ASX: VAN



Developing a major Australian Gold Project Marymia Gold Project Western Australia

Investor Presentation

FEBRUARY 2022

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Competent Person's Statements

- The information in this report that relates to exploration results has been reviewed, compiled and fairly represented by Mr David Jenkins, a Member of the Australian Institute of Geologists and a full time employee of Terra Search Pty Ltd. Mr Jenkins has sufficient experience, including over 28 years' experience in exploration and resource evaluation relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Jenkins consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.
 - The Statement of Mineral Resource Estimates has been compiled by Dr. Spero Carras who is a full-time employee of Carras Mining Pty Ltd and a Fellow of the Australian Institute of Mining and Metallurgy ("FAusIMM"). Dr. Carras has sufficient experience relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ("JORC") Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Dr. Carras consents to the inclusion in this report of the matters based on this information in the form and context in which it appears. Dr. Carras has over 40 years experience in gold mine evaluation.
 - Information in this announcement is extracted from reports lodged as market announcements available on the Company's website <u>https://vangomining.com/.</u> The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and, in the case of estimates of mineral resources or ore reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.



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Vango Mining is a **gold exploration and development company** focused on exploring and developing the **Company's key asset, the 100% owned Marymia Gold Project in the Mid-West region of Western Australia.**

In the near-term, the Company is focused on **expanding its high-grade resource base** to support **plans to become a significant gold mining and production company.**

Vango also has a Farm-in, Joint Venture Agreement with Lodestar Minerals (ASX: LSR) for the nearby Ned's Creek Project, confirming Vango's dominant ground position in the world-class Marymia Gold Belt.

Corporate Overview



CORPORATE SNAPSHOT



BOARD OF DIRECTORS

Bruce McInnes	Executive Chairman
Sean Zhou	Deputy Chairman
Dr Carol Zhang	Non-Executive Director
Hunter Guo	Non-Executive Director
Craig Wallace	Non-Executive Director

SHAREHOLDER DETAILS

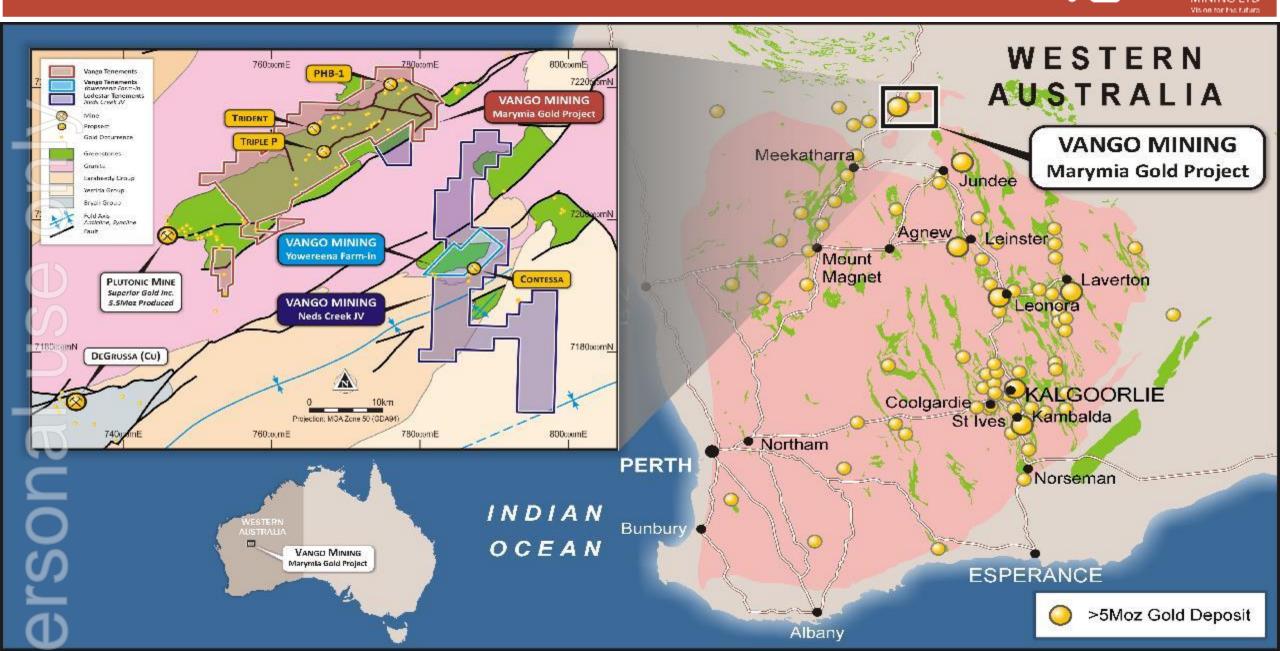
Directors

Top 20 Holds



TWELVE MONTH SHARE PRICE GRAPH

Major Project in WA's World-Class Goldfields



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About the Marymia Gold Project



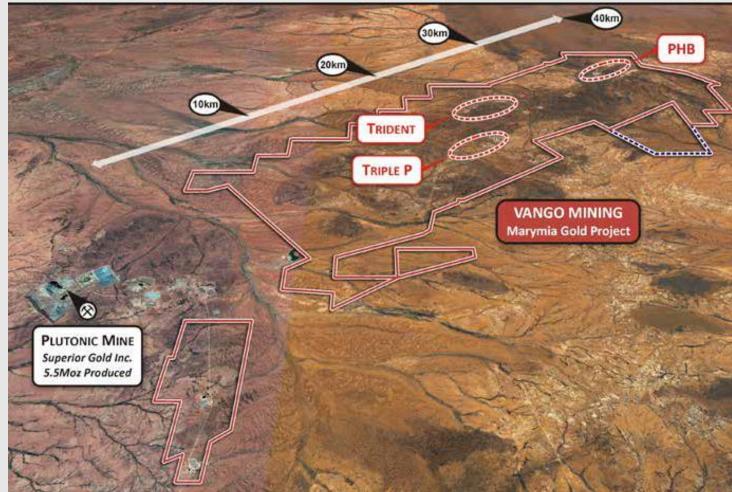
- Dominant ground position in world-class Marymia
 Gold Belt extending from >5.5Moz Plutonic Gold Mine¹
- Project sits on 45 granted Mining Leases which are all pre-native title with >40km in strike length
- 1Moz high-grade resource and growing 1.02Mt @ 3.0 g/t Au² includes:
 - Underground: 541,000oz @ 7.9g/t Au

Open pit: for 461,000oz @ 1.7g/t Au

Extensive open-pit focused resource expansion
 drilling campaign ongoing designed to deliver
 resource upgrade

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- Exploration to date has targeted just 3 key gold corridors of 6 identified corridors – **major exploration upside within Project area**
- Vango aims to develop the Marymia Project into a significant gold mining operation



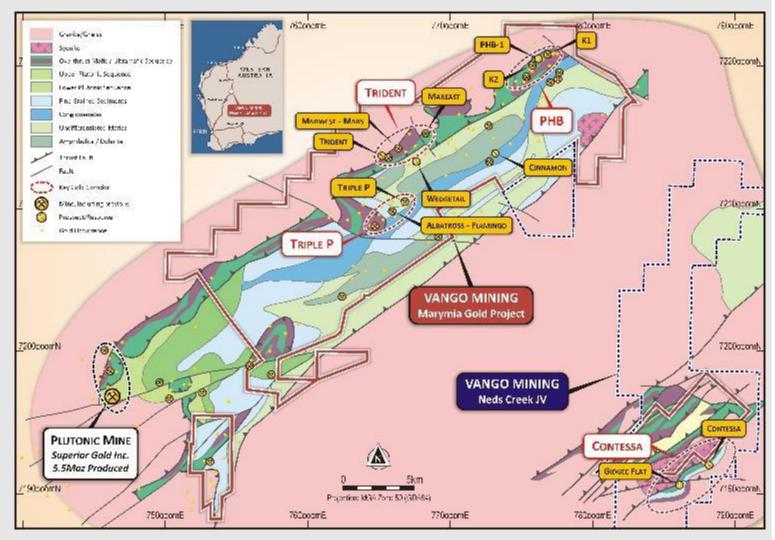
Outline of Marymia Gold Project area showing the >40km strike length and the >5.5Moz Plutonic Gold Mine immediately to the south

Marymia Project – 1Moz and Growing

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Marymia: a major brownfields gold project in world class gold belt

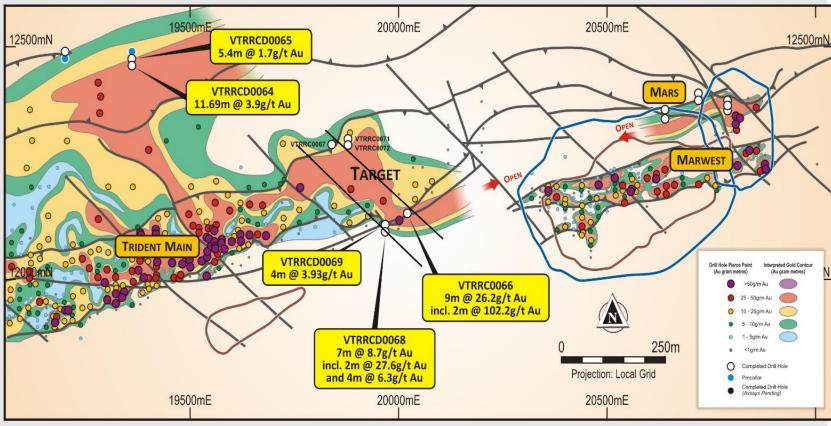
- 1Moz JORC 2012 Mineral Resource confirmed May 2020: 10.38Mt @ 3.0 g/t Au for 1.02Moz Gold¹
- **2020: 20,000m RC and diamond drilling drill campaign completed** - focused on priority targets at the 'crown-jewels' Trident gold corridor and PHB gold corridor at Marymia
- H2, 2021 ongoing: Major open-pit focused Resource expansion drilling campaign - to
 - add significant, near-surface resources to the Marymia Resource
- Results from 2020 and 2021 drilling programs to be included in Resource upgrade planned to be completed by end of Q2, 2022



Trident Gold Corridor – The Crown Jewels



- Drilling successfully extended dip and strike extent of mineralisation outside existing Resource - 410,000 @ 8g/t Au¹
- Trident extension drilling significantly extended gold mineralised zone to the north-east by ~250m towards the Marwest Deposit.
- Potential for Trident and Marwest to form one large high-grade gold system with a strike length of at least 3km
- Drilling for depth extensions extended down dip extent of mineralisation by 200m - thick, high-grade zones with **potential to add further significant resources to the Trident resource**

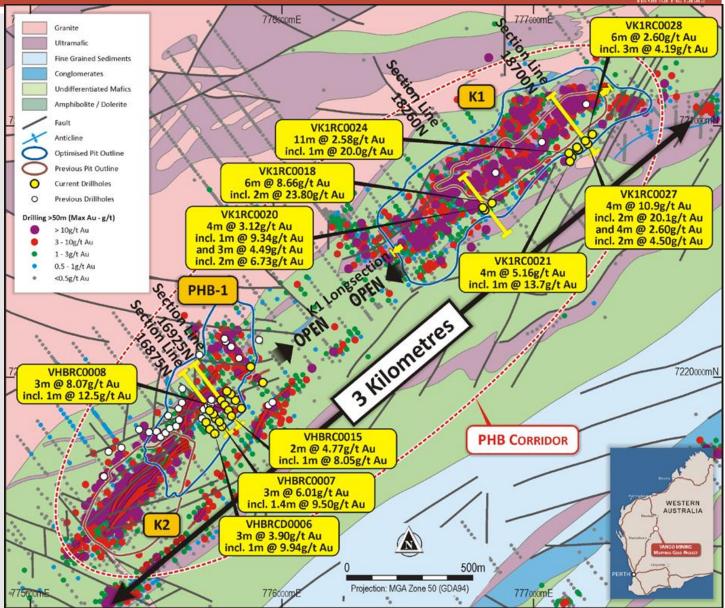


Selected drill results from recent drilling at Trident Gold Corridor at Marymia Gold Project – showing Marwest target to the north-east ²

PHB Gold Corridor

VANGO. MINING LTD Vision for the Littlet

- Drilling also completed at the PHB gold corridor in 2020 field season
- 23 RC holes for 5,751m and 6 Diamond holes for 1,412.8m completed
- PHB drilling successfully targeted high-grade extensions of the three key lode structures – the Main, Central and West Loads
- Drilling at the PHB corridor also delivered a new, high-grade lode discovery below the K1 open pit, northeast of PHB-1



¹ VAN ASX 25/11/20 AGM 2020 Presentation – Developing a Major Australian Gold Project

Selected drill results from drilling at PHB Gold Corridor at Marymia Gold Project ¹

Highlight Results: Trident, PHB and Triple P Gold Corridors

Trident Corridor

- 9m @ 26.2 g/t Au from 137m incl. 2m @ 102.2
 g/t au from 139m in VTRRC0066¹
- **7m @ 8.7 g/t Au from 110m** incl. 2m @ 27.6 g/t Au from 110m and 1m @ 17.4 g/t Au from 114m in VTRRC0068¹⁶
- **7.15m @ 17.1 g/t from 193.85m** in hole VTRDD0003 incl. 3.6m @ 24.4 g/t Au¹⁵
- **11m @ 20.2 g/t from 161m** in hole VTRRCD0001 incl. 2m @ 93 g/t Au¹⁴
- 6m @ 15.4 g/t from 198m incl. 4m @ 22.5 g/t Au in hole VTRRCD0007¹³
- **7m @ 18.2 g/t from 218m** incl. 2.02m @ 44.0g/t Au in hole VTRRCD0013¹²
- **11.48m @ 11.5 g/t Au from 159m** incl. 4m @ 26.1 g/t Au in hole VTRRCD0016¹²
- **11m @ 36.2 g/t from 213m** incl. 2m @ 184 g/t Au in VTRGT0050¹¹
- **9m @ 12.7 g/t Au from 54m** incl. 7m @ 15.6 g/t Au from 56m and including 3m @ 30.6 g/t Au from 56m in VMWRC0002⁹
- **9m @ 15.0 g/t Au from 28m** incl. 3m @ 39.8 g/t Au in VMERC0012¹⁰

PHB Corridor

- **7m @ 103.6 g/t Au from** 48m incl. 3m @ 240 g/t Au and including 1m @ 691 g/t Au⁵
- 3m @ 19.7 g/t Au from 126m and 8m @
 4.17 g/t Au from 110m, incl. 3m @ 8.69 g/t
 Au, in VK2RC0009⁴
- 15m @ 6.51 g/t Au from 118m incl. 5m @ 12.5 g/t Au, in VK2RC0010a⁴
- 6m @ 8.66 g/t Au incl. 2m @ 23.8 g/t Au from 128m in VK1RC0018³
- 4m @ 10.9 g/t Au, incl. 2m @ 20.1 g/t Au, from 161m in VK1RC0027²

Triple P Corridor

- 4m @ 23.0 g/t from 109m incl. 1m @ 85.0 g/t Au in VPPPRC0008⁸
- 4m @ 9.48 g/t Au from 177m incl. 1m @ 25.0 g/t Au in VPPPRC0005⁸
- 4m @ 6.38 g/t Au from 164m incl. 2m @ 10.9 g/t Au in VPPPRC0004⁸
- 4m @ 50.6 g/t Au from 81m incl. 2m @ 99.1 g/t Au including 1m @ 182 g/t Au in VAFRC0001⁷
- 3m @ 38.0 g/t Au from 97m incl. 2m @
 56.1 g/t Au including 1m @ 100.9 g/t Au in VAFRC0001⁷
- 14m @ 6.99 g/t Au from 48m incl. 7m @ 11.9 g/t Au incl. 2m @ 28.3 g/t Au in VAFRC0010⁶

VAN ASX, 06/01/21 Bonanza Gold Zone Identified 250m from Trident Resource ² VAN ASX, 20/10/20 Significant Intersections Extend High-Grade Lode Discovery VAN ASX, 24/09/20 High-Grade Lode Discovery in PHB Corridor at Marymia ⁴ VAN ASX, 23/03/20 High-Grade Drilling Success at Marymia Gold Project ⁵ VAN ASX, 03/03/20 Exceptional Intersections from New Lode Discovery at Marymia VAN ASX, 21/01/20 Exceptional High-Grade Gold Intercepts – Open Pit Potential VAN ASX, 02/01/20 Bonanza Gold Intersections from New Zone at Marymia ⁸ VAN ASX, 05/08/19 New Very High-Grade Gold Zone Discovered at Marymia Project VAN ASX, 19/06/19 Very High-Grade Gold Intersections Extends Trident-Marwest ¹⁰ VAN ASX, 23/05/19 Vango's High-Grade Gold Intersections Extend Corridor ¹¹ VAN ASX,08/04/19 Bonanza High Grade Gold Intersections at Trident ¹² VAN ASX, 28/05/18 Further Very High - Grade Gold Intersections from Trident ¹³ VAN ASX, 24/04/18 Initial High-Grade Gold Intersections from Trident Gold Deposit ¹⁴ VAN ASX, 17/07/17 Further High-Grade Gold Intersections at Plutonic Dome ¹⁵ VAN ASX, 29/06/17 High Grade Gold Intersections from Drilling at Plutonic Dome ¹⁶ VAN ASX, 18/02/21 High-Grade Gold Extensions at Trident



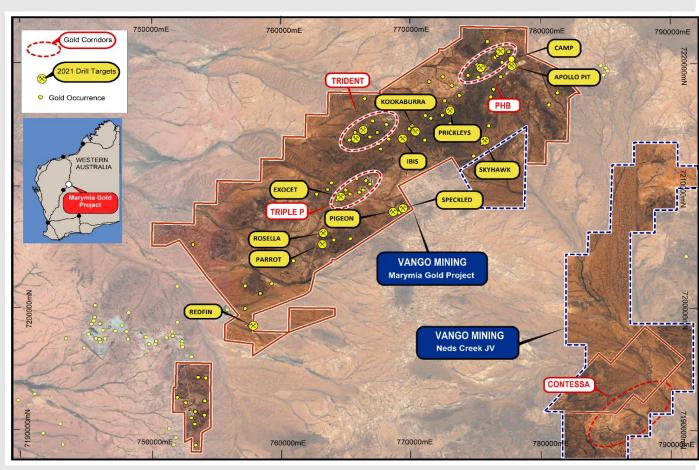
Designed to add significant, near-surface resources amenable to open pit mining

- Major open-pit focused resource expansion drilling campaign commenced July 2021
- Phase 1 complete: 8,914 metres of RC drilling across 56 holes at 11 targeted open-pits
- Targeting open-pits not part of the existing Marymia resource - targets ranked in order of priority based on historic gold inventory and review of historic drilling
- **11 open pits are;** Skyhawk, Parrot, Apollo, Prickleys, Ibis, Exocet, Rosella, Pigeon, Kookaburra, Redfin and Speckled

Drilling also aims to;

- Enhance understanding of mineralised zones within the targeted open pits – to assist with mine planning
- Deliver 'critical mass' of resources to increase proposed mine life of a potential future mining operation at Marymia

2nd phase of drilling planned at targets which deliver positive results in the completed first phase drilling - to test for further extensions of gold mineralisation to add to the resource base



Open pit drill targets for 2021 field season at Marymia Project

Resource Expansion Drilling Campaign - Outcomes 🚺 VANGO

- The Marymia open-pits were previously mined at a time of depressed gold prices, presenting an opportunity for Vango's open-pit focused drilling to add substantial mineable resources.
 There are significant historic gold intersections below the open-pits and Vango's drilling is testing for
- extensions to these resources and for repeating structures at depth.
- Multiple high-grade intersections returned reaffirm and strengthen the Project's significant open-pit potential
- Demonstrated the continuation of significant zones of near-surface gold mineralisation across the targeted open-pits
- Identified previously un-mined high-grade mineralisation below the open pits and confirmed continuity of mineralised structures below the openpits – open pits were previously mined to only shallow depths at a time of low gold prices
- Confirmed continuation of mineralised zones from substantial historical drilling at the Marymia open-pits.
 Historic drilling also returned many high-grade gold intersections at the open-pits – these historical results will be included in the planned resource upgrade for the first time

¹ VAN ASX 03/12/21 Drilling Confirms Rosella Mineralisation Extension at Depth ² VAN ASX 19/01/22 Vango Intercepts Additional High Grade Gold ³ VAN ASX 21/09/21 Wide High-Grade Gold Intercepts at Skyhawk

ROSELLA¹

1m at 4.0 g/t Au from 54m in VRORC0001

3m at 10.0 g/t Au from 80m in VRORC0001 incl 1m @ 27.0 g/t Au from 80m 3m at 2.6 g/t Au from 101m in VRORC0003 incl 1m @ 6.7 g/t Au from 102m 11m at 4 g/t Au from 83m in VRORC0004 incl 6m at 6.6 g/t Au from 85m PIGEON²

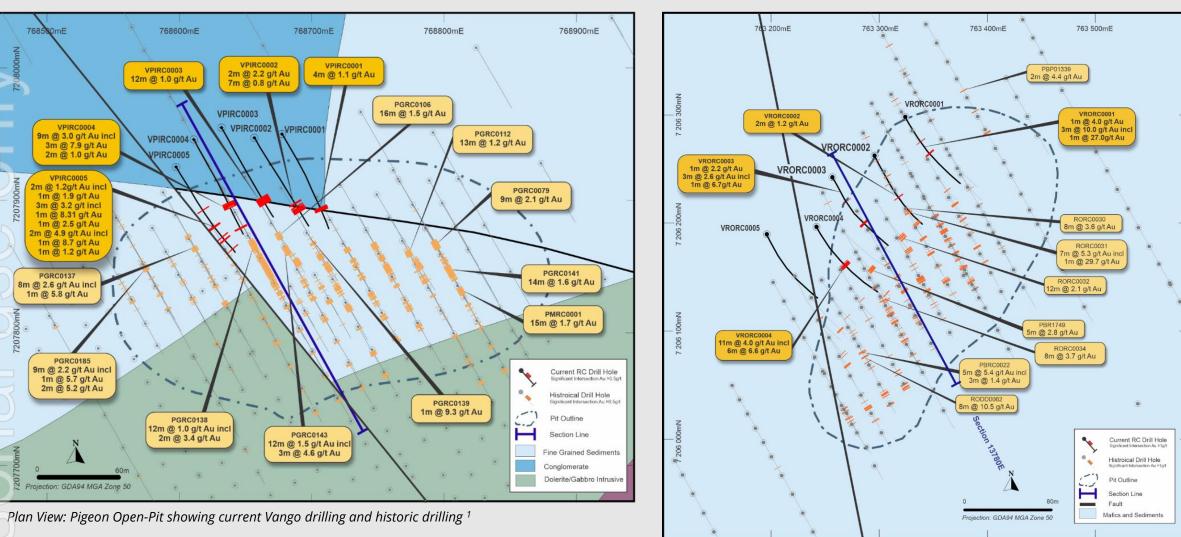
9m at 3 g/t Au from 111m in VPIRC0004 incl 3m at 7.9 g/t Au from 114m 12m at 1 g/t Au from 121m in VPIRC0003

3m @ 3.2 g/t Au from 133m in VPIRC0005 incl 1m @ 8.31 g/t Au from 134m

1m @ 2.5 g/t Au from 159m in VPIRC0005 (repeat of 8.84 g/t Au)

2m @ 4.9 g/t Au from 166m in VPIRC0005 incl 1m @ 8.7 g/t from 166m SKYHAWK³

16m @ 4.4 g/t Au, from 54m in VSKRC0007, including 6m @ 8.2 g/t Au 1m @ 12.1 g/t Au from 55m in VSKRC0003 6m @ 1.9 g/t Au from 21m in VSKRC0004 incl 1m @ 6.4 g/t Au 3m @ 2.5 g/t Au from 59m in VSKRC0006 incl 1m @ 6.1 g/t Au

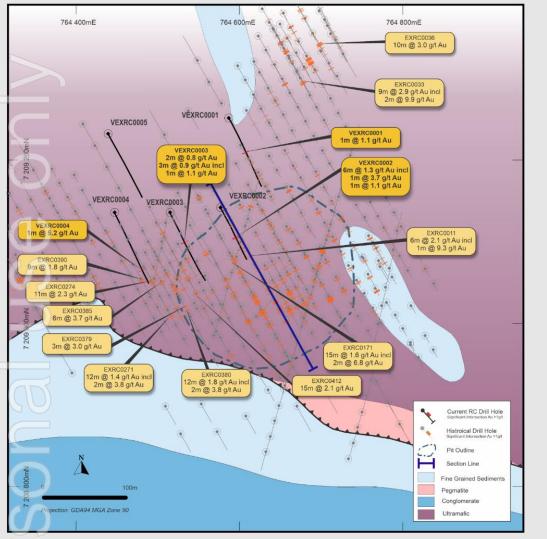


Plan View: Rosella Open-Pit showing current Vango drilling and historic drilling

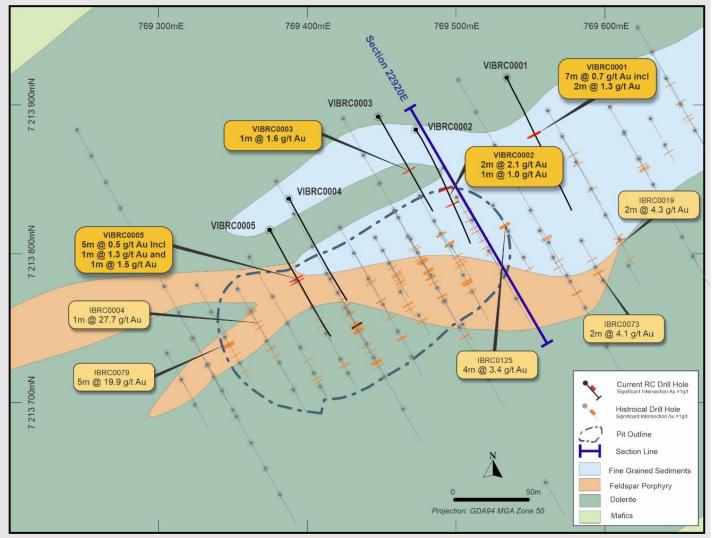
¹ VAN ASX 19/01/22 Vango Intercepts Additional High Grade Gold ² VAN ASX 03/12/21 Drilling Confirms Rosella Mineralisation Extension at Depth

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Vision for the future



Plan View: Exocet Open-Pit showing current Vango drilling and historic drilling ¹

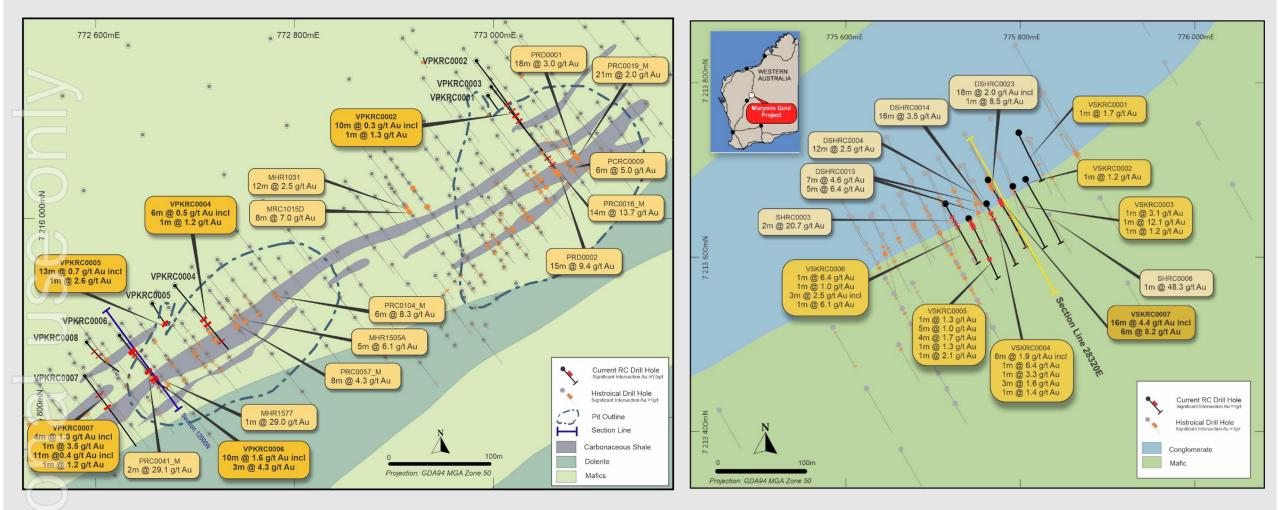


Plan View: Ibis Open-Pit showing current Vango drilling and historic drilling ²

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Vision for the future

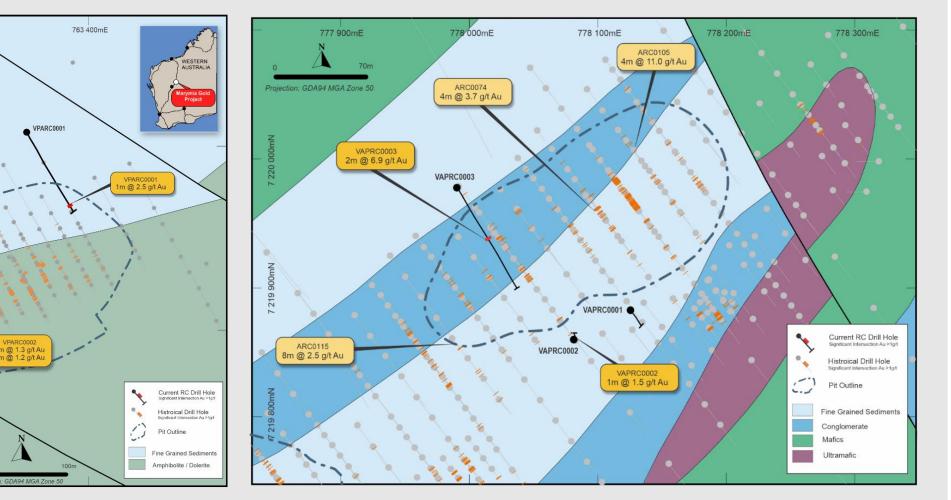




Plan View: Prickleys Open-Pit showing current Vango drilling and historic drilling ¹

Plan View: Skyhawk Open-Pit showing current Vango drilling and historic drilling ²

⁴ VAN ASX 03/11/21 Multiple Broad Gold Intercepts at Prickleys Open-Pit ² VAN ASX 21/09/21 Wide High-Grade Gold Intercepts at Skyhawk



Plan View: Apollo Open-Pit showing current Vango drilling and historic drilling ¹

Plan View: Parrot Open-Pit showing current Vango drilling and historic drilling ¹

763 200mE

VPARC0002

PBRD1753 8m @ 1.6 g/t Au

763 000mE

PARC0073

12m @ 2.6 g/t Au

VPARC0003 3m @ 1.3 g/t Au 1m @ 1.1 g/t Au

PBR7977

2 11.1 g/t AL

VPARC0004

VPARC0003

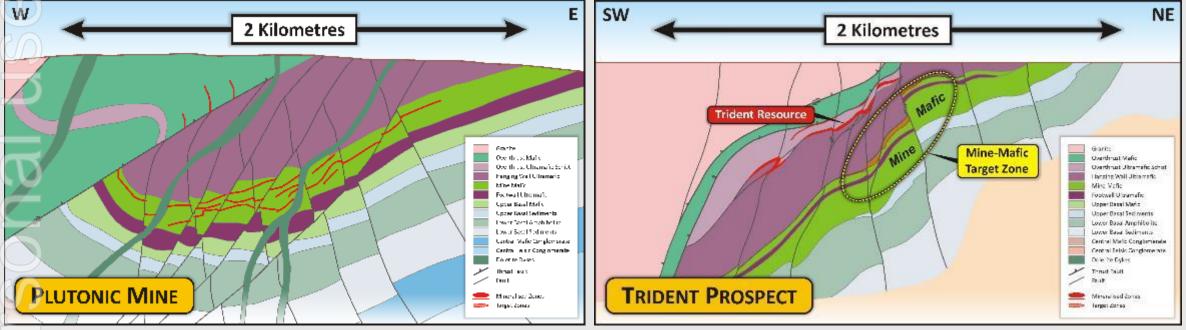
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Marymia Project Exploration Model



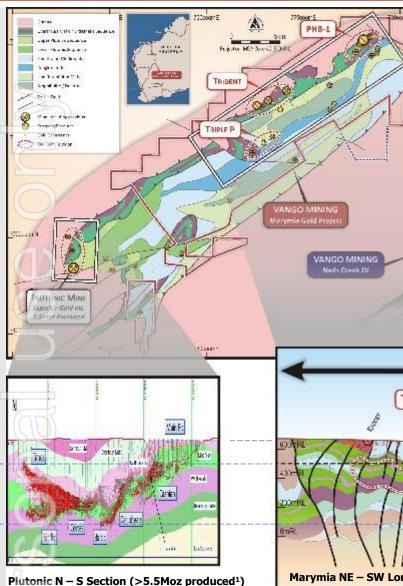
Trident Corridor – recognition of analogous setting to Plutonic Gold Mine

- Geological setting of Trident Corridor similar to >5.5Moz¹ Plutonic Gold Mine, located immediately south of Marymia Project
 - Mine-Mafic stratigraphy hosts entire Plutonic deposit and identified in Trident footwall
 - -> High-grade gold mineralisation at Plutonic and Trident controlled by steeply dipping structures where they pass through the host units
 - O Mine-Mafic stratigraphy at Trident is largely un-tested in 5km structural corridor
- Extensive shallow drilling database complemented by deeper geophysical data highlights high-priority, largely un-tested, multiple Plutonic look-a-like targets



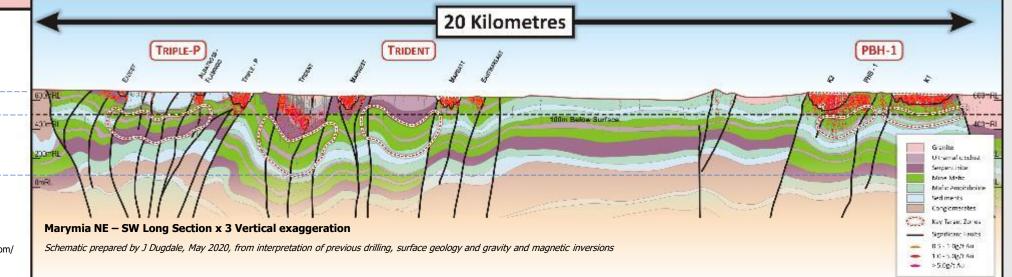
¹ Superior Gold Inc., TSX-V:SGI, 22/07/19 Corporate Presentation, Corporate Website www.superior-gold.com

Marymia Gold Project – Untested Potential



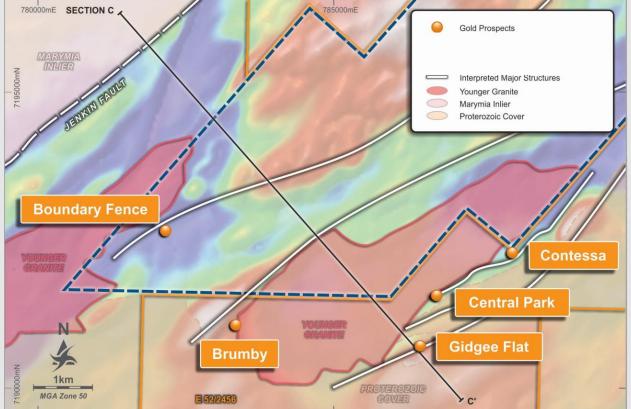
¹ Superior Gold Inc. Website https://www.superior-gold.com/

- To date exploration focused on only three key gold corridors over 20km strike with deeper Plutonic¹ look-a-like targets identified
- Plutonic Gold Mine mined/drilled to >600m for >5.5Moz produced to date¹
- Marymia Project has extensive drilling and geological data base project largely untested >100m depth
- Major upside potential at depth, and at other untested corridors within project area
- Drilling in current field season targeting open pits to deliver substantial additional near-surface ounces to existing Resource
- Further resource potential from nearby Ned's Creek Farm-in JV Project



Ned's Creek Farm-in Joint Venture Project

- **Farm-In and JV** with Lodestar Minerals (ASX: LSR) at **Ned's Creek Project - Vango to earn a 51% interest** by expending \$5m on exploration over 3yrs from 2019¹
- Latest phase of drilling completed results pending
- Program comprised 29 holes for a total for 3,715m;
 - 12 vertical RC holes, to a depth of 90m to verify significant supergene gold intersected in previous aircore drilling and support a maiden resource estimate;
 - **14 holes targeting Contessa granite contact** as a potential source of widespread supergene and nugget-related gold in the Contessa area; and
 - **3 additional RC holes on the contact zone at the Central Park prospect**, 1500m southwest of Contessa



Neds Creek prospect location plan on a background magnetic image.

¹ VAN ASX 01/05/2019 and 17/07/2019

Next Steps

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- Phase 2 open-pit drilling campaign H1, 2022
 - Resource upgrade by end Q2, 2022
 - Results and Next phases of exploration at Ned's Creek Farm-in JV Project - 2022
- Mine Planning ongoing in parallel
 - Permitting/Approvals ongoing in parallel



Thank you



Bruce McInnes | Executive Chairman T: +61 2 7208 9611

James Moses | Media and Investor Inquiries T: +61 420 991 574 Level 29, 88 Phillip Street Sydney NSW 2000

ASX: VAN

info@vangomining.com

https://vangomining.com



Vision for the future

Appendix 1: JORC 2012 Mineral Resource¹

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	Vision for the future

MARYMIA GOLD PROJECT JORC 2012 MINERAL RESOURCE ESTIMATE MAY 2020																			
Deposit	Cut-off	Oxide		Transition			Fresh			Indicated			Inferred			Total			
Mineral Resource - Open Pit (OP):	Au g/t	K Tonnes	g/t Au	K Oz	K Tonnes	g/t Au	K Oz	K Tonnes	g/t Au	K Oz	K Tonnes	g/t Au	K Oz	K Tonnes	g/t Au	K Oz	K Tonnes	g/t Au	K Oz
Trident West OP	0.5	12	1.2	0.5	189	1.0	6.2	51	1.2	2.0	253	1.1	9				253	1.1	9
Marwest & Mars OP	0.5	10	2.1	0.7	162	2.0	10.6	515	2.0	33.2	688	2.0	45				688	2.0	45
Mareast OP	0.5	10	1.5	0.5	451	1.9	27.9	25	2.2	1.7	486	1.9	30				486	1.9	30
EastMareast OP	0.5	224	1.1	8.0	13	0.9	0.4				237	1.1	8				237	1.1	8
Wedgetail OP	0.5	154	1.7	8.3	31	1.7	1.7				185	1.7	10				185	1.7	10
РНВ-1 (КЗ) ОР	0.5	287	1.5	14.1	392	1.9	23.7	162	2.4	12.4	604	2.0	39	238	1.4	11	841	1.9	50
K1 OP	0.5	350	1.5	17.0	780	1.6	41.1	450	2.1	31.0	743	1.8	42	837	1.7	47	1,580	1.8	89
Triple-P & Triple-P Sth OP	0.5	189	1.2	7.4	293	1.5	13.7	637	2.1	42.3	633	2.1	42	486	1.4	21	1,120	1.8	63
Albatross & Flamingo OP	0.5	606	1.3	24.8	239	1.7	13.0	8	1.7	0.4				853	1.4	38	853	1.4	38
Cinnamon OP	0.5	513	1.6	26.9	470	1.8	26.7	1,025	2.0	65.1	1,472	1.8	86	536	1.9	32	2,008	1.8	119
Total Open Pits		2,354	1.4	108	3,021	1.7	165	2,875	2.0	188	5,300	1.8	311	2,950	1.6	150	8,250	1.7	461
Mineral Resource - Underground (UG):	Au g/t	K Tonnes	g/t Au	K Oz	K Tonnes	g/t Au	K Oz	K Tonnes	g/t Au	K Oz	K Tonnes	g/t Au	K Oz	K Tonnes	g/t Au	K Oz	K Tonnes	g/t Au	K Oz
Trident UG	3.0							1,590	8.0	410	945	9.4	285	645	6.0	125	1,590	8.0	410
K2 UG	3.0							374	8.9	107	197	10.6	67	177	7.0	40	374	8.9	107
Triple-P & Zone-B UG	3.0							170	4.3	24				170	4.3	24	170	4.3	24
Total Underground								2,134	7.9	541	1,142	9.6	352	992	5.9	189	2,134	7.9	541
Total JORC 2012 Mineral Resource		2,354	1.4	108	3,021	1.7	165	5,009	4.5	729	6,442	3.2	663	3,942	2.7	339	10,384	3.0	1,002

¹ VAN ASX 19/05/20 Marymia Mineral Resource Increases to One Million Ounces

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1. Mineral Resources reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (Joint Ore Reserves Committee Code – JORC 2012 Edition).

2. Open pit resources reported within optimised conceptual pit shells at A\$2,500/oz gold price above a 0.5 g/t Au cut off and include oxide, transition and fresh material.

Trident underground resources are retained as first reported 18 April 2019, above a 3.0 g/t Au cut-off grade, and modelled at a gold price of A\$2,000/oz, on the basis that the information has not materially changed since last reported. Other underground resources reported above a 3.0 g/t Au cut off (with minor 2.5 g/t Au cut-off material included for continuity purposes) and includes fresh material only.

Totals may differ due to rounding, Mineral Resources reported on a dry in-situ basis.