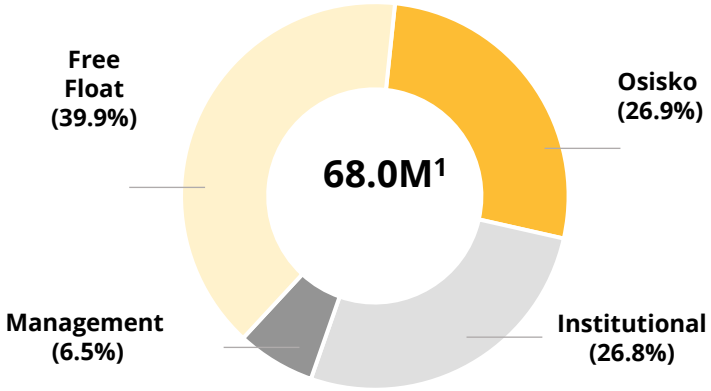


*** Diversity includes women and visible minorities**

Strong Financial Position

O3 Mining

Corporate Structure



Key Financials

C$164.7M
Market Capitalization[1]

C$141.4M
Cash & Investments[2]

C$23.3M
Enterprise Value[1]

US$6.0
EV/oz Au[1]

3.9Moz
Total Resources[3]

C$103.8M
Financing 2019-2021

1/ As of May 13th, 2021 - Exchange Rate ($C:$US): 0.8223
2/ Cash and Investments as of December 31, 2020 + Moneta's investment (As of May 13th, 2021) + C$35.0M Financing
3/ Mineral Inventory (Appendix)

Marban – Building a Mine in Val-d'Or

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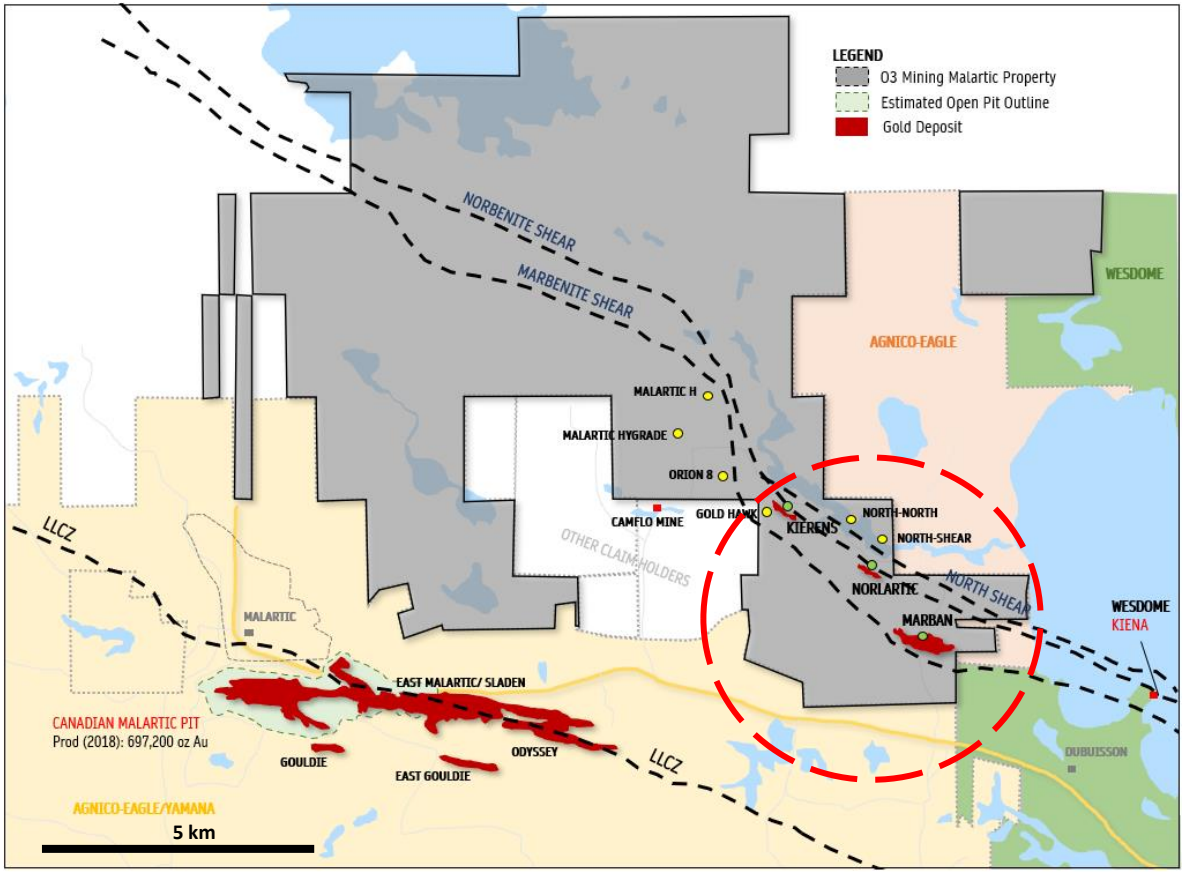
Project Overview

- **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
- **125,000m (2021-2022) resource expansion** drilling program underway
- **Tier 1** mining jurisdiction with Québec **flow-through** exploration financing advantage
- **Key infrastructure:** railway, hydropower, 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**

Marban – Brownfield Growth Opportunity

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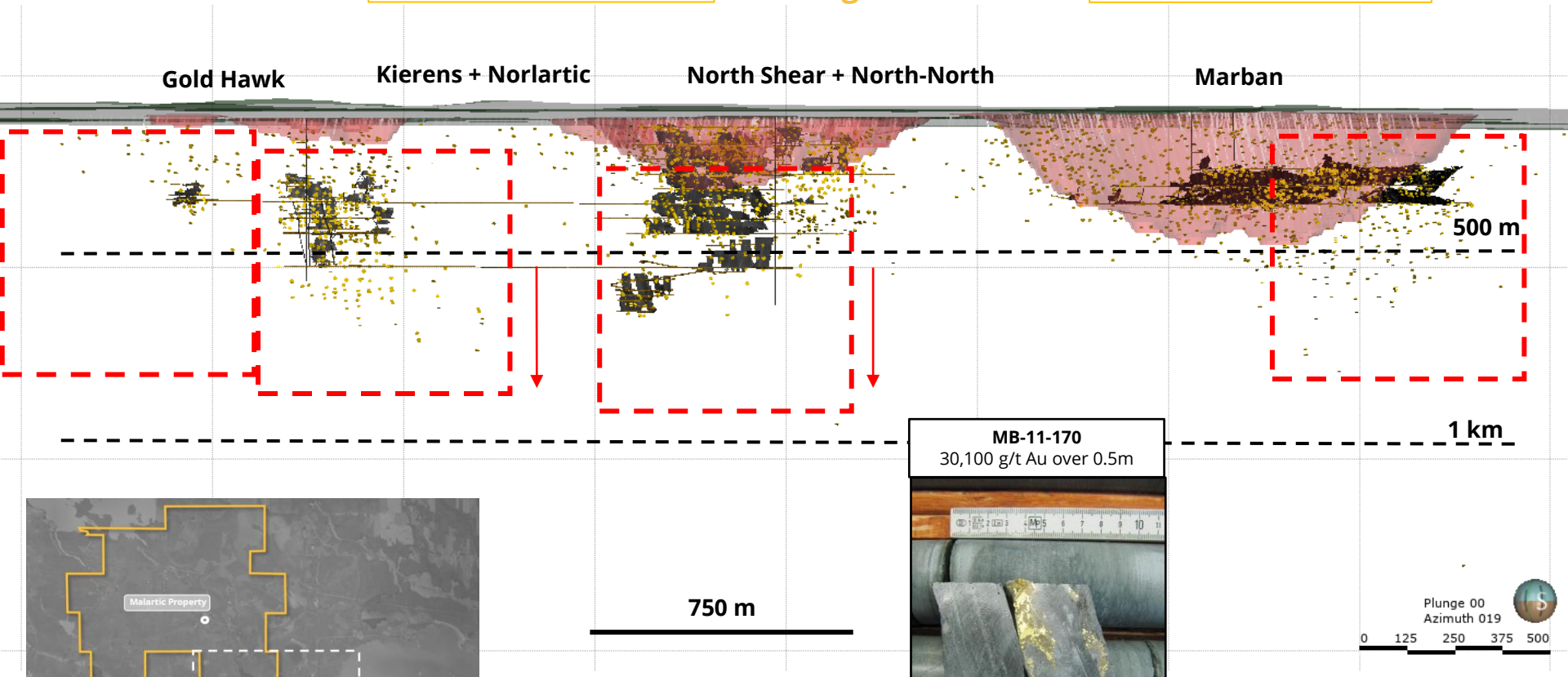
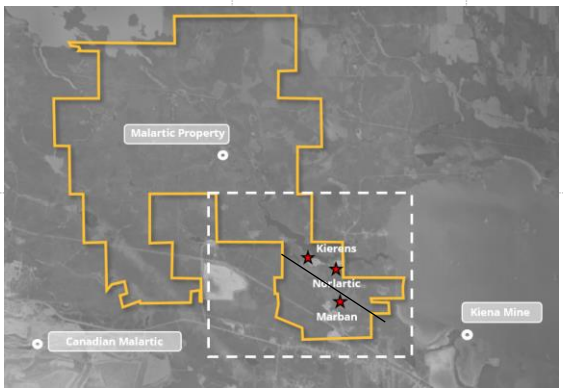
Kierens-Nolartic Pit
14,900oz Au (450KT @ 1.03g/t) Meas
246,430oz Au (6.6MKT @ 1.15g/t) Ind
286,724oz Au (6.3MT @ 1.42g/t) Inf
Kierens-Nolartic UG
58,504oz Au (510KT @ 3.57g/t) Ind
11,560oz Au (119KT @ 3.02g/t) Inf

125,000m brownfield resource expansion drilling at Marban

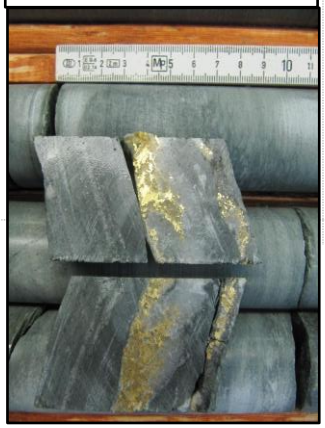
Marban Pit
2,762oz Au (65KT @ 1.32g/t) Meas
1.537Moz Au (46.3MT @ 1.03g/t) Ind
227,226oz Au (6.5MT @ 1.09g/t) Inf
Marban UG
54,982oz Au (220KT @ 7.77g/t) Ind
85,317oz Au (304KT @ 8.73g/t) Inf





750 m

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



Marban – Comparable Depth to Other Deposits

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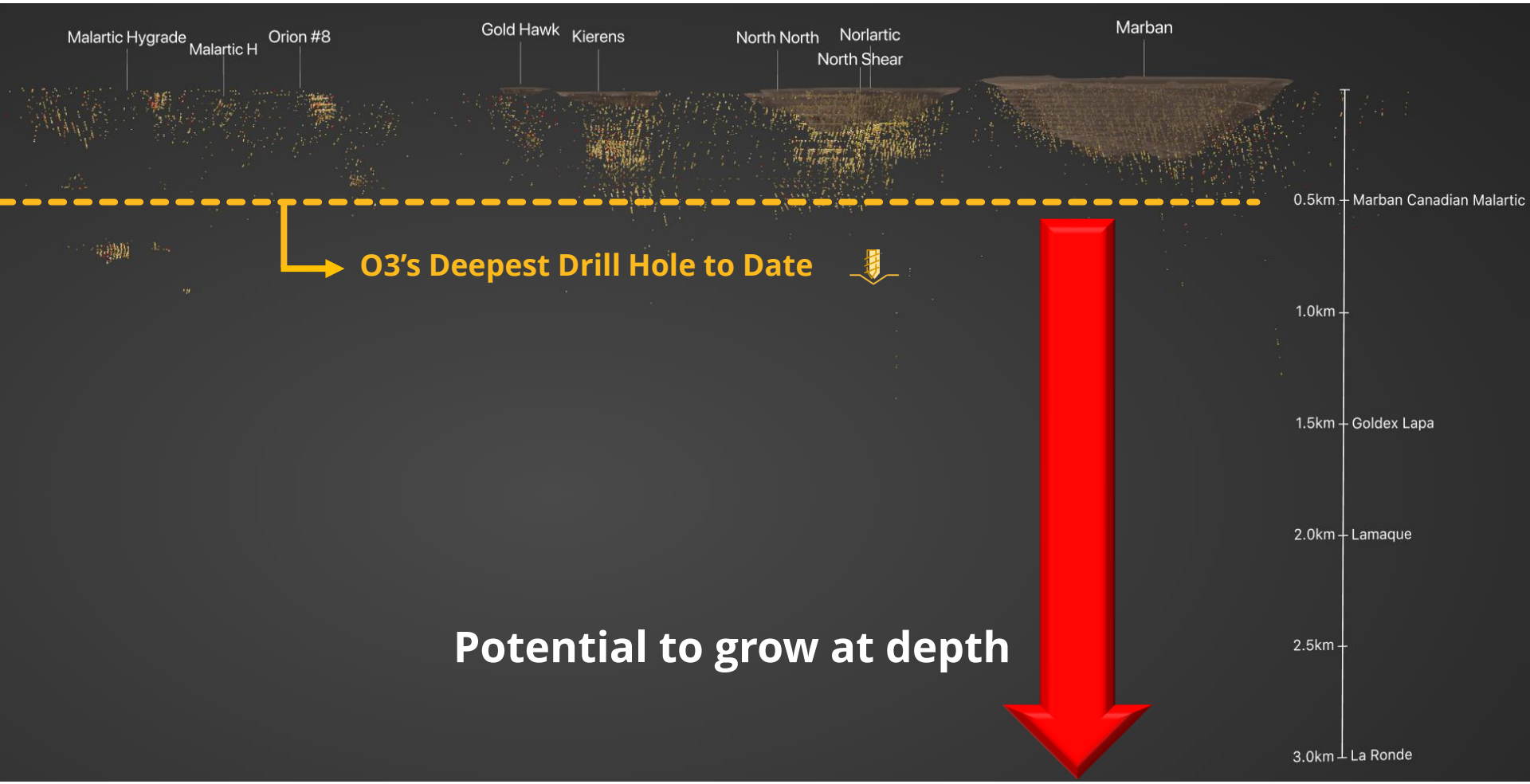

Marban Timeline

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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**

MCap[1]: C$164.7M

		PEA Base Case Price	Consensus Price[2]	Spot Price[1]
Gold Price	**US$/oz**	**US$1,450**	**US$1,780**	**US$1,800**
Post-Tax	NPV (5%)	**C$423M**	C$735M	**C$753M**
	IRR	**25.2%**	39.8%	**40.7%**
	Payback	**4.0 years**	2.4 years	**2.3 years**

The Road to Production

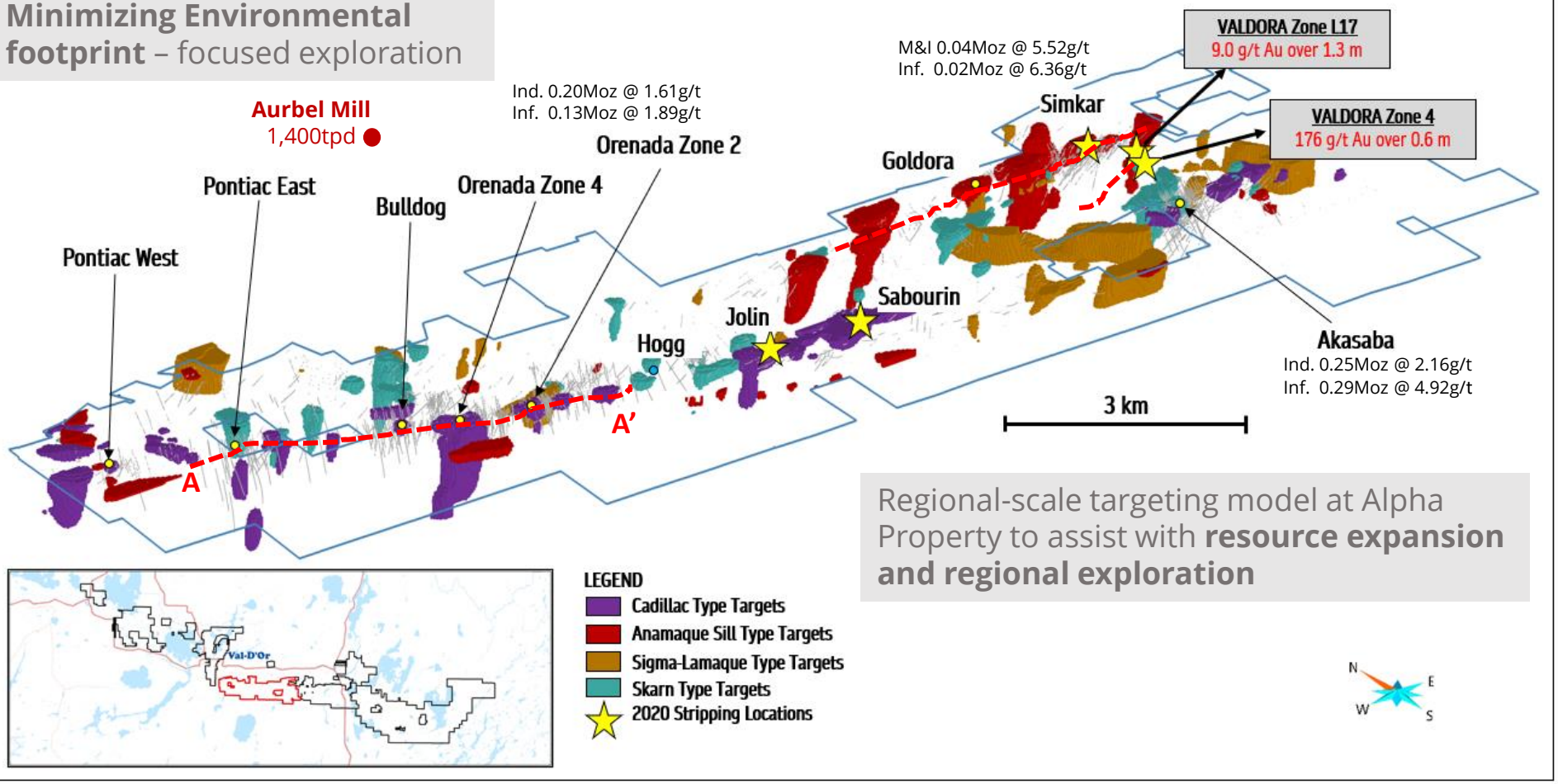
115,000oz Annually

2021	2022	2023	2024	2025	2026
Pre-Feasibility Study		Feasibility Study	Detailed engineering	Construction Commissioning	

1/ As of May 13th, 2021
2/ Consensus Commodity Prices as of February 01, 2021

Over 25 targets identified using artificial intelligence

Minimizing Environmental footprint – focused exploration



Regional-scale targeting model at Alpha Property to assist with **resource expansion and regional exploration**

Mineral Prospectivity Indices (MPI) Map of Alpha Property

Alpha Property Longitudinal

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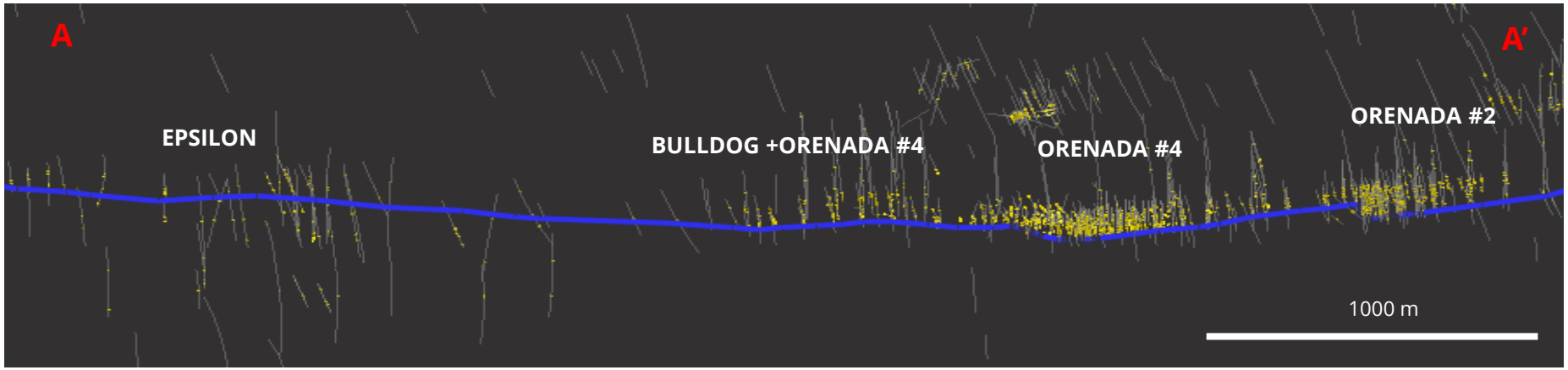
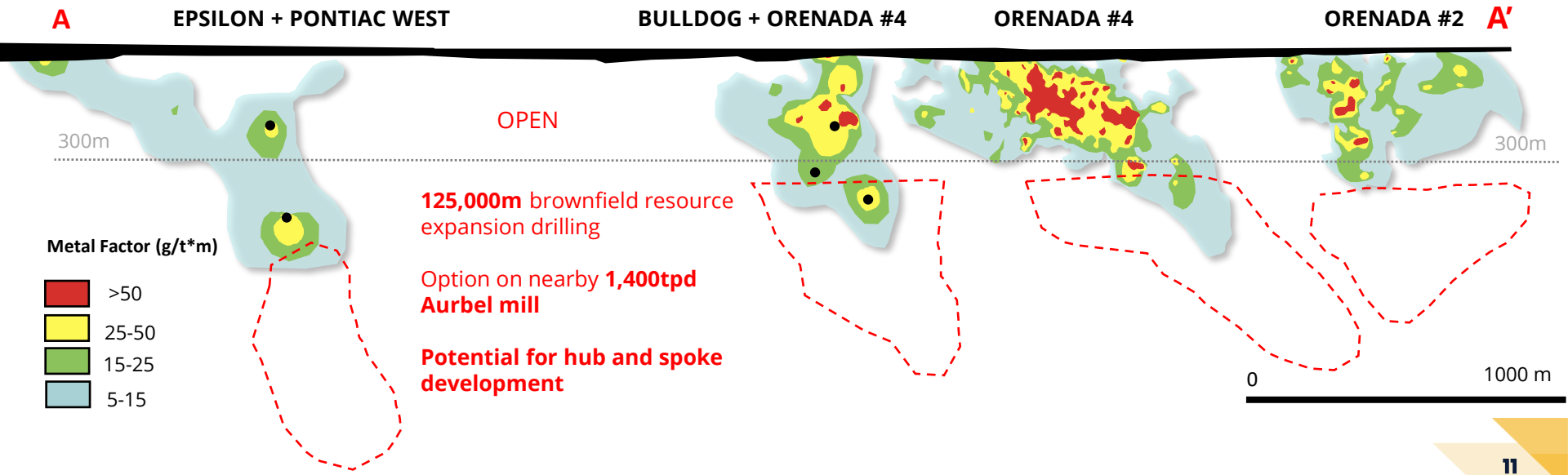
Mineralized Footprint

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.



Simkar – Sector 3 Longitudinal Section

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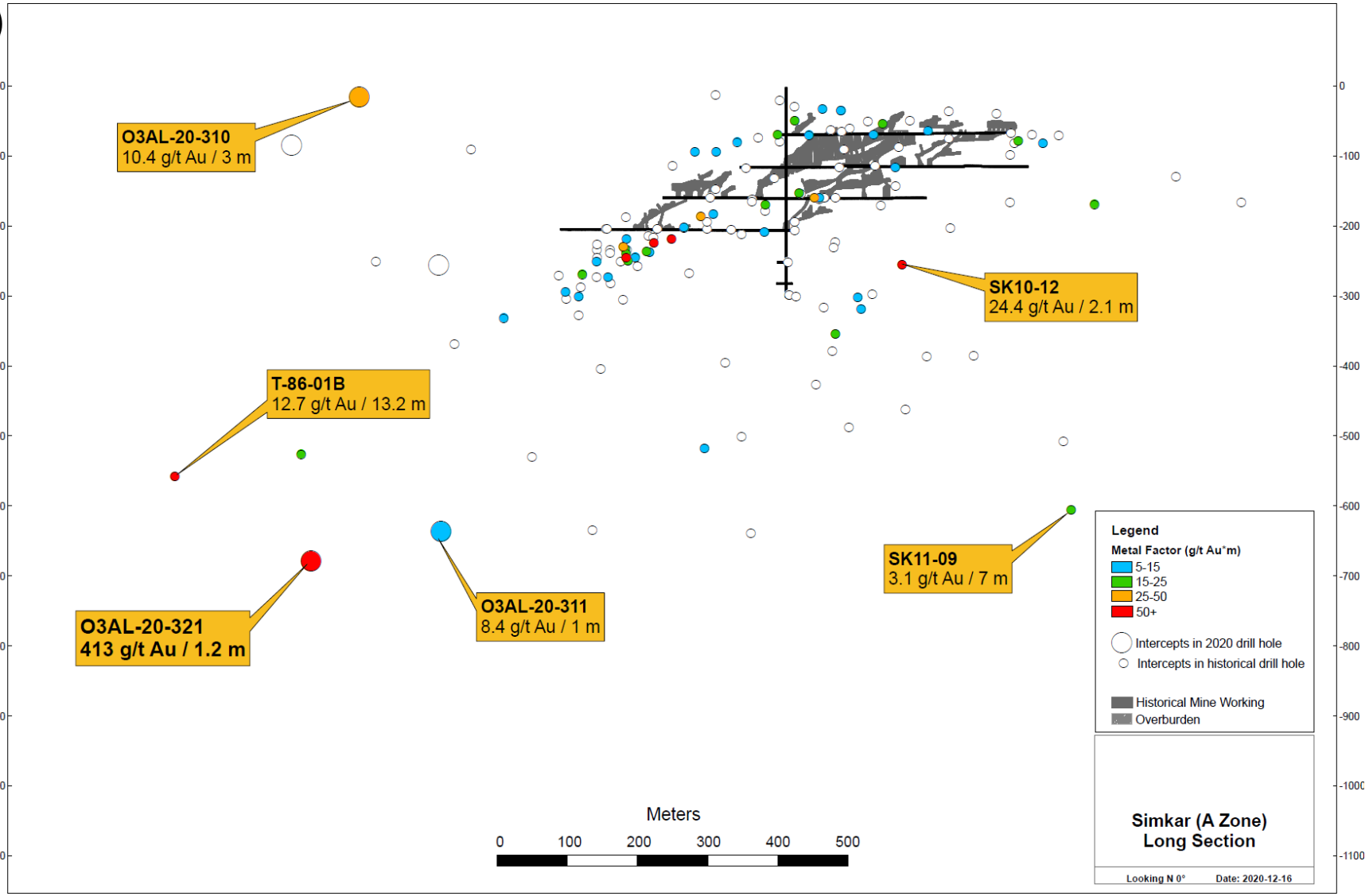

Creating Shareholder Value

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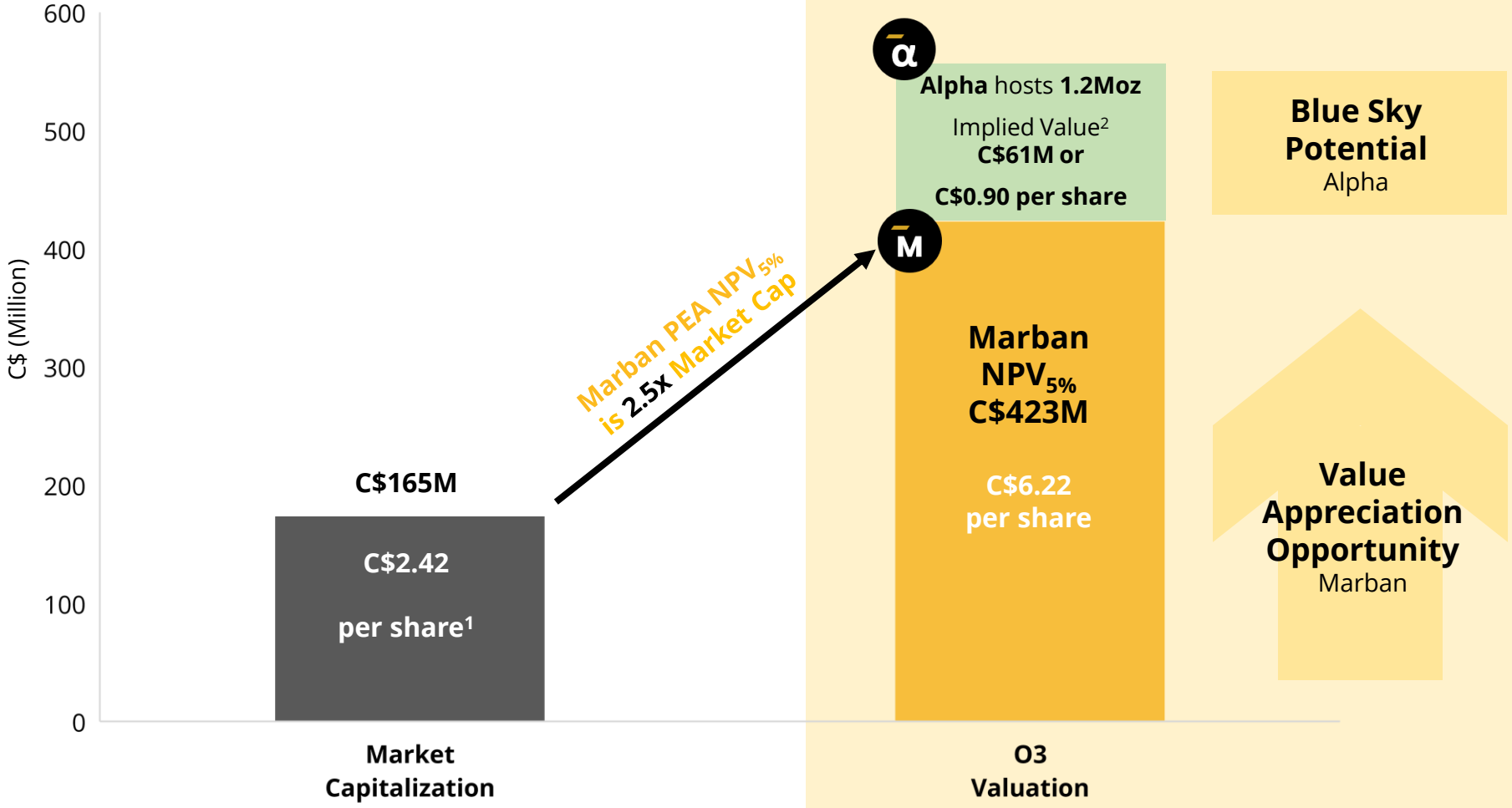
Market Capitalization

O3 Valuation



1/ As of May 13th, 2021
2/ Conservative EV/oz multiple of US$40/oz below average US$77/oz - Exchange Rate ($C:$US): 0.8223

250,000m Drill Program

Q1 2021

10 Drill Rigs Total

- Resource expansion drilling at Marban (4 drill rigs)
- Grow footprint and resources at Alpha (6 drill rigs)
- Partnered with Moneta Porcupine for ~ 27% ownership

Q2 2021

6 Drill Rigs Total

- Continue Resource Expansion
- Marban (3 drill rigs)
- Alpha (3 drill rigs)
- Initiate ECOLOGO Certification Process

Q3 & Q4 2021

8 Drill Rigs Total

- O3 Mining updated Resources
- Marban (5 drill rigs)
- Alpha (3 drill rigs)
- Initiate a Pre-Feasibility Study on Marban

Analyst Coverage
Current Price[1] $2.42
Average Target Price $5.18

CORMARK SECURITIES INC. · Sprott · STIFEL | GMP · cg Canaccord Genuity · VIII EIGHT CAPITAL · CIBC · NATIONAL BANK FINANCIAL MARKETS

1/ As of May 13th, 2021

O3 Mining

Appendix

John Burznski

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.

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.

Jose Vizquerra

President, CEO & 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 Compañia 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.

Murray John

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.

Mélissa Desrochers

Director

Mélissa Desrochers currently serves as director of O3 Mining Inc and is a Public Affairs, Communications and Stakeholders Engagement Consultant for a Québec company. She is an experienced consultant with a background in strategic communications and stakeholder engagement for major and complex projects within the mining industry. Her expertise lies in communications, government relations and enhancing companies Environmental, Social and Governance (ESG) activities. Her previous work experience includes Director of Government Relations and External Communication for Agnico Eagle Mines Limited, Communications and Community Relations Manager for Canadian Malartic Mine, and formerly co-owning a communications firm for several years in which she worked closely with stakeholders from the natural resources sector. Ms. Desrochers studied communications, indigenous affairs, management and holds a Graduate degree in Project Management from the Université du Québec en Abitibi-Témiscamingue.

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.

O3 Mining Mineral Inventory

O3 Mining

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

Marban PEA Base Case Metrics

O3 Mining

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

Partnership with Moneta Porcupine

O3 Mining

January 14th, 2021

Timmins Camp is a top mining jurisdiction that offers excellent infrastructure and talent

70,000 hectares in the Timmins Camp where over 85 Moz gold has been produced

Combined projects account for 8.4 Moz gold[1]

O3 Mining will own approximately 27% of New Moneta retaining exposure to the upside

H1-2021

4 Drills

Complete drilling campaign at Golden Highway 30,000m

H2-2021

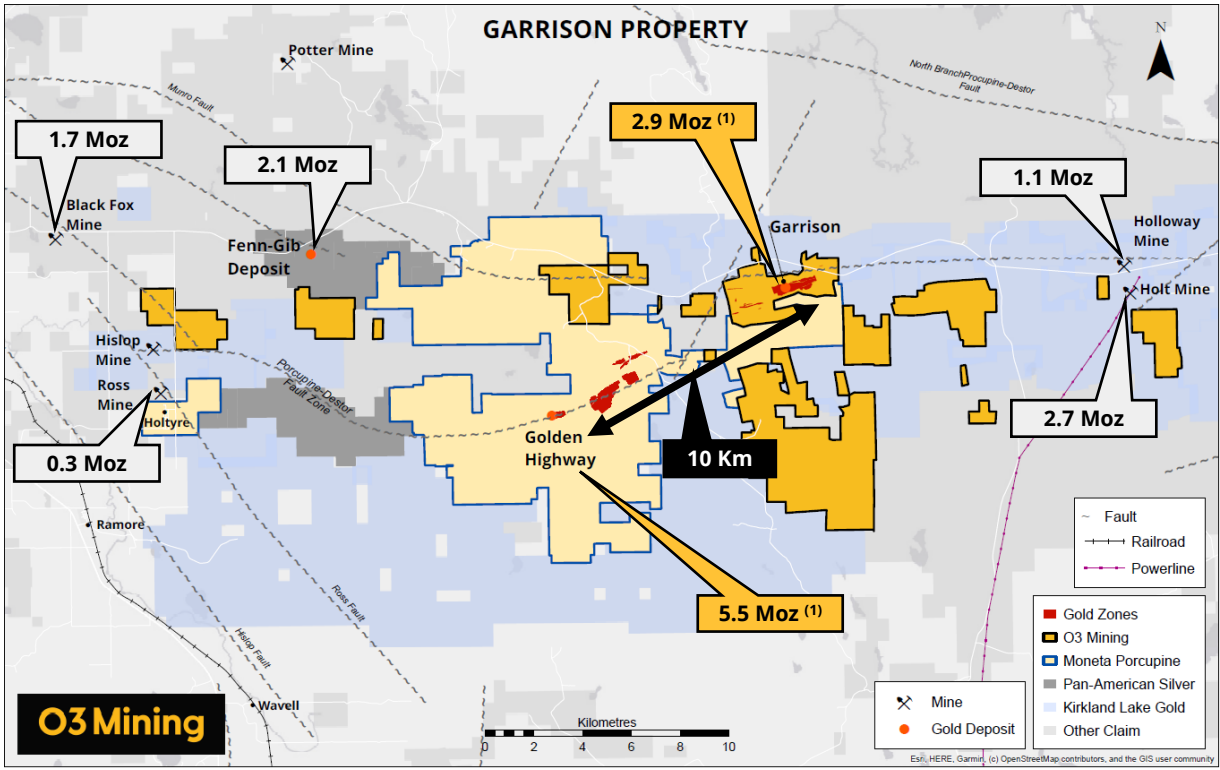
PEA

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

H1-2022

Resources

New resource estimate for combined project



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