# **ASX Announcement**

Quarterly Activities Report
For the Quarter Ended 31 December 2019



# **HIGHLIGHTS**

# <u>Ulysses Gold Project, Western Australia (GML: 100%)</u>

- 107,000oz increase in the Mineral Resource for the Ulysses deposit from 760,000oz to 867,000oz of contained gold.
- Updated Measured, Indicated and Inferred Mineral Resource now stands at:

# 8.5Mt @ 3.2g/t gold for 867,000 ounces of contained gold<sup>1</sup>

- Measured and Indicated Resource increased by 22% (103,000oz) to 574,000oz.
- Importantly, the Measured Resource increased significantly from 4,000oz to 133,000oz as a result of recent drilling.
- High-grade portion of the updated Mineral Resource estimated to contain:

# 4.8Mt @ 4.5g/t gold for 695,000 ounces

o Including high-grade shoots containing:

# 1.73Mt @ 6.5g/t gold for 360,000 ounces

- Mineral Resource remains open both at depth and along strike.
- Drilling to continue in the New Year to test a number of new areas for further Resource growth.
- Feasibility work progressing.

#### Barimaia Gold Project, Western Australia (GML: 65%)

 245m diamond drilling program completed in December 2019 to test the current geological model.

#### Desdemona South JV Gold Project, Western Australia (GML: Right to Earn Up To 80%)

- Exploration farm-in and joint venture signed with Kin Mining (ASX: KIN) over the Desdemona South Area, south of Leonora in WA.
- Desdemona tenement package is contiguous with and located immediately north of Genesis' 100%-owned 867,000oz¹ Ulysses Gold Project.
- Project is strategically located between Ulysses and St Barbara's Gwalia Mine, and covers a number of conceptual to moderately advanced gold targets.
- Includes over 10km of prospective strike, including the northern extension of the strongly mineralised structural corridor that hosts the Ulysses gold deposit.
- Target zones identified to be tested in the first half of 2020.
- Joint Venture is consistent with the Company's strategy to consolidate additional, highly prospective gold tenure in the Leonora district.

<sup>&</sup>lt;sup>1</sup> Measured, Indicated and Inferred Resource of 8.5Mt @ 3.2g/t gold for 867,000oz – refer to the original ASX announcement dated 19 December 2019 for full details and Table 1 in this report. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of Mineral Resource estimates, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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 materially changed from the original market announcement.

### **ULYSSES GOLD PROJECT, WA (Genesis: 100%)**

The Ulysses Gold Project is located ~30km south of Leonora and 200km north of Kalgoorlie, in the mineral-rich and highly prospective Eastern Goldfields of WA.

It lies 30km south of the Gwalia mine (6Moz of Production and 2.1Moz of Ore Reserves) and along strike from the Orient Well and Kookynie mine camps, which have produced over 0.5Moz.

Genesis acquired the Ulysses Project in 2015 and, following initial exploration success, completed two open pit mining campaigns at the Ulysses West Pit in 2016 and 2017. Ore from Ulysses West was processed under a toll-treatment arrangement at the Paddington Mill, located 160km south of Ulysses along the Goldfields Highway.

Genesis is targeting the development of a long-life underground mining operation at Ulysses with major resource expansion drilling programs continuing in parallel with regional exploration programs.

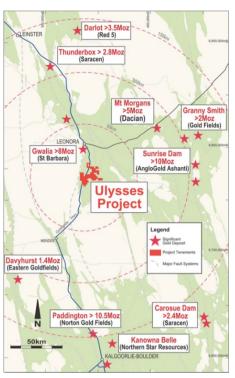


Figure 1. Ulysses Gold Project location.

# **Ulysses Mineral Resource Upgrade**

On 19 December 2019, Genesis announced a **107,000oz increase** in the Mineral Resource for the Ulysses deposit from 760,000oz to **867,000oz** of contained gold.

The updated Mineral Resource incorporates the results of the highly successful drilling program completed at Ulysses over the past four months, which has returned numerous high-grade intersections that confirmed and extended a number of high-grade gold zones.

The updated Measured, Indicated and Inferred Mineral Resource now totals **8.5Mt** @ **3.2g/t** gold for **867,000 ounces of contained gold** (refer to Table 1 for full details), which represents a 14% increase in contained ounces when compared with the October 2018 Mineral Resource. Importantly, the higher-confidence Measured and Indicated component has increased by 103,000 ounces (22%) to 574,000 ounces, with the Measured Resource increasing significantly from 4,000 ounces to 133,000 ounces.

The high-grade portion of the Mineral Resource, reported at a cut-off of 2g/t gold (refer to Table 1 for full details), which will form part of the mining evaluation for the Feasibility Study, is estimated to contain **4.8Mt @ 4.5g/t gold for 695,000 ounces**.

The high-grade shoots which form part of the overall Mineral Resource are estimated to contain **1.73Mt @ 6.5g/t gold for 360,000 ounces**.

The Mineral Resource extends over a strike length of more than 2.5km and sits immediately below and along strike from the Ulysses Open Pits (see Figures 2 and 3).

The Resource envelope currently extends to ~500m below surface at its deepest point and is estimated to an average depth of ~320m below surface, with a gold endowment of +2,700 ounces per vertical metre (ovm) for the 260m interval from the 360mRL (base of the open pits) to the 100mRL (interval of highest drill density).

The base of the Indicated portion of the Resource is shown in Figure 2 below.

### **Next Steps**

The next steps for the Ulysses Project in 2020 will include:

- Continued in-fill and extensional drilling in and around the existing Resource area;
- Drilling targeting new discoveries within the greater Ulysses Project area;
- Continued evaluation of potential project acquisition and consolidation opportunities in the surrounding area; and
- Progressing Feasibility Studies on the Ulysses mine development, including toll-treatment options, with a view to making a decision on developing a long-term mine in 1HCY2020.

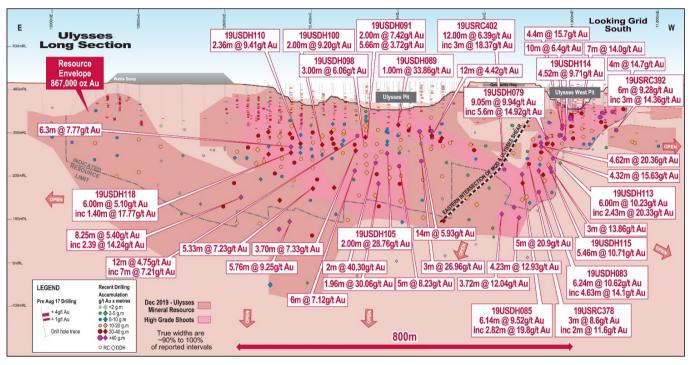


Figure 2. Projected Long Section in local grid showing the new Ulysses Mineral Resource (moderate red outline) with the high-grade portion of the resource showing in magenta. Limit of Indicated Mineral Resource shown.

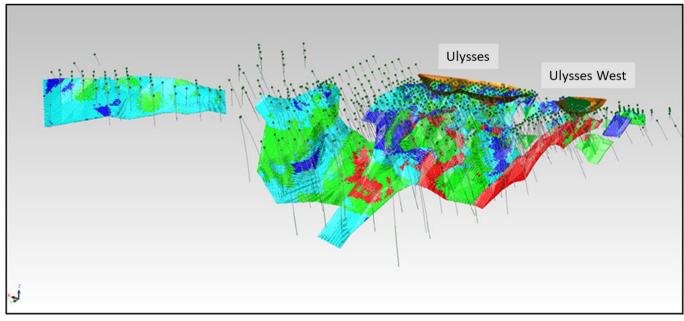


Figure 3. View looking towards the south-east showing the showing the modelled Resource.

Table 1: Ulysses Gold Deposit December 2019 Mineral Resource (0.75g/t cut-off grade above 200mRL, 2.0g/t cut-off below 200mRL)

	Measured		Indicated		Inferred		Total		
Domain	Tonnes	Au	Tonnes	Au	Tonnes	Au	Tonnes	Au	Au
	Mt	g/t	Mt	g/t	Mt	g/t	Mt	g/t	Ounces
HG Shoots	0.66	6.0	0.89	6.5	0.19	8.2	1.73	6.5	360,600
Shear Zone	0.14	1.3	3.20	2.2	1.88	3.2	5.21	2.5	426,100
Ulysses East			0.53	1.8	1.00	1.6	1.53	1.6	80,500
Total	0.80	5.2	4.61	3.0	3.07	3.0	8.48	3.2	867,200

December 2019 Mineral Resource Estimate 2.0g/t Global Cut-off											
	Measured		Indicated		Inferred		Total				
Туре	Tonnes Mt	Au g/t	Tonnes Mt	Au g/t	Tonnes Mt	Au g/t	Tonnes Mt	Au g/t	Au Ounces		
Total	0.66	6.0	2.42	4.4	1.70	4.1	4.78	4.5	695,900		

NB. Rounding errors may occur

# **Ulysses Drilling Results**

A program of Reverse Circulation (RC) and diamond drilling commenced in August 2019 to upgrade the Ulysses Mineral Resource. Over 20,000m of drilling was completed by the end of November to upgrade the top 200m of the Resource in preparation for mining. Drilling targeted approximately 1,000m of strike and some 300m of down-dip extent within and adjacent to the previous Resource envelope. At Ulysses West, drilling targeted ~600m of down-plunge extent.

Results were reported during the quarter from the Resource upgrade drilling program with holes targeting the upper parts of the Ulysses Mineral Resource (see Figure 2) with the drilling continuing to strongly support the continuity of the higher-grade gold mineralisation.

Hole 19USRC402 returned strong gold mineralisation with an intercept of 12m @ 6.39g/t gold including 3m @ 18.37g/t gold. This intersection is interpreted to occur within the Ulysses West quartz dolerite, which is one of the favourable host rocks for high-grade gold mineralisation at Ulysses. It occurs on the eastern limit of the intersection of the Ulysses West quartz dolerite and the Ulysses Shear, and potentially expands the zone of high-grade mineralisation associated with the Ulysses West shoot.

High-grade gold intersections from the most recent holes, as announced to the ASX on 19 November 2019 included:

- 6m @ 9.28g/t gold from 121m 19USRC392
  - > Including 3m @ 14.36g/t gold
- 12m @ 6.39g/t gold from 210m 19USRC402
  - > Including 3m @ 18.37g/t gold
- 6.00m @ 5.10g/t gold from 180m 19USDH118
  - Including 1.40m @ 17.77g/t gold
- 3.17m @ 4.36g/t gold from 168.83m 19USDH119
- 10.10m @ 2.45g/t gold from 182.2m 19USDH120
  - Including 4.81m @ 4.51g/t gold
- 11.20m @ 1.01g/t gold from 168.65m 19USDH121
- 4.57m @ 4.52g/t gold from 127.13m 19USDH123
- 1m @ 12.42g/t gold from 123m 19USRC388

6m @ 2.79g/t gold from 93m
 4m @ 3.05g/t gold from 226m
 19USRC401

• 9.91m @ 3.67g/t gold from 129.97m 19USDH124

> Including 4.58m @ 6.83g/t gold

True widths are ~90% to 100% of down-hole lengths

Full details of the assay results were provided in the Company's ASX Announcement dated 19 November 2019.

# BARIMAIA GOLD PROJECT, WA (Genesis: 65%)

The Barimaia Gold Project is located in the Murchison District of Western Australia, 10km south-east of the 6Moz<sup>2</sup> Mt Magnet Gold Mine, operated by ASX-listed Ramelius Resources Limited (see Figure 4).

An initial "proof-of-concept" drilling program completed in the September 2017 Quarter confirmed the presence of a substantial gold system at Barimaia. Based on the strength of the results from this initial work, Genesis moved ahead to complete the acquisition of Metallo Resources Pty Ltd, a company that holds the right to earn 80% in the project, in September 2017.

Genesis has now earned an initial 65% interest in the project and has elected to form a Joint Venture for the continued development of the project.

In December 2019, Genesis completed a 245m diamond drilling program to test the current structural geological model for the Barimaia Project. The assay results from this drilling are expected to be received in the first guarter of 2020.

Previous Reverse Circulation drilling completed in late 2018 defined significant shallow gold mineralisation over a 1km strike length, centred on the McNabs and McNabs East prospects (see Figures 6 and 7).

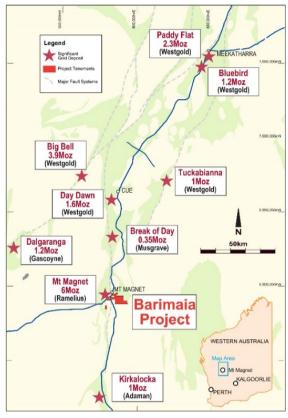


Figure 4. Barimaia Project location

Previous air-core drilling completed in July 2019 identified significant extensions of the east-west trending gold mineralised system to the east of McNabs East (see Figures 6 and 7).

Although at an early stage of definition and based on wide-spaced drilling, the gold mineralisation at McNabs and McNabs East is considered to occur within the same east-west oriented structural trend.

The McNabs Prospects area is entirely under shallow cover and comprises significant gold mineralisation associated with porphyry bodies intruding an ultramafic dominated volcano-sedimentary package. The prospect geology and mineralisation has strong similarities (including geochemical signature being anomalous in Au-Bi-Te-Pb-W-Ag) with the nearby porphyry-hosted, structurally controlled gold deposits of Ramelius Resources Limited.

The bedrock mineralisation now represents a very large bedrock gold target that requires systematic drill testing.

<sup>&</sup>lt;sup>2</sup> Refer Ramelius Resources' ASX Announcement dated 22 February 2017.

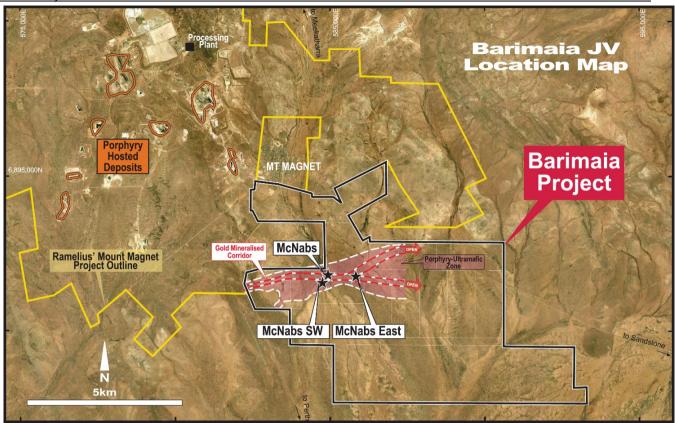


Figure 5. Barimaia Project showing prospect locations. The Barimaia Project is adjacent to Ramelius' Mt
Magnet Gold Mine. Target mineralised corridor highlighted.

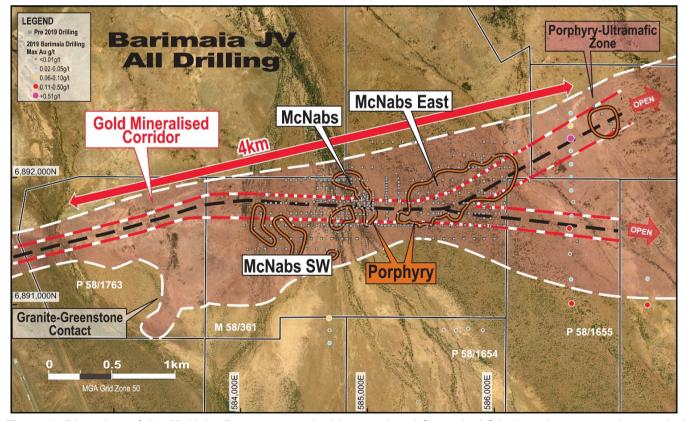


Figure 6. Plan view of the McNabs Prospects and with completed Genesis AC holes shown as colour coded circles with white outlines. The east-west trending gold mineralised structural corridor and porphyry-ultramafic rocks is highlighted.

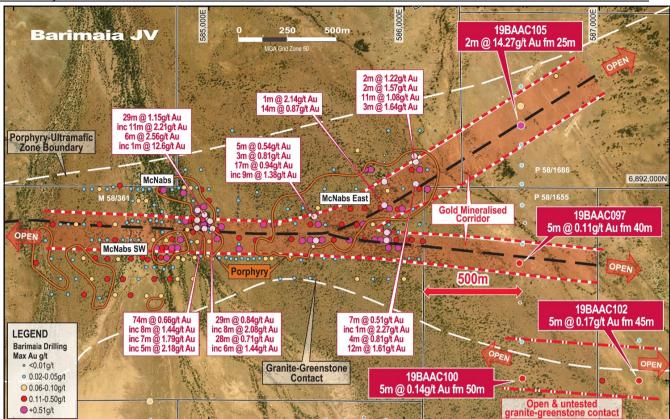


Figure 7. Plan view of the McNabs Prospects and with completed Genesis AC holes shown as colour coded circles with white outlines. The east-west trending gold mineralised structural corridor is highlighted. 2018 drilling intercepts (red text) from wide spaced RC drilling with collar locations shown by white circles.

#### **Future Activities**

Future planned activities at Barimaia include:

- Analysis of assay results from the diamond drilling program completed in December 2019;
- Further systematic air-core drilling to test the area east, west and south of the currently identified bedrock gold targets to extend the mineralised system which is open in all directions; and
- RC drilling to systematically test the +1.5km of E-W striking bedrock gold targets associated with the McNabs Prospects.

#### **Barimaia Joint Venture Terms**

The **Barimaia Joint Venture Gold Project** is subject to a Farm-in and Joint Venture Agreement (Mt Magnet JV), under which Genesis has now earned an initial 65% interest in the project by spending \$750,000. Following satisfaction of this initial earn-in Genesis has elected to form a joint venture.

# **DESDEMONA SOUTH JV GOLD PROJECT, WA (Genesis: RTE 80%)**

On 10 December 2019, Genesis announced that it had entered into a Farm-in and Joint Venture agreement with Kin Mining NL (ASX: KIN) over the **Desdemona South JV Gold Project** ("Desdemona South" or "Project"), located south of Leonora in Western Australia.

Desdemona South (see Figure 8) comprises a strategically located tenement package immediately north of and contiguous with Genesis' 100%-owned **867,000oz Ulysses Gold Project**, and includes a range of exploration targets which will strengthen and expand the Company's growth pipeline in the Leonora region.

Under the terms of the agreement, Genesis will have the right to earn an initial 60% interest in the Project and move to 80% under certain conditions.

The Joint Venture will provide Genesis with over 10km of strike of mafic stratigraphy (similar to Ulysses) to explore within the same regional structural corridor that controls gold mineralisation in the district (see Figures 9 and 11).

#### **Desdemona South Overview**

The Desdemona South JV Gold Project comprises a package of nine tenements covering a total area of ~156km², shown in the blue shading in Figure 8. The Project is easily accessed off the Goldfields Highway and is strategically located between Genesis' Ulysses Project and St Barbara's Gwalia Mine.

The tenement package includes a number of conceptual to moderately advanced gold targets. There are no Mineral Resources located on the Project. The Project area has been explored for gold and base metals since the 1970's but has had a fragmented and discontinuous exploration history due to a number of owners.

The Project area overlies Archaean greenstones and meta-sedimentary rocks intruded by sill-like bodies of mafic and ultramafic rocks. Mafic lavas, rhyolites and dacites predominate in the sequence, with dolerites and gabbros being the dominant intrusions. The regolith is variable with significant transported cover over the western portion of the project.

Early exploration of the Project area by previous explorers was hindered by the presence of widespread transported cover and deep clay overburden. Many rotary air blast drill programs conducted in the project area were unsuccessful, as target depths to test the bedrock could not be achieved due to swelling clays or water in-flows from buried palaeo-channels.

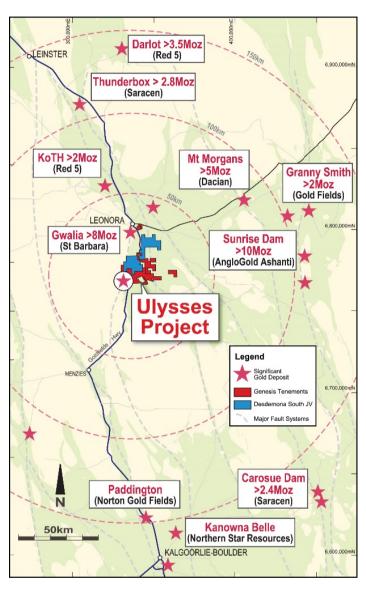


Figure 8. Project location map showing the Desdemona South JV Project in blue.

## **Target Zones**

A number of target areas have been developed for drill testing in 2020 and are shown on Figures 10 and 11. Target areas 1 and 2 cover approximately 10km of strike of mafic stratigraphy (similar to Ulysses) within structurally complex areas within the regional structural corridor.

These targets are concealed by transported cover and have been under-explored to date. Genesis proposes initially to complete wide-spaced air-core drilling with the objective of defining significant gold anomalism.

Target 3 is located on the granite-greenstone contact outside the mafic stratigraphic sequence and covers a structurally complex area that is untested by drilling. The Company plans to undertake wide-spaced aircore drilling to test this area, with the objective of defining significant gold anomalism.

Target 4 is located in the north-eastern portion of the Project in a structurally complex area associated with the Emu Fault. This area is untested by drilling and is located adjacent to Lake Raeside.

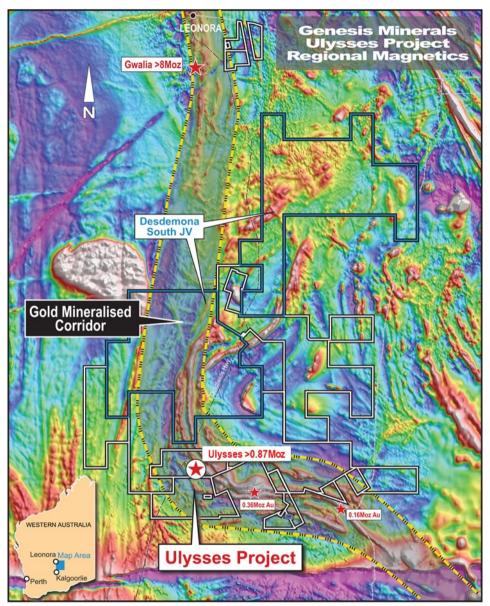


Figure 9. Regional magnetics RTP showing Ulysses and Desdemona South JV.

The Pelican-Flamingo Target is positioned on the northern limb of the Melita Syncline (see Figures 10 and 11). Mineralisation comprises quartz veining and sericite-pyrite alteration in a quartz-feldspar porphyry. A best result of 8m @ 22.48g/t Au from 60m in HWAC037 in air-core drilling was recorded.

A follow-up RC program defined narrow high-grade bedrock mineralisation with a best/typical result of 1m at 9.3g/t from 111m. The controls on mineralisation are not well understood and mineralisation remains open.

The broader area is only lightly tested and the magnetic dolerite unit spatially associated with the mineralisation remains untested. This area is considered a prospective target for applying the Ulysses geological model.

Planned drill testing will include Reverse Circulation and air-core drilling.

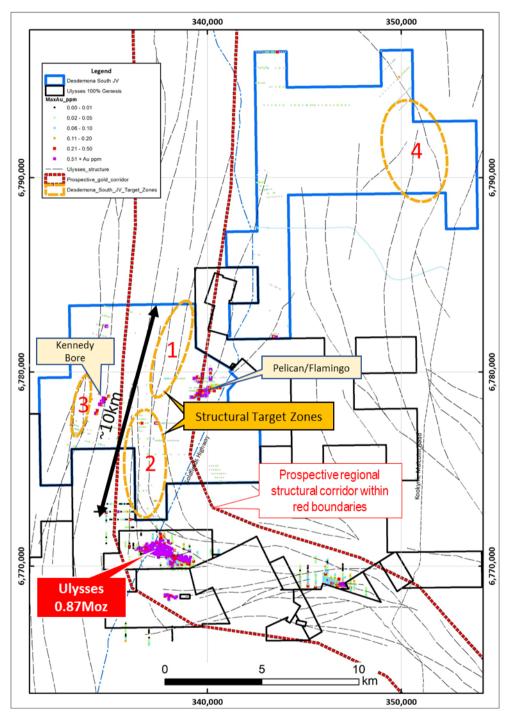


Figure 10. Plan view showing initial target zones on the Desdemona South JV area. Initial targets for testing highlighted within the orange polygons.

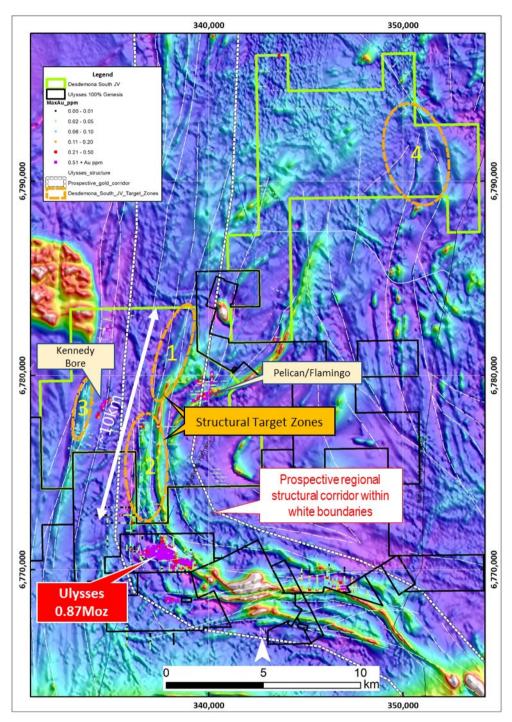


Figure 11. Plan view showing initial target zones on the Desdemona South JV area on RTP magnetics. Initial targets for testing highlighted within the orange polygons.

# **Farm-In and Joint Venture Terms**

The initial Farm-In terms are as follows:

- **Stage 1 Expenditure**: Genesis must incur expenditure of not less than \$250,000 (Minimum Expenditure) on the JV Area within 18 months of Commencement.
- Stage 2 Expenditure: Genesis may earn a 60% interest in the JV Area by incurring a further \$750,000 expenditure (total spend of \$1,000,000) on the JV Area within 36 months of Commencement.

Once Genesis earns a 60% interest, Kin may elect to form a Joint Venture with participating interests of 60% Genesis and 40% Kin or grant Genesis the right to elect to sole contribute or form a JV.

Once Genesis earns a 70% interest (if Kin does not elect to from a JV at 60%) Kin may elect to form a Joint Venture with participating interests of 70% Genesis and 30% Kin or grant Genesis the right to elect to sole contribute or form a JV to move to 80%.

Genesis would need to spend \$2.6 million in total to earn an 80% interest in the JV.

### **CORPORATE**

Cash

At 31 December 2019, the Company held cash reserves of A\$6 million.

This announcement is authorised for release by Michael Fowler, Managing Director of Genesis.

For further information, visit: www.genesisminerals.com.au or please contact

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#### **COMPETENT PERSONS' STATEMENTS**

The information in this report that relates to Exploration Results is based on information compiled by Mr. Michael Fowler who is a full-time employee of the Company, a shareholder of Genesis Minerals Limited and is a member of the Australasian Institute of Mining and Metallurgy. Mr. Fowler has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Fowler consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Information in this report that relates to Mineral Resources is based on information compiled by Mr Paul Payne, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Payne is a full-time employee of Payne Geological Services and is a shareholder of Genesis Minerals Limited. Mr Payne has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Payne consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### FORWARD LOOKING STATEMENTS

Some statements in this report regarding estimates or future events are forward looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward looking statements, opinions and estimates included in this report are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain any additional mine licenses, permits and other regulatory approvals required in connection with mining and third party processing operations, competition for among other things, capital, acquisition of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest fluctuations, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward looking statements will prove to be correct.

This report has been prepared in compliance with the JORC Code (2012) and the ASX Listing Rules.

The Company has concluded it has a reasonable basis for providing the forward looking statements included in this report, including with respect to any production targets and financial estimates, based on the information contained in this report.

This report has been prepared by Genesis Minerals Limited. This document contains background information current at the date of this report. The report is in summary form and does not purport to be all-inclusive or complete.

Recipients should conduct their own investigations and perform their own analysis in order to satisfy themselves as to the accuracy and completeness of the information, statements and opinions contained in this report.

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