



## Reporting on Genesis Minerals Mulwarrie Project

Labyrinth Resources Ltd ("Labyrinth", "the Company") (ASX:LRL) refers to the Mulwarrie acquisition announcement released on the ASX on 18 November 2024.

For completeness, Labyrinth announces further information in relation to the Mineral Resource estimate of Genesis' Mulwarrie project.

The Mineral Resource estimate for the Mulwarrie project is shown on the following pages.

#### Table 1: Mulwarrie Mineral Resource Estimate Summary

Mulwarrie Mineral Resource Estimate Summary (0.5g/t cut-off)			
Category	Tonnage (Mt)	Au Grade (g/t)	Au Ounces
Inferred	0.88	2.8	78,700
Total	0.88	2.8	78,700

1. Reported as at 17th April 2023, refer ASX:GMD 'Reporting on St Barbara Leonora Projects'

This announcement has been authorised and approved for release by the Board.

#### **Investor Enquiries**

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#### **MULWARRIE**

#### **Geology and Geological Interpretation**

The Mulwarrie Gold Project is located 150 km north west of Kalgoorlie in the Ularring District of the North Coolgardie Minerals Field. The project is secured by 2 contiguous tenements, M30/119 and M30/145, 10kms north west of the Davyhurst Mining centre. The two tenements lie within a 10km wide greenstone belt which forms the northwest extension of the Coolgardie Line. The structurally dominant north trending Mt. Ida fault lies approximately 4km east of the Mulwarrie Mining Centre. Most of the lithologies within this greenstone belt are steeply dipping and well foliated along a NNW/SSE trend.

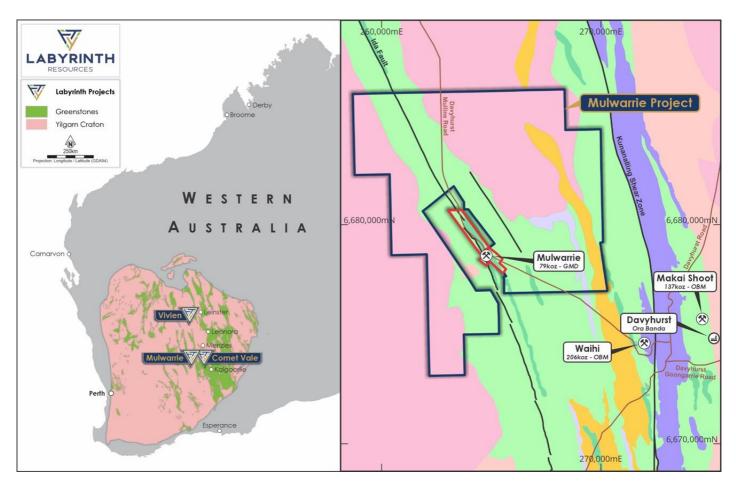


Figure 1 Location and Geology of the Mulwarrie Project

Grades of metamorphism at Mulwarrie are generally higher than in the Kalgoorlie area with hornblende – biotite – plagioclase amphibolites common. Hornblende is diagnostic of the amphibolite facies and at Mulwarrie metamorphism has peaked at mid to upper amphibolite facies.

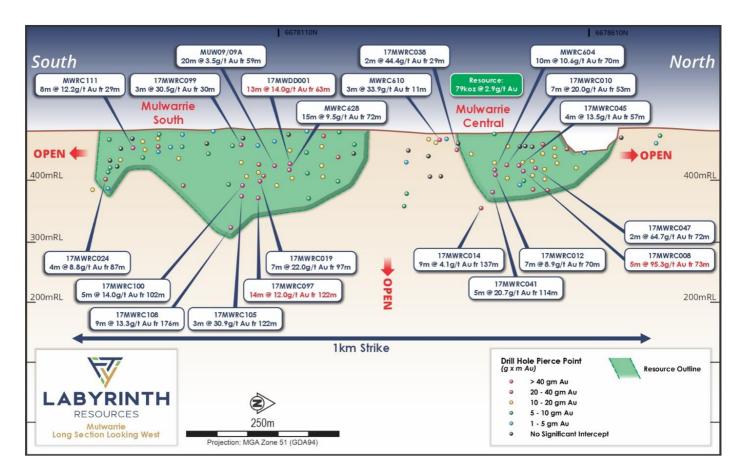


Figure 2 Long section looking west at Mulwarrie

Gold mineralisation has been found in two distinct settings at Mulwarrie. Firstly, in narrow shear zones with only minor or no quartz veining, with limited calcsilicate alteration haloes and with erratic but occasionally high gold values. The zones of mineralisation may be up to 2 metres wide but are generally less than 50 cm. They are conformable to the stratigraphy and foliation. The second and most important type of gold mineralisation is associated with quite flat dipping often massive quartz reefs with strong diopside, biotite, epidote and carbonate alteration haloes. Pyrrhotite and pyrite development is also strong within and adjacent to the quartz reefs. Minor amounts of chalcopyrite, galena and sphalerite are also associated with gold mineralisation. Gold is found within quartz reefs, within biotite selvages to the quartz veins and also in the associated country rocks. In MWRC 628 at 9373N/9879E (local grid coordinate) an intersection of 15 metres @ 9.54 g/t Au from 72 – 87 metres drill depth occurs within quartz veins having abundant sulphide mineralisation combined with diopside, biotite and silica alteration. Mineralised shoots appear to plunge 30- 45 degrees to the south (125°magnetic).

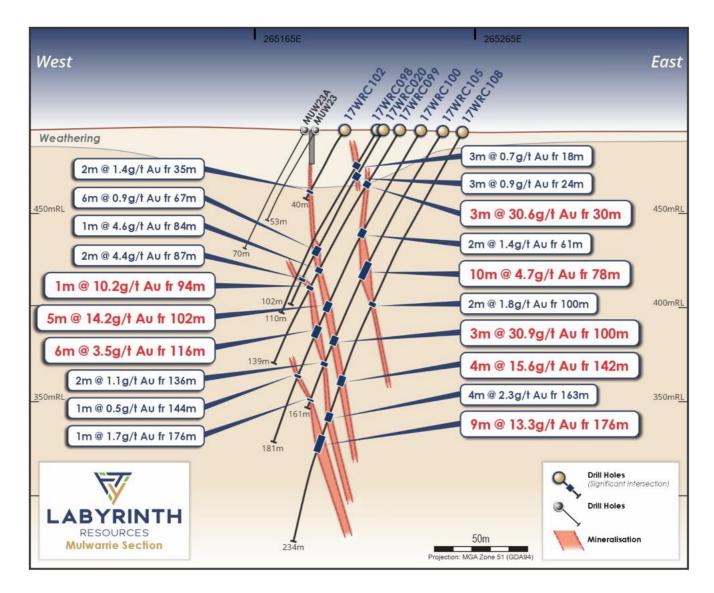


Figure 3 Cross section looking north at Mulwarrie

#### **Drilling Techniques**

Drill sample data has been collected by various exploration companies between 1983 and 1996. Drilling programs included Rotary Air Blast (RAB), and RC drilling techniques, the current historical database includes 453 holes for a total of 14,321m. Spitfire conducted 3 phases of drilling, June 2017 (24 RC holes for 2,915m and 1 Diamond drill hole of 99.6m, August 2017 (24 RC holes for 2,780m) and finishing with November/December 2017 (27 RC holes for 3,517m). The spacing of drill hole collars is variable. The gold mineralisation has generally been defined by drill holes on a cross section line spacing, roughly perpendicular to the strike of the mineralised zones between 10m and 25m apart.

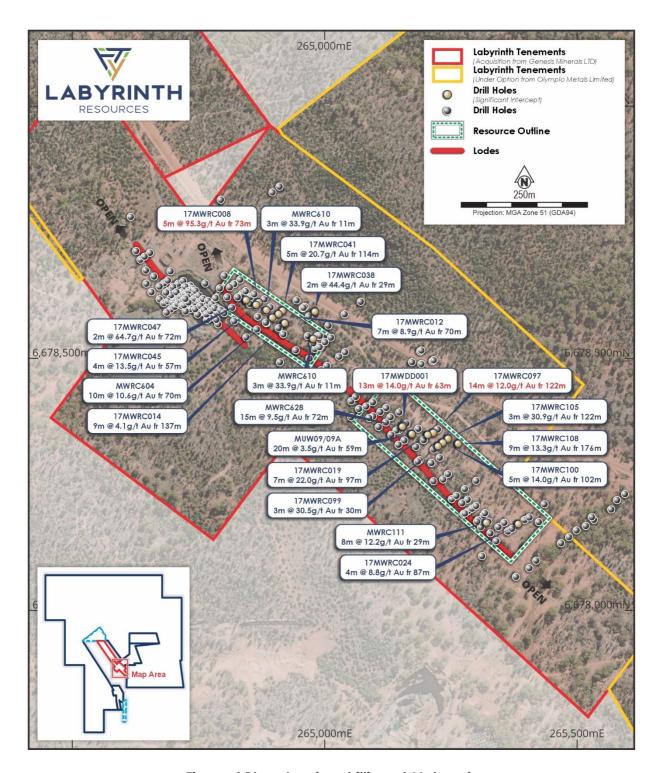


Figure 4 Plan showing drilling at Mulwarrie

#### Sampling, sub-sampling techniques and Sample Analysis

Sample information used in resource estimation was derived from both RC and diamond core drilling. The drill samples have been geologically logged and sampled for lab analysis. Minor sample recovery problems were noted in the historical reports when drilling encountered faulted/fractured ground. No sample recovery problems were encountered with the recent diamond & RC drilling. The Spitfire 2017 RC drilling was completed using a face sampling hammer with 5.75 inch bit. The recent diamond hole was drilled HQ to 70.7m & the remainder NQ2 to 99.6m. All core was orientated from 17MWDD001.

#### **Estimation Methodology**

Grade estimation was by Ordinary Kriging for Au using GEOVIA Surpac<sup>TM</sup> software. The estimate was resolved into 1m (E) x 5m (N) x 5m (RL) parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, top cuts were applied for gold to 17 of the 21 domains.

#### **Cut-off Grades**

Quartz vein boundaries typically coincide with anomalous Au which allows for geological continuity of the mineralised zones. All gold-bearing vein (and grade) contact models were built in Leapfrog<sup>TM</sup> Geo software and exported for use as domain boundaries for the block model. The cut-off grade of 0.5 g/t Au assumes a gold price of AUD\$2500/oz.

#### **Resource Classification**

The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information. The Mulwarrie Mineral Resource has been classified as Inferred according to JORC 2012 primarily due to a lack of oriented diamond core holes to assisting in supporting the structural model. In addition, very limited bulk density data is available to date.

#### **Mining Assumptions**

No modifying factors were applied to the reported Mineral Resources. Parameters including geotechnical, mining dilution, ore loss and metallurgical recoveries will be considered during the planned mining evaluation of the project. The reported Mineral Resources have been depleted to account for previous mining.

#### **Metallurgical Assumptions**

Metallurgical tests of selected RC samples including bottle roll cyanidation leach tests and rate of cyanidation tests were completed by Ammtec in 1986 and 1987 for Pancontinental. More recently bottle roll cyanidation leach tests prior to trial mining using a mobile gravity/CIL plant were also carried out by Goldfield Argonaut in 2015. Petrological examination of selected samples was also completed at the end of trial mining. In September 2107 2 composite samples were created by Nagrom from ore grade RC samples collected from East Lode intercepts.

One composite was created from sulphidic quartz lode ore (semi massive pyrite & pyrrhotite in quartz), the other composite was created from biotite altered & sheared basalt containing disseminated pyrite & pyrrhotite also derived from ore grade RC samples collected from East Lode intercepts.

A standard grind size was used of P80 (0.106mm). Initial test work has produced encouraging results and indicates that both the quartz lode & altered basalt ore is not refractory in nature. 24-hour bottle roll tests returned 96.6% recovery from the quartz lode composite and 91% recovery from the sulphide bearing altered basalt composite. Other Modifying Factors No modifying factors are applied to the Mineral Resource.

#### **Relevant reports**

All material information within this report has been released to the ASX within the following reports:

ASX:GMD – 'Revised reporting on St Barbara Leonora Projects, 24th April 2023'

ASX:GMD - 'Reporting on St Barbara Leonora Projects, 17th April 2023'

ASX:STB – 'Ore reserve and Mineral resource Statement as at 31 December 2022', Feb 22nd 2023

ASX:BDC – 'High grade diamond results at Mulwarrie', 18th march 2019

ASX:SPI – '2.6Moz JORC Resource for Bardoc Gold project', 13th November 2018

ASX:SPI – 'More high grade Hits at Mulwarrie porject', 30th January 2018

ASX:SPI – 'High grade primary Gold hits at Mulwarrie project', 27th September 2017

#### **Competent Persons Statement**

The information in this announcement relates to exploration results for the Mulwarrie Project which Ms. Jennifer Neild has reviewed and approves. Ms. Neild, who is an employee of Labyrinth Resources Limited, a professional geoscientist and a Member of the Australian Institute of Geoscientists. Ms. Neild has sufficient experience relevant to the style of mineralisation and type of deposits under consideration, and to the activities which have been undertaken 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, Mineral Resources and Ore Reserves. Ms. Neild consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

The information in this report that relates to Mineral Resources at Mulwarrie Deposit is based on information, and fairly represents, information and supporting documentation compiled by Ms. Jane Bateman who is a Fellow of the Australasian Institute of Mining and Metallurgy. Jane Bateman is a full-time employee of St Barbara Ltd and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking 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". Jane Bateman consents to the inclusion in the statement of the matters based on her information in the form and context in which it appears.

#### **Disclaimer**

The information in this announcement relating to estimates of Mineral Resources and Ore Reserves were compiled by St Barbara. The Mineral Resources and Ore Reserves estimates in this announcement have been previously reported and Labyrinth relies on this information and the Competent Persons who have reviewed the Mineral Resources and Ore Reserves contained in this announcement and consented to its release.

The Company confirms that it is not aware of any information or data that materially affects the information included in the said original announcements and the form and context in which the Competent Persons' findings are presented have not materially modified from the original market announcements.

### **Appendix 1**

### JORC TABLE 1 Checklist of Assessment and Reporting Criteria – Mulwarrie Section 1 Sampling Techniques and data

### Sampling techniques

- Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.
- Reverse Circulation (RC) and Diamond Core (DC) drilling on nominal 50m x 25m grid spacing. Drilling was mainly completed by Bardoc Gold Ltd in conjunction with Spitfire Minerals The holes were generally drilled towards magnetic 233 degrees at varying angles to optimally intersect the mineralized zones.

The Mulwarrie Gold drill sample data has been

collected by various exploration companies

- Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.
- between 1983 and 1996 Drilling programs included Rotary Air Blast (RAB), and Reverse Circulation (RC) drilling techniques, the historical database includes 528 holes for a total of 23,763m. This includes publicly available data from outside of the tenement area that affects interpretation of the model.

  Bardoc RC drilling was sampled as one metre
- Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay').
- down hole intervals. The recovered samples were passed through a cone splitter and a nominal 2.5kg 3.5kg sample was taken to a Kalgoorlie contract laboratory.

  Samples were sent to the lab oven dried,

crushed, reduced by riffle splitting to 3kg as

required and pulverized in a single stage process

- In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.
- The sample was then prepared by standard fire assay techniques with a 50g charge.

to 85% passing 75  $\mu$ m.

- Approximately 200g of pulp material was returned to Bardoc for storage and potential reassay at a later date. The Diamond samples were collected at nominated intervals by Bardoc staff based on interpreted mineralisation, alteration and lithological contacts.
- Labyrinth is currently looking into whether these samples still exist or are stored by Genesis Minerals Ltd.

#### Drilling techniques

- Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).
- Drilling programs at Mulwarrie included Rotary Air Blast (RAB), and Reverse Circulation (RC) drilling techniques.
- Hole depths range from 3m to 234m.
- RAB drilling makes up 55.8% and RC drilling makes up 43.6% of the historical exploration drilling completed at Mulwarrie. The three diamond holes makes up 0.6% of drilling.
- Several campaigns of drilling were undertaken by the historical companies, between 1983 and 1996.
- Company drilling rigs and professional drilling contractors were used by the historical exploration companies.
- The diamond holes completed by Bardoc were drilled HQ to 70.7m & the remainder NQ2 to 99.6m. All core was orientated from 17MWDD001,2 and 3.
- The June and August 2017 RC drilling were completed using a face sampling hammer with 5.75 inch bit.

Drill sample recovery	core and chip sample recoveries and results assessed.  the field Minor so the his faulted proble diamo  Future drilling though	pole recovery was qualitatively assessed by geologists.  sample recovery problems were noted in torical reports when drilling encountered d/fractured ground. No sample recovery ms were encountered with the Bardoc and & RC drilling.  drilling programs will record and assess recoveries and reevaluate historic data and twinning several of the older holes.
	recovery and ensure representative nature of the samples  The cycl material checked contami recoveri Bardoc/ represer	depths were crossed checked regularly. Ione was regularly cleaned to ensure no I build up and sample material was Id for any potential downhole Ination. The drilling sample es/quality were considered acceptable by Spitfire geologists and are appropriately Intative for the style of mineralisation.
	sample recovery and grade and sample is whether sample bias may have gain of f	nalysis of drilling samples, no obvious recovery biases or biases related to loss or ines have been identified. Labyrinth will his in any future programs.
Logging	been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.  Some I the regrescent continuaddition.  Loggin quantinus and all veining.  Drill how Mulwa reports entere.  No general No gene	cological logging was appropriate for the f drilling and the lithology's encountered. gical logs are available for most holes. Ver, logging was often rudimentary and ogs were not recorded or not included in corts. Detailed logs were recorded for the diamond & RC drilling. Labyrinth will ue to evaluate the validity of this data with conal drilling.  In it is qualitative, with the exception of some tative logging of sulphide, quartz veining teration content. Percent sulphide & quartz gray was recorded for the more recent drilling. The logging data was entered into the suried database directly from historical drilling of and assay reports. Hard copy logs were and by hand for the recent drilling. The contechnical logs are available for the call drilling. Geotechnical logging was ently completed on diamond hole DD001,2 and 3, Labyrinth is investigating this data exists however SG data is bile.  Gle diamond hole was logged for entic susceptibility and specific gravity.
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the</li> <li>RC, RAB colour, v taken of have red</li> <li>The dian</li> </ul>	and diamond were logged for lithology, weathering, minerals present. Photos were the diamond hole, Labyrinth does not cord of chip tray photos.  nond drill core was logged for lithology,
	measure Intersect mineralis measure	e of host, alteration, mineralogy, structural ements. Photos were taken of the core. tions were sampled according to sation with a minimum sample ement 0.25m.
Sub-sampling techniques and sample	whether quarter, half or all core taken. retained and ger	d core cut to half core, the other half If for geotechnical and metallurgical work meral logging.
preparation	sampled, rotary split, etc and whether sampled wet or dry. taken at attache were tak	ng single 1 metre splits were automatically the time of drilling by a cone splitter d to the cyclone. 4m composite samples ken off the other side.
	and appropriateness of the sample undertal mineralis automa samples and ged	nnique was appropriate for the work ken. During logging samples that showed sation, veining or alteration were tically split to a 1m sample, 4m composite were used as indicators of mineralisation plogy. 1m split samples are taken from m composites show >0.2g/t gold sm.

	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul> <li>QAQC reference samples and duplicates were submitted by LRL. In house standards and blanks were inserted by ALS</li> </ul>
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	Im samples are automatically bagged from the cyclone, field duplicates are taken in suspected mineralised zones from the piles. This methodology has since changed in order to ensure that a true duplicate is being taken from the splitter.
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>All RC samples are collected to approximately 1-5 kg. The sample sizes taken are appropriate relative to the style of mineralisation and analytical methods undertaken.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul> <li>All samples were sent to ALS laboratory in Kalgoorlie. Photon Assay method has shown to provide quick turnaround times and high accuracy.</li> </ul>
	<ul> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	All analytical results listed are from an accredited laboratory using photon assay method
	<ul> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	Certified Reference Materials (CRMs) are included in each batch to ensure the reliability of the assay. These CRMs, such as OREAS254C, OREAS230, and OREAS241, are specifically chosen for photon assay to maintain quality standards and were evaluated against published certificates. The standard deviation was minimal for samples. OREAS241 shows strong precision in analysis values however is not accurate with the certified value and therefore is being switched.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	<ul> <li>External verification have not been carried out, but values were checked against logging and photographs to ensure the intersected Au values are in line with logged alteration, mineralisaiton or veining.</li> </ul>
	The use of twinned holes	•
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	Data was captured in spreadsheets while the Company developments its own logging systems. Spreadsheets are automatically uploaded to Cloud when reaching camp and checked by head office geologists. Assay files have been sent directly from the lab to MaxGeo to avoid operator errors. All physical sampling sheets are filed and scanned electronically and submissions to the lab checked to ensure that no samples are missing or incorrect IDs.
	Discuss any adjustment to assay data.	No adjustments were made to the assay data.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	<ul> <li>Downhole survey measurements were collected for some of the historical RC holes using a single shot downhole survey tool. For many of the shallow holes, only one top of hole survey was completed at the collar position, noting the azimuth and dip at the start of the hole. North seeking gyro down hole surveys were completed for the recent RC drilling.</li> <li>The Mulwarrie Gold project drill holes were drilled on a local grid, sub-parallel to strike (orientated at 323 degrees magnetic). Most drill hole collars were surveyed using a standard GPS and later checked with a differential GPS.</li> </ul>
	Specification of the grid system used.	<ul> <li>All collar locations quoted in this Report are using the GDA1994 MGA, Zone 51 coordinate system.</li> <li>Some coordinates collected by DGPS and found to be within 0.2m of location.</li> </ul>
	<ul> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Topography based on publicly available data. A surveyed dataset is available for the mine area but LRL is not aware of its origin.</li> </ul>

Data spacing and distribution	Data spacing for reporting of Exploration Results.      Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.  Whether sample compositing has been applied.	<ul> <li>The Mulwarrie spacing of drilling is approximately 25m x 30m. However a number of holes were drilled to 10x15m within the designed pit cutback areas. East of the historic prospect, spacing increased to 50m spacing. At depth drilling becomes sparse and spacing is wider. Opportunity mainly exists at depth (given the shallow drilling) and along strike.</li> <li>The spacing of the drill hole collars is variable. The gold mineralisation at the Mulwarrie Gold Project has generally been defined by drill holes on a cross section line spacing, roughly perpendicular to the strike of the mineralised zones at 15m,20m, 25m and 50m, with an average on-section spacing of 10m to 15m.</li> <li>RC sampling, in general, was collected on 1m intervals down hole in mineralised zones including the recent program. Some alternate 1m samples were collected in non mineralised footwall and hanging wall lithologies in historical holes. 3m composites were collected in non mineralised lithologies in the recent RC drilling.</li> <li>RAB sampling was collected on a combination of 1m, 2m, 3m and 4m composites in mineralised zones. Some alternate 2m, 3m and 4m compositing was carries out in non mineralised footwall and hanging wall lithologies.</li> </ul>
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	<ul> <li>The drill density is sufficient to estimate a Mineral Resource.</li> <li>The relationship between the drilling orientation and the orientation of mineralised structures is not considered to have introduced a sampling bias. Most holes have been drilled perpendicular to the main orientation of the interpreted mineralised body. Multiple holes were drilled in the opposite direction to test the relationship between lithology, mineralisation and plunge of mineralisation.</li> </ul>
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No drilling orientation related sampling bias has been identified at the project.
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples are assumed to be transported in best practice methods, though Labyrinth is not privy to the true chain of ownership.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>Apart from a desktop review of the historic surface and drill data, no audits have been undertaken.</li> </ul>

#### **SECTION 2 REPORTING OF EXPLORATION RESULTS**

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Labyrinth Resources Ltd has recently entered into an option agreement with Olympio Metals Ltd to acquire the Mulwarrie and Mulline Projects. As part of the strategic consolidation of gold projects in the region Labyrinth entered into an agreement to acquire the Mulwarrie Mining tenements from Genesis Minerals Ltd. where a 79koz gold resource exists.  M30/119 M30/145
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	<ul> <li>No known impediments exist with respect to the exploration or development of the tenement. Labyrinth has acquired Olympio tenements which surround the Mining tenement. The owners of a mining tenement to the west and P licences are of interest and have been investigated as part of the acquisition.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>See previous announcements. In particular review the Bardoc/Spitfire ASX announcement 19 March 2019, HIGH-GRADE DIAMOND DRILLING RESULTS AT MULWARRIE CONFIRM LODE STRUCTURES AND PAVE WAY FOR RESOURCE UPGRADE</li> <li>A summary of previous exploration at Mulwarrie Gold Project is included below;</li> <li>The Mulwarrie District, including the Mulwarrie Project area has a recorded production of 26,344 ounces of gold from 19,728 tonnes for an average grade of 41.53 g/t Au (1903-1910).</li> <li>1983 - 1988 - Pancontinental Mining Limited completed gridding, geological mapping, aeromagnetic and ground surveys, IP surveys, regional soil sampling, costeaning, RAB and RC drilling.</li> <li>Callion, a subsidiary of the German based corporation, Thyssen Schachtbau GMBH (TSG) commenced mining at Mulwarrie Central West in November 1989, with New Holland Mining N.L. (20% interest) and H.F. Reif (6.25% interest). A total of 24,344 tonnes @ 3.88 g/t for 94.5 kg (3,037 ounces) of gold was recovered.</li> <li>In 1995 Consolidated Minerals had secured the tenements and in 1996 completed 34 RC holes (MWRC 601-634) for a total of 2,977 metres and to a maximum depth of 126 metres.</li> <li>Post 1997 and up to the date that Ethan Minerals Ltd signed option agreements with Reif and Hoppmann the latter parties carried out their own exploration programs within the Mulwarrie tenements. This work consisted of RC drilling, reconnaissance prospecting and loam sampling.</li> <li>In 1998 Reif and Hoppmann carried out an RC drilling program of 8 drill holes. MWRC 635 – MWRC 642 which was focused directly south of the Central Pit between 9590 North and 9620 North. The individual assay results from this program cannot be located in available reports.</li> <li>In 2017 Spitfire Minerals conducted drilling programs and after Bardoc took ownership conducted a resource estimation and investigated internally mining and economic studies. A pit cuthors design was created.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	studies. A pit cutback design was created.  The Mulwarrie Gold Project lies within a 10km wide greenstone belt which forms the northwest extension of the Coolgardie Line. The structurally dominant north trending Mt. Ida fault lies approximately 4km east of the Mulwarrie Mining Centre. Most of the lithologies within this

areenstone belt are steeply dipping and well foliated along a NNW/SSE trend. Gold mineralisation has been found in two distinct settings at Mulwarrie. Firstly, in narrow shear zones with only minor or no quartz veining, with limited calcsilicate alteration haloes and with variable, but occasionally high gold values. The zones of mineralisation may be up to 2 metres wide but are generally less than 50 cm. They are conformable to the stratigraphy and foliation. The second and most important type of gold mineralisation is associated with quite flat dipping often massive quartz reefs with strong diopside, biotite, epidote and carbonate alteration haloes where gold is also found and contributes to the overall wide mineralised intervals. Gold mineralisation at Mulwarrie is associated with flat to steep dipping quartz reefs with strong diopside, biotite, epidote and carbonate alteration haloes. Pyrrhotite and pyrite development is also strong within and adjacent to the quartz reefs. Minor amounts of chalcopyrite, galena and sphalerite are also associated with gold mineralisation. Gold is found within quartz reefs, within biotite selvages to the quartz veins and also in sheared & altered country rocks. The main modelled mineralised domains have a total dimension of 1,000m (north-south), ranging between less than a metre to multiple metres over up to 150m (east-west) in multiple veins and ranging between 300m and 500m RL (AMSL). Benson (1996) interpreted the mineralised zones as being lens shaped pods and as being structurally and stratigraphically controlled with the zones commonly occurring at felsic/mafic contacts, within shear zones and at metabasalt metadolerite contacts. **Drill hole Information** A summary of all information Tables reported in the announcement all in MGA material to the understanding of GDA zone 51 the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth • hole length. If the exclusion of this information No information material to the understanding of is justified on the basis that the the exploration results has been excluded. information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.

Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.  Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	The mineralized drill intersections will be reported as down hole intervals and were not converted to true widths. True widths may be up to 50% less than drill intersections pending confirmation of lode geometry. Where gold intersections are amalgamated, a weighted average is calculated & repeats were recorded, the average of all the samples was used.  Metal equivalent values have not been reported.  All samples reported are 1m samples as these are the ones that have contributed to the evaluation and estimation of mineralisation.
	reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	All samples reported relate to surface outcrop.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The mineralised veins at Cheer di pto the south and trending ESE-WNW.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	All drillhole lengths are known.
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	A plan view of drilling locations has been provided in the body of the announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All samples were reported for Au and their context discussed.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All other relevant data has been included within this report. Though Labyrinth acknowledges that often, with time and the announcement of acquisition, further insight and data is obtained from previous geologists/companies that have explored the ground.

Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	<ul> <li>Further work will be conducted to investigation the extension of mineralisation at depth and along strike.</li> </ul>
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	A map noting the sample locations has been included. A 1:100k geological map has been included for reference.

# Section 3 Estimation and Reporting of Mineral Resources Mulwarrie

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.      Data validation procedures used.	<ul> <li>The historical database was compiled and supplied to Spitfire as a Microsoft Access database.</li> <li>The data have then been imported into a relational SQL Server database using DataShed™ (industry standard drill hole database management software).</li> <li>Subsequent drilling data has been supplied in Excel templates, using drop down lists to verify codes before it is imported to the SQL database.</li> <li>The data are constantly audited and any discrepancies checked by Spitfire personnel and its consultants before being updated in the database. Normal data validation checks were completed on import to the SQL database.</li> <li>Historical data have not been checked back to hard copy results, but have been checked against previous databases supplied and results compared against new Spitefire infill drilling.</li> <li>All logs are supplied as Excel spreadsheets files and any discrepancies checked and corrected by field personnel.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> </ul>	The competent person has not visited site.  Mulwarrie was owned by SBM for a short time prior to sale to GMD and was not considered a core asset.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The confidence in the geological interpretation is considered reasonable. Gold is found within quartz reefs, within biotite selvages to the quartz veins and also in sheared &amp; altered country rocks. These quartz veins and shears have been modelled in 3-D using Leapfrog™ and Surpac™ software.</li> <li>The geological interpretation is supported by drill hole logging, assays and mineralogical studies completed historically and infilled/extended by Spitfire in 2017. Pit mapping and investigation of historical workings also support the model.</li> <li>No alternative interpretations have been considered at this stage. Grade wireframes correlate well with the logged quartz veins. The key factor affecting continuity is the presence of quartz and shear fabrics.</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the	The main modelled mineralized domains have a total dimension of 1,000m (north-south), ranging between less than a metre to multiple metres over up to 150m (east-west) in multiple veins and ranging between 300m and 500m RL (AMSL).

	upper and lower limits of the Mineral Resource.	
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and</li> <li>key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points.</li> <li>If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of byproducts.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available</li> </ul>	<ul> <li>Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for Au.</li> <li>Drill spacing typically ranges from 10-15m to 50m with some limited zones to 100m.</li> <li>Drill hole samples were flagged with wire framed domain codes. Sample data was composited Au to 1m using a best fit method. Since all holes were typically sampled on 1m intervals, there were only a very small number of residuals in the diamond core holes that were sampled to geological contacts.</li> <li>Influences of extreme sample distribution outliers were reduced by top-cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical tools. Based on this statistical analysis of the data population, top-cuts were applied for Au to 17 of the 21 domains. Some domains did not require top-cutting.</li> <li>Directional variograms were modelled by domain using traditional variograms. Nugget values are moderate to high (between 40% and 50%) and structure ranges up to 150-200m. Domains with more limited samples used variography of geologically similar, adjacent domains.</li> <li>Block model was constructed with parent blocks of 1m (E) by 5m (N) by 5m (RL) and sub-blocked to 0.25m (E) by 1.25m (N) by 1.25m (RL). All estimation was completed to the parent cell size.</li> <li>Three estimation passes were used. The first pass had a limit of 15m, the second pass 30m and the third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 10 samples, a minimum of 5 samples and maximum per hole of 3 samples.</li> <li>Search ellipse sizes were based primarily on a combination of the variography and the trends of the wire framed mineralized zones. Hard boundaries were applied between all estimation domains.</li> <li>Validation of the block model included a volumetric comparison of block model grades to the declustered input composite grades plus swath pl</li></ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnes have been estimated on a dry basis.

Cut-off parameters	The basis of the adopted cut-off	Quartz veins typically coincide with anomalous
	grade(s) or quality parameters applied.	Au which allows for geological continuity of the mineralised zones. The quartz vein (and grade) contact models were built in Leapfrog <sup>TM</sup> Geo software and exported for use as domain boundaries for the block model.
Mining factors or	Assumptions made regarding	Based on the orientations, thicknesses and
assumptions	possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	depths to which the gold-bearing veins have been modelled, plus their estimated grades, the potential mining method is considered to be open pit mining with the possibility of selective
Metallurgical	• The basis for assumptions or	Metallurgical tests of selected RC samples     including bottle roll outpidglion leach tests and
factors or assumptions	predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	quartz lode ore (semi massive pyrite & pyrrhotite in quartz), the other composite was created from biotite altered & sheared basalt containing disseminated pyrite & pyrrhotite also derived from ore grade RC samples collected from East Lode intercepts. Labelled sulphide composite in the Nagrom report. A standard grind size was used of P80 (0.106mm). Initial test work has produced encouraging results and indicates that both the quartz lode & altered basalt ore is not refractory in nature. 24-hour bottle roll tests returned 96.6% recovery from the quartz lode composite and 91% recovery from the sulphide bearing altered basalt composite.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an	Appropriate environmental studies and sterilisation drilling will be planned as part of any future feasibility study programs.

	explanation of the environmental assumptions made.	
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>No density measurements were reported by the historical exploration companies.</li> <li>Spitfire had a selection of 7 core samples from the only core hole (17MWDD001) analysed by hydrostatic weighing on uncoated HQ core samples to determine bulk density factors. Of these, two were quartz lode samples with associated sulphide minerals and had results of 2.87 and 3.12.</li> <li>Spitfire has chosen to use 2.8 for the bulk density to account for the increased sulphide content of the vein hosting the gold (compared to quartz of 2.65) but more conservative that the abovementioned limited core analysis results.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density and pit mapping information, confidence in the underlying database. In particular, the lack of oriented and structurally logged diamond core holes and bulk density information is noted.</li> <li>All factors considered, the resource estimate has been assigned to the Inferred category until further diamond core drilling and structural analysis confirms the geological/structural model constructed for the resource.</li> <li>In addition, considering the already close spacing of the RC drilling, alongside additional diamond core holes, further bulk density data would support potential future re-classification to Indicated and possibly Measured Resources</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.  The results of any audits or reviews of Mineral Resource estimates.	The resource estimate was released to the ASX on 30 September 2018 ASX:SPI '2.6Moz Consolidated JORC Resource for Bardoc Gold Project sets strong foundation for new Australian gold development' The competent person has reviewed this work.

## Discussion of relative accuracy/confidence

- Where appropriate a statement of the relative accuracy and confidence • level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative • accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.
- The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.
- These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.

- The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
- The statement relates to global estimates of tonnes and grade.