

Marymia Exceptional Gold Results and Project Update

Highlights

- Vango has successfully completed its extensive 20,000m drill campaign at Marymia in Q4 2020
- Drilling significantly extended the gold mineralised system along strike and at depth at the three major gold corridors at the Marymia Gold Project – Trident (Vango's crown jewels), PHB & Triple-P
- Vango is finalising plans for its 2021 Field Season;
 - Results from 2020 drilling campaign being added to resource model ahead of major resource upgrade – as well as assisting in ongoing mine planning
 - Next phase of drilling to a number of priority open-pits not part of the current Marymia resource – drilling designed to add significant, near-surface resources
 - Extension drilling to confirm exploration model that Trident-Marwest exists as one large, contiguous high-grade gold system – and add significant resources
- Highlight Results from Vango's drilling campaigns at the Trident Gold Corridor – the Company's crown-jewels
 - 9m @ 26.2 g/t Au from 137m incl. 2m @ 102.2 g/t Au from 139m in VTRRC0066¹
 - 7.15m @ 17.1 g/t from 193.85m in hole VTRDD0003 incl. 3.6m @ 24.4 g/t Au¹⁷
 - 11m @ 20.0 g/t from 161m in hole VTRRC0001 incl. 2m @ 93 g/t Au¹⁶
 - 7m @ 18.2 g/t from 218m incl. 2.02m @ 44.0g/t Au in hole VTRRC0013¹⁴
 - 11.48m @ 11.5 g/t Au from 159m incl. 4m @ 26.1 g/t Au in hole VTRRC0016¹⁴
 - 11m @ 36.2 g/t from 213m incl. 2m @ 184 g/t Au in VTRGT0050¹³
 - 9m @ 15.0 g/t Au from 28m incl. 3m @ 39.8 g/t Au in VMERC0012¹²
 - 10m @ 22.6 g/t Au from 50m incl. 6m @ 33.3 g/t Au (>1 Oz/t) in VMERC0025⁸

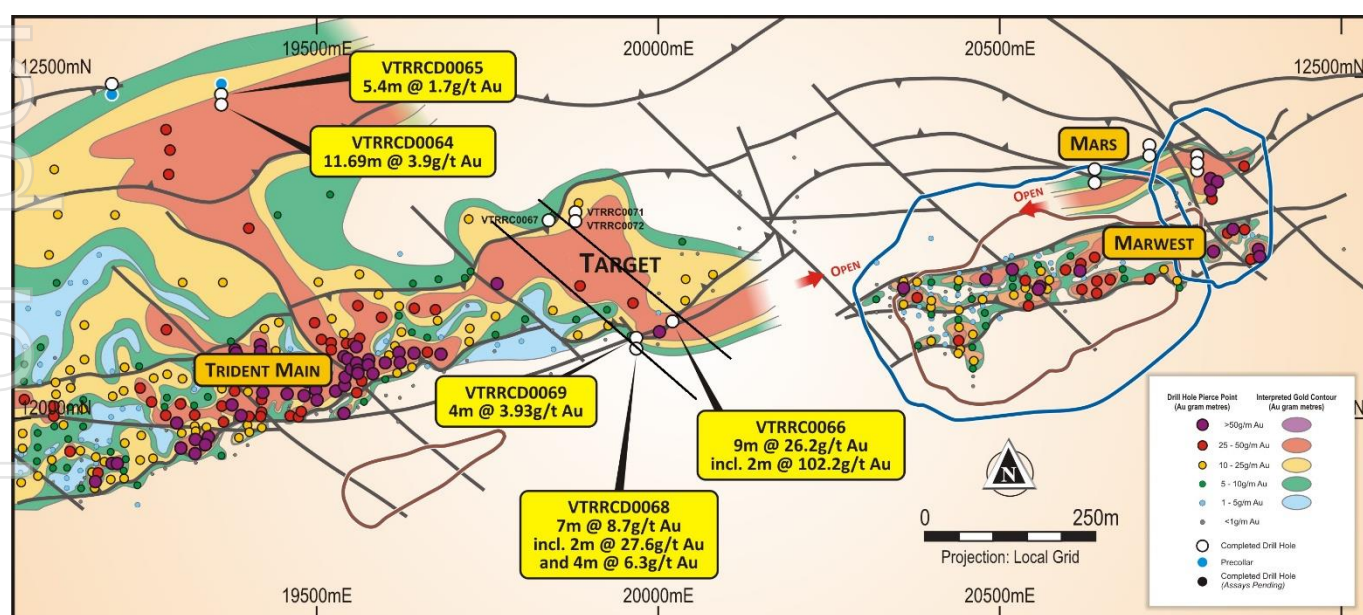


Figure 1 Plan view of the Trident-Marwest area showing collar locations of the latest drilling and pierce points of gold intercepts

Vango Mining Limited (Vango, ASX: VAN) is pleased to provide the following update on its flagship Marymia Gold Project (Marymia, the Project) in the Mid-West region of Western Australia (**Figure 3**), and its plans for the 2021 field season.

Vango completed an extensive 20,000 metre reverse circulation (RC) and diamond drilling drill campaign in December 2020, and all results have been received. The program focused on priority target areas at the Trident gold corridor and PHB gold corridor at Marymia. This drilling campaign followed the Company's previous phases of drilling which culminated in a million-ounce resource (10.38Mt @ 3.0 g/t Au for 1.02Moz Gold), at the Marymia Project, announced on 20 May 2020[^].

This drilling successfully tested high-grade resource extensions and deeper 'Plutonic-analogue' targets - the Plutonic gold mine is located immediately south of the Marymia Project area and has produced more than 5.5Moz of gold[#]. The Trident and PHB corridors both lie within projected extensions of the Mine-Mafic stratigraphy that hosts the Plutonic mine.

Summary of 2020 Trident-Marwest Corridor Drilling

28 RC holes for 6622 metres and 7 Diamond holes for 1781.8 metres were drilled at the Trident corridor. The Trident drilling was designed to extend the dip and strike extent of mineralisation outside of the existing Resource. Of key note is that the Trident extension drilling has significantly extended the gold mineralised zone to the north-east of Trident, by approximately 250m towards the Marwest Deposit.

This drilling has continued to close-the-gap between Trident and Marwest from 600m to just 250m, and continues to indicate that Trident and Marwest may form one large high-grade gold system with a strike length of at least 3 kilometres.

Drilling for depth extensions at Trident Deeps extended the down dip extent of mineralisation by 200m, and confirmed the presence of thick, high-grade gold mineralised zones which have the potential to contribute significant additional resources to the Trident resource base.

Highlight Results from Vango's Drilling Campaigns at 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 VTRRC0068[~]**
- **7.15m @ 17.1 g/t from 193.85m in hole VTRDD0003 incl. 3.6m @ 24.4 g/t Au¹⁷**
- **11m @ 20.0 g/t from 161m in hole VTRRCD0001 incl. 2m @ 93 g/t Au¹⁶**
- **6m @ 15.4 g/t from 198m incl. 4m @ 22.5 g/t Au in hole VTRRCD0007¹⁵**
- **7m @ 18.2 g/t from 218m incl. 2.02m @ 44.0g/t Au in hole VTRRCD0013¹⁴**
- **11.48m @ 11.5 g/t Au from 159m incl. 4m @ 26.1 g/t Au in hole VTRRCD0016¹⁴**
- **11m @ 36.2 g/t from 213m incl. 2m @ 184 g/t Au in VTRGT0050¹³**
- **9m @ 12.7 g/t Au from 54m incl. 7m @ 15.6 g/t Au from 56m and 3m @ 30.6 g/t Au from 56m in VMWRC0002¹¹**
- **4m @ 4.0 g/t Au from 121m incl. 2m @ 7.1 g/t Au incl. 1m @ 10.0 g/t Au and 11m @ 3.1 g/t Au from 137m incl. 6m @ 4.2 g/t Au incl. 1m @ 11.5 g/t Au in VMWRC0004¹⁰**
- **5m @ 3.1 g/t Au from 70m incl. 1m @ 4.5 g/t Au and 1m @ 4.6 g/t Au in VMWRC0008¹⁰**
- **9m @ 15.0 g/t Au from 28m incl. 3m @ 39.8 g/t Au in VMERC0012¹²**
- **10m @ 22.6 g/t Au from 50m incl. 6m @ 33.3 g/t Au (>1 Oz/t) in VMERC0025⁸**

Summary of 2020 PHB-K1 Corridor Drilling

At PHB, 23 RC holes for 5751 metres and 6 Diamond holes for 1412.8 metres were completed. The PHB drilling was designed to test for high-grade extensions of the three key lode structures – the Main, Central and West Loads – at the PHB-1 target. Drilling in the PHB corridor also delivered a new, high-grade lode discovery below the K1 open pit, northeast of PHB-1.

Highlight Results from Vango's Drilling Campaigns at PHB and Triple-P Corridors

PHB

- **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

- **4m @ 23.0 g/t from 109m incl. 1m @ 85.0 g/t Au in VPPRC0008⁹**
- **4m @ 9.48 g/t Au from 177m incl. 1m @ 25.0 g/t Au** in VPPRC0005⁹
- **4m @ 6.38 g/t Au from 164m incl. 2m @ 10.9 g/t Au** in VPPRC0004⁹
- **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

2021 Field Season Objectives

- Vango is currently compiling all results from the 2020 drilling campaign into the Marymia Project's resource model in preparation for a major resource upgrade, planned for the first half of the current calendar year.
- As part of the resource expansion, the next phase of drilling will target approximately 10 priority open pit targets at Marymia, which are not currently part of the Marymia JORC 2012 resource. This drilling is planned for the next quarter and is designed to add significant near-surface resources.
- Further extension drilling will also be completed to further extend gold mineralisation at Trident to the north-east towards the Marwest Deposit, with the aim of confirming that Trident and Marwest forms one large, contiguous high-grade gold system.
- Once it has finalised plans for its 2021 field season, the Company will update the market on the details of the next phase of drilling.

Previous ASX releases referenced in this ASX release:

- ~ VAN ASX, 18/02/21 High-Grade Gold Extensions at Trident
- ¹ 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
- ³ 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
- ⁶ VAN ASX, 21/01/20 Exceptional High-Grade Gold Intercepts – Open Pit Potential
- ⁷ VAN ASX, 02/01/20 Bonanza Gold Intersections from New Zone at Marymia
- ⁸ VAN ASX, 08/11/19 Further Exceptional High-Grade Gold Intersection at Mareast
- ⁹ VAN ASX, 05/08/19 New Very High-Grade Gold Zone Discovered at Marymia Project
- ¹⁰ VAN ASX, 10/07/19 Gold Results Confirm Potential to Double Trident Resource
- ¹¹ VAN ASX, 19/06/19 Very High-Grade Gold Intersections Extends Trident-Marwest
- ¹² VAN ASX, 23/05/19 Vango's High-Grade Gold Intersections Extend Corridor
- ¹³ VAN ASX, 08/04/19 Bonanza High Grade Gold Intersections at Trident
- ¹⁴ VAN ASX, 28/05/18 Further Very High - Grade Gold Intersections from Trident
- ¹⁵ VAN ASX, 24/04/18 High-Grade Gold Intersections from Trident Gold Deposit
- ¹⁶ VAN ASX, 17/07/17 Further High-Grade Gold Intersections at Plutonic Dome
- ¹⁷ VAN ASX, 29/06/17 High Grade Gold Intersections from Drilling at Trident
- [^] VAN ASX, 20/05/20 Vango Mineral Increases to One Million Ounces
- [#] Superior Gold Inc. TSX-V: SGI Corporate Website
- ^{*} DAU ASX, 24/06/13 Information Memorandum
- [>] DAU ASX, 08/11/11 Significant Copper Anomaly Outlined at Apex
- [<] VAN ASX, 10/02/20 High-Grade Initial Drilling Intersections from Ned's Creek
- ⁺ VAN ASX, 01/05/19 Vango Option to JV Ned's Creek High-Grade Gold Project

The information in this announcement is extracted from reports lodged as market announcements summarised above.

The Company confirms that it is not aware of any new information that materially affects the information included in the original market announcements and 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.

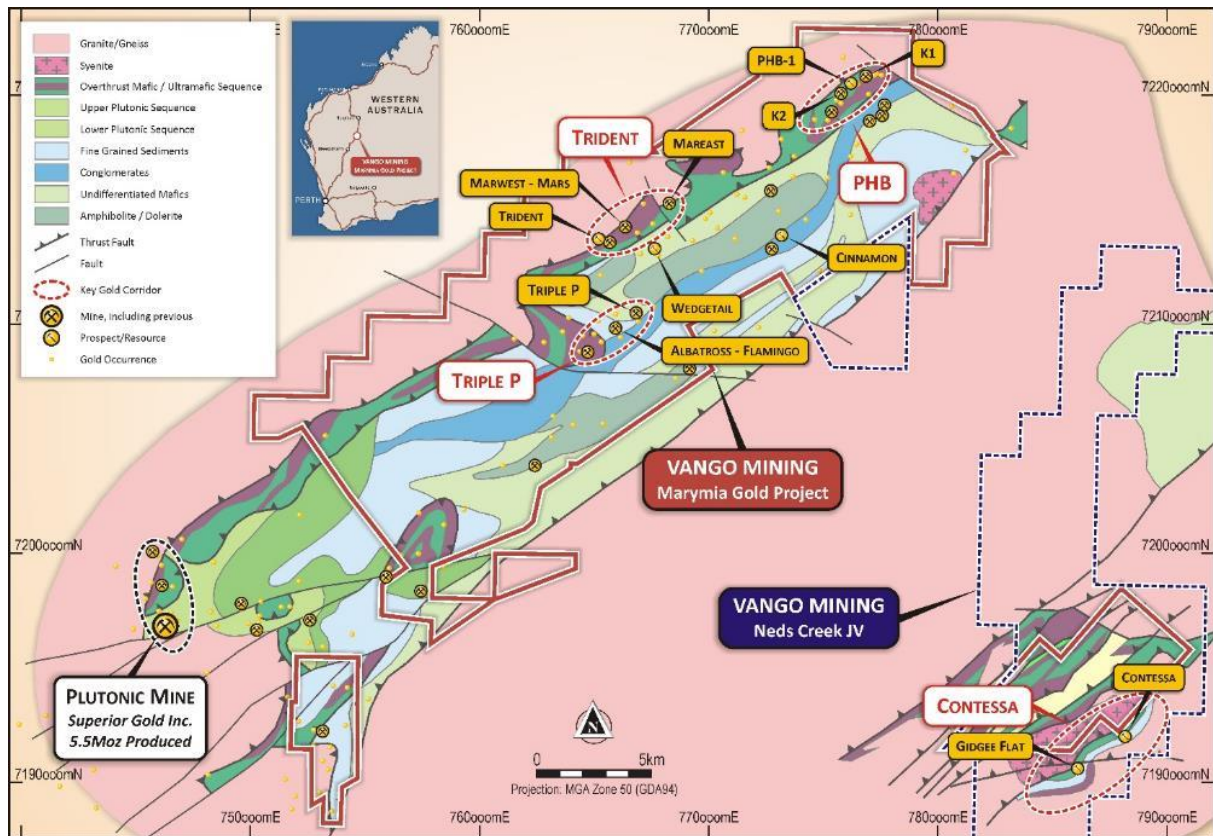


Figure 2: Marymia Gold Project and Ned's Creek JV tenements showing key target corridors

Authorised for release by the Board of Vango Mining Limited.

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About Vango Mining

Vango Mining Limited (ASX: VAN) is an exploration mining company with ambitions of becoming a high-grade WA gold miner by developing the 100% owned Marymia Gold Project (**Marymia**) located in the mid-west region of Western Australia, consisting of 45 granted mining leases over 300km².

Marymia has an established high-grade resource of 1Moz @ 3 g/t Au, underpinned by Trident - 410koz @ 8 g/t Au³, with immediate extensions open at depth/along strike.

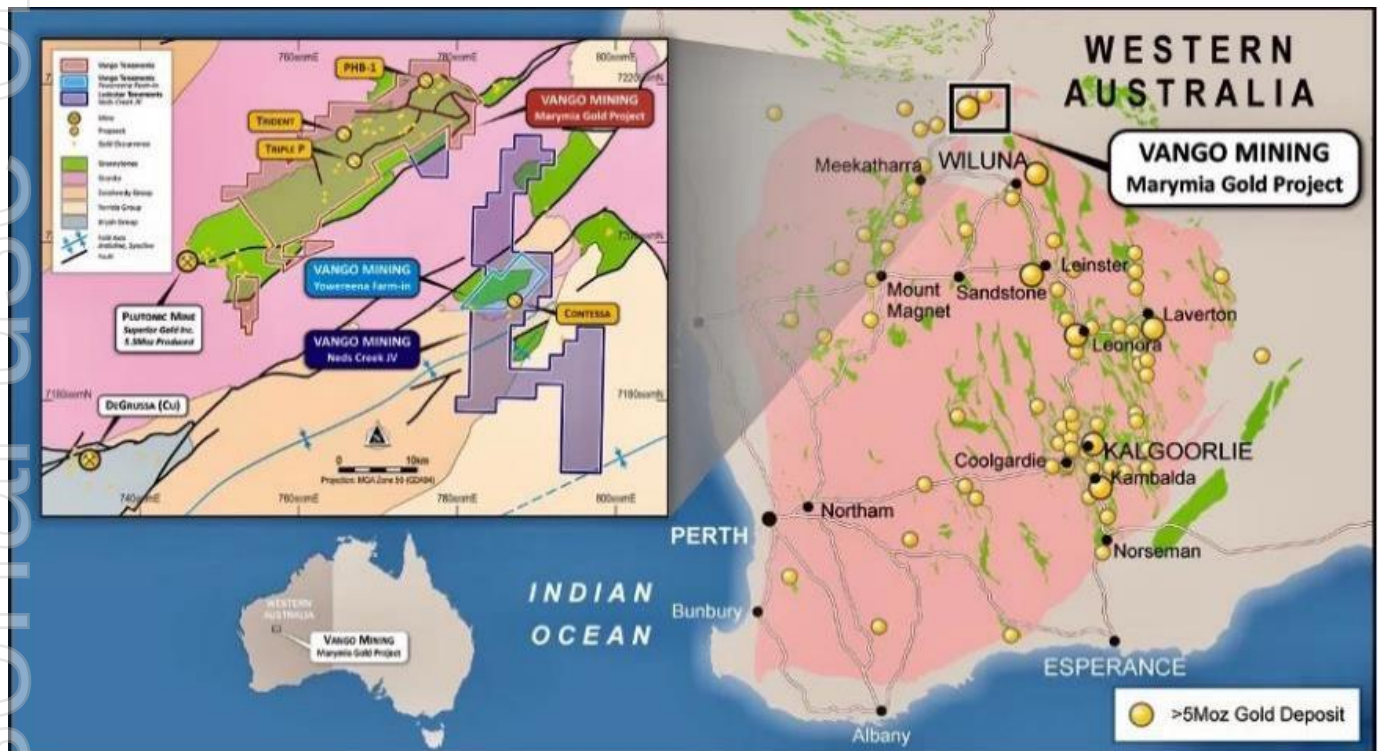


Figure 3: Location of Marymia Gold Project in the Yilgarn block of Western Australia.

The Marymia Gold Project has the potential to become one of Australia's largest high-grade production mines. The Greenstone Belt at the Marymia region includes six major gold corridors - all on granted mining leases, that remain largely un-tested beyond 100m depth, supported with an extensive drilling and geophysical database. Historical mining between 1992-2001, produced 580,000 ounces of gold almost entirely from open-pits. The geology is primarily formed of volcanic rocks, dominated by basalt, with minor sedimentary rocks inter-leaving the volcanic formations.

The Company is progressing a deliberate strategy focussed on growing its high-grade gold endowment to support its ambitions of becoming a significant high-grade, gold producer. To this end, the Company is currently focused on a multi stage 36,000 metre drilling program testing high-grade extensions and deeper 'Plutonic' targets, with stage one 20,000 metre program underway at PHB and Trident corridors, including over 7,000 metres of diamond drilling.

In parallel with the high-grade resource extension and definition program, the Company is also testing several much larger scale targets, looking for repeats of the Plutonic-style mineralisation. The Plutonic gold mine sits along strike to the southwest of Vango's ground (**Figure 3**) and has produced over 5.5Moz⁷ from a geological sequence known as the Mine-Mafic. This same geological sequence is interpreted from geophysical imagery to continue for 40km in Vango's Marymia tenements, however the majority of the Mine-mafic sequence in Vango's ground remains un-tested.

Dual success, through the Company's resource growth program, in combination with large-scale 'Plutonic analogue' targets drilling program, has the potential to lead to a material change to the scale of Vango's planned high-grade gold mining operations at Marymia.

JORC compliant Mineral Resource Estimate (ASX Announcement dated 20 May 2020*)⁶

MARYMIA GOLD PROJECT JORC 2012 MINERAL RESOURCE ESTIMATE – MAY 2020										
Deposit	Cut-off	Indicated			Inferred			Total		
	Au g/t	K t	g/t	K oz	K t	g/t	Oz	Kt	g/t	K oz
Mineral Resource										
Open Pits	0.5	5,300	1.8	311	2,950	1.6	150	8,250	1.7	461
Underground	3.0	1,142	9.6	352	992	5.9	189	2,134	7.9	541
Total		6,442	3.2	663	3,942	2.7	339	10,384	3.0	1,002

* VAN confirms all material assumptions and technical parameters underpinning the Resource Estimate and Reserve continue to apply, and have not materially changed as per Listing Rule 5.23.2

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).

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, see breakdown Appendix 2.

Trident underground resources are retained as first reported 18 April 2019¹ 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.

Competent Persons Statements

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, including over 40 years’ experience in gold mine 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. 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.

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.

Forward Looking Statements

This announcement contains ‘forward-looking information’ that is based on the Company’s expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company’s business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as ‘outlook’, ‘anticipate’, ‘project’, ‘target’, ‘potential’, ‘likely’, ‘believe’, ‘estimate’, ‘expect’, ‘intend’, ‘may’, ‘would’, ‘could’, ‘should’, ‘scheduled’, ‘will’, ‘plan’, ‘forecast’, ‘evolve’ and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company’s actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.