



## BLINA MINERALS NL ASX ANNOUNCEMENT

25 September 2019

### Board:

**David Porter**

Non-Executive Chairman

**Gino D'Anna**

Non-Executive Director

**Matthew Driscoll**

Non-Executive Director

### Capital Structure:

5.454 Billion Shares

904 Million Options

@ 0.17c exp 31/10/2020

**ASX Code: BDI**

## INDEPENDENT VALUATION REPORT AND INFORMATION REQUIRED FOR THE ISSUE OF SECURITIES UNDER ASX LISTING RULE 7.1A

Blina Minerals NL (**Company**) refers to its announcement on 24 September 2019 regarding its acquisition of a 50% stake in Colour Minerals Pty Ltd pursuant to the heads of agreement entered into with Kalgoorlie Mine Management Pty Ltd (**KMM**) (the **Acquisition**) and the Appendix 3B released today.

As set out in the Appendix 3B released today, the Company has issued 861,000,000 fully paid ordinary shares in the capital of the Company (Shares) to KMM in consideration for the Acquisition, completed by issuing:

1. 409,08,386 Shares using the Company's placement capacity under ASX Listing Rule 7.1; and
2. 451,917,614 Shares using the Company's placement capacity under ASX Listing Rule 7.1A.

In relation to the issue of the Shares issued under ASX Listing Rule 7.1A, the Company hereby provides an independent valuation report for the purposes of ASX Listing Rule 7.1A.3. The independent valuation report is required to demonstrate that the issue of the Shares complies with ASX Listing Rule 7.1A.3, as the Shares were issued for non-cash consideration pursuant to the terms of the Acquisition.

In addition to the above, the Company also provides the following information in relation to the issue of the Shares issued under ASX Listing Rule 7.1A as required by ASX Listing Rules 7.1A.4(b) and 3.10.5A:

1. the Company issued Shares under ASX Listing Rule 7.1A. This represents 8.28% of the Company's total issued capital post issue of the 861,000,000 Shares;
2. the Company issued the Shares to KMM for non-cash consideration pursuant to the terms of the Acquisition. Accordingly, the Company confirms that no underwriting agreements are applicable to the issue; and
3. the Company will pay registry fee for the issuing of the shares and ASX fees for the quotation of the shares.

For further information please contact

**David Porter**

Non-Executive Director

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*Australian and International Exploration and Evaluation of Mineral Properties*

### INDEPENDENT VALUATION OF THE BARKLY and BABBLER PROJECTS HELD BY COLOUR MINERALS PTY LTD NEAR TENNANT CREEK, NORTHERN TERRITORY

Author: A. J. Maynard BAppSc(Geol), MAIG MAusIMM

Company: Al Maynard & Associates Pty Ltd

Date: 23<sup>rd</sup> August, 2019

## EXECUTIVE SUMMARY

This Independent Technical Valuation Report has been prepared by Allen J. Maynard, principal of Al Maynard & Associates ("AM&A") at the request of Mr David Porter to assist with providing a basis for a commercial transaction regarding the Project.

The two tenements comprising the Barkly and Babbler Projects, Exploration Licences 28620 and 30701, are located in central Northern Territory, 45 km east of the Tennant Creek township, south of the Barkly Highway in the Northern Territory (Figure 1).



**Figure 1: Project location.**

The Barkly-Babbler Project is considered highly prospective for magnetite hosted copper-gold similar to other deposits found elsewhere in the Tennant Creek Goldfield.

Recent exploration drilling at the Bluebird Prospect has been very successful with significant Cu-Au-Bi mineralisation intersections. Based on the drilling results, mineralisation is now defined to a depth of at least 150 m vertically from surface and over a strike length of up to 120 m. The mineralisation starts at less than 50 m below surface.

Further exploration drilling is planned on both tenements with resource definition drilling focussed at Bluebird.

Relevant previous exploration costs and the rating methods were used to value the property.

Based on an assessment of the factors involved the estimate for the value for the Barkly-Babbler Project at the current date to be in range of A\$1.3 million to A\$2.1 million with a preferred value of A\$1.6 million

This valuation is effective on 23<sup>rd</sup> August 2019.

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Mr David Porter

23<sup>rd</sup> August, 2019

Colour Minerals Pty Ltd

Via email: David Porter <d\_porter48@outlook.com>

Dear Mr Porter,

## VALUATION OF THE BARKLY AND BABBLER PROJECTS.

### 1.0 INTRODUCTION

This Independent Technical Valuation Report ("Report") has been prepared by Al Maynard & Associates ("AM&A") at the request of Mr D. Porter, to provide an Independent Technical Valuation of the Barkly and Babblers Projects near Tennant Creek in the Northern Territory.

#### 1.1 Scope and Limitations

This Report has been prepared in accordance with the requirements of the Valuation of Mineral Assets and Mineral Securities for Independent Expert's Reports (the 'Valmin Code') (2015) as adopted by the Australian Institute of Geoscientists ('AIG') and the Australasian Institute of Mining and Metallurgy ('AusIMM').

This Report is valid as of 23<sup>rd</sup> August, 2019 which is the date of the latest review of the data and technical information. The valuation can be expected to change over time having regard to political, economic, market and legal factors. The valuation can also vary due to the success or otherwise of any mineral exploration that is conducted either on the mineral assets concerned or by other explorers on prospects in the near environs.

In order to form an opinion as to the value of any mineral asset, it is necessary to make assumptions as to certain future events, which might include economic and political factors and the likely exploration success. The writer has taken all reasonable care in formulating these assumptions to ensure that they are appropriate to the case. These assumptions are based on the writers' technical training and experience in the mining industry. Whilst the opinions expressed represent the writer's fair and reasonable professional opinion at the time of this Report, these opinions are not however, forecasts as it is never possible to predict accurately the many variable factors that need to be considered in forming an opinion as to the value of any mineral asset.

The valuation methodology of mineral assets is subjective. The values obtained are estimates of the amount of money, or cash equivalent, which would be likely to change hands between a willing buyer and a willing seller in an arms' length transaction, wherein each party had acted knowledgeably, prudently and without compulsion. This is the required basis for the estimation to be in accordance with the provisions of the Valmin Code. There are a number of generally accepted procedures for establishing the value of mineral assets with the method employed depending upon the circumstances of the mineral asset. When relevant, AM&A uses the appropriate methods to enable a balanced analysis. Values are presented as a range and the preferred value is identified. The readers should therefore form their own opinion as to the reasonableness of the assumptions made and the consequent likelihood of the values being achieved.

The information presented in this Report is based solely on technical reports provided supplemented by our own inquiries. At the request of AM&A, copies of relevant technical reports and agreements were readily available and relevant references are listed in the References section of this report.

Mr Porter will be invoiced and expected to pay a fee of \$7,000 for the preparation of this Report. This fee comprises a normal, commercial daily rate plus expenses. Payment is not contingent on the results of this report. Except for these fees, neither the writer nor any associates have any interest, nor the rights to any interest in the mineral assets reported upon.

The valuation presented in this Report is restricted to a statement of the fair value of the mineral asset package. The Valmin Code defines fair value as "The estimated amount of money, or the cash equivalent of some other consideration, for which, in the opinion of the Expert reached in accordance with the provisions of the Valmin Code, the mineral asset or security shall change hands on the Valuation date between a willing buyer and a willing seller in an arms' length transaction, wherein each party had acted knowledgeably, prudently and without compulsion".

It should be noted that in all cases, the fair valuation of the mineral assets presented is analogous with the concept of “valuation in use” commonly applied to other commercial valuations. This concept holds that the assets have a particular value only in the context of the usual business of the company as a going concern. This value will invariably be significantly higher than the disposal value, where, there is not a willing seller. Disposal values for mineral assets may be a small fraction of going concern values.

In accordance with the Valmin Code, we have prepared the “Range of Values” as shown in

<b>Total</b>	<b>A\$1.3M</b>	<b>A\$2.1M</b>	<b>A\$1.6M</b>
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Table 4. Regarding the Project it is considered that more than sufficient geotechnical data has been provided from the reports covering the previous exploration of the relevant area to enable an understanding of the geology. This provides adequate information to form an informed opinion as to the current value of the mineral assets. No recent site visit was undertaken by the author since he has prior knowledge of the district from earlier work in the project area including site visits.

## 1.2 Statement of Competence

This Report has been prepared by Allen J. Maynard BAppSc(Geol), MAIG (No 2062) MAusIMM (No 104986), a geologist with over 40 continuous years in the industry and 35 years in mineral asset valuation. The writer holds the appropriate qualifications, experience and independence to qualify as an independent “Expert” under the definitions of the Valmin Code.

## 2.0 VALUATION OF THE MINERAL ASSETS – METHODS AND GUIDES

With due regard to the guidelines for assessment and valuation of mineral assets and mineral securities as adopted by the AusIMM Mineral Valuation Committee on 17 February 1995 – the Valmin Code (2015) – we have derived the estimates listed below using the appropriate method for the current technical value of the mineral assets as described.

The ASIC publications “Regulatory Guides ‘111 & 112” have also been duly referred to and considered in relation to the valuation procedure. The subjective nature of the valuation task is kept as objective as possible by the application of the guideline criteria of a “fair value”. This is a value that an informed, willing, but not anxious, arms’ length purchaser will pay for a mineral (or other similar) asset in a transaction devoid of “forced sale” circumstances.

### 2.1 General Valuation Methods

The Valmin Code identifies various methods of valuing mineral assets, including:-

- Discounted cash flow,
- Joint Venture and farm-in terms for arms’ length transactions,
- Precedents from similar asset sales/valuations,
- Multiples of exploration expenditure,
- Ratings systems related to perceived prospectivity,
- Real estate value and,
- Rule of thumb or yardstick approach.

### 2.2 Discounted Cash Flow/Net Present Value

This method provides an indication of the value of a mineral asset with identified reserves. It utilises an economic model based upon known resources, capital and operating costs, commodity prices and a discount for risk estimated to be inherent in the project.

Net present value (‘NPV’) is determined from discounted cash flow (‘DCF’) analysis where reasonable mining and processing parameters can be applied to an identified ore reserve. It is a process that allows perceived capital costs, operating costs, royalties, taxes and project financing requirements to be analysed in conjunction



with a discount rate to reflect the perceived technical and financial risks and the depleting value of the mineral asset over time. The NPV method relies on reasonable estimates of capital requirements, mining and processing costs.

## **2.3 Joint Venture Terms**

The terms of a proposed joint venture agreement may be used to provide a market value based upon the amount an incoming partner is prepared to spend to earn an interest in part or all of the mineral asset. This pre-supposes some form of subjectivity on the part of the incoming party when grass roots mineral assets are involved.

## **2.4 Similar or Comparable Transactions**

When commercial transactions concerning mineral assets in similar circumstances have recently occurred, the market value precedent may be applied in part or in full to the mineral asset under consideration.

## **2.5 Multiple of Exploration Expenditure**

The multiple of exploration expenditure method ('MEE') is used whereby a subjective factor (also called the prospectivity enhancement multiplier or 'PEM') is based on previous expenditure on a mineral asset with or without future committed exploration expenditure and is used to establish a base value from which the effectiveness of exploration can be assessed. Where exploration has produced documented positive results a MEE multiplier can be selected that takes into account the valuer's judgment of the prospectivity of the mineral asset and the value of the database. PEMs can typically range between 0 to 3.0 and occasionally up to 5.0 where very favourable exploration results have been achieved, applied to previous exploration expenditure to derive a dollar value.

## **2.6 Ratings System of Prospectivity (Kilburn)**

The most readily accepted method of this type is the modified Kilburn Geological Engineering/Geoscience Method and is a rating method based on the basic acquisition cost ('BAC') of the mineral asset that applies incremental, fractional or integer ratings to a BAC cost with respect to various prospectivity factors to derive a value. Under the Kilburn method the valuer is required to systematically assess four key technical factors which enhance, downgrade or have no impact on the value of the mineral asset. The factors are then applied serially to the BAC of each mineral asset in order to derive a value for the mineral asset. The factors used are; off-property attributes, on-property attributes, anomalies and geology. A fifth factor that may be applied is the current state of the market.

## **2.7 Empirical Methods (Yardstick – Real Estate)**

The market value determinations may be made according to the independent expert's knowledge of the particular mineral asset. This can include a discount applied to values arrived at by considering conceptual target models for the area. The market value may also be rated in terms of a dollar value per unit area or dollar value per unit of resource in the ground. This includes the range of values that can be estimated for an exploration mineral asset based on current market prices for equivalent assets, existing or previous joint venture and sale agreements, the geological potential of the mineral assets, regarding possible potential resources, and the probability of present value being derived from individual recognised areas of mineralisation. This method is termed a "Yardstick" or a "Real Estate" approach. Both methods are inherently subjective according to technical considerations and the informed opinion of the valuer. The Valmin Code (2015) prohibits the use of 'in situ' valuation methods.

## **2.8 General Comments**

The aims of the various methods are to provide an independent opinion of a "fair value" for the mineral asset under consideration and to provide as much detail as possible of the manner in which the value is reached. It is necessarily subjective according to the degree of risk perceived by the mineral asset valuer in addition to all other commercial considerations. Efforts to construct a transparent valuation using sophisticated financial models are still hindered by the nature of the original assumptions where a known resource exists and are not applicable to mineral assets without an identified resource or reserve.

The values derived for this Report have been concluded after taking into account the general geological environment of the mineral asset under consideration with respect to the mineral resource estimates.

## **2.9 Environmental implications**

Information to date is that there are no identified existing material environmental liabilities on the mineral assets. Accordingly, no adjustment was made during this Report for environmental implications.

## **2.10 Indigenous Title Claims**

Neither the Company nor the author is aware of any indigenous title claims within the mineral assets. Accordingly, no adjustment was made during this Report for indigenous title implications.

## **2.11 Commodities-Metal prices**

Metal prices have been considered in assessing the values. Metal prices can be sourced from [www.kitco.com](http://www.kitco.com) and London Metals Exchange.

## **2.12 Resource/Reserve Summary**

The projects do not include any JORC Code (2012) resource estimates.

## **2.13 Previous Valuations**

The writer is not aware of recent previous valuations although one or more could exist.

## **2.14 Encumbrances/Royalty**

The Projects may be subject to state royalties as stipulated by the Northern Territory Government where currently applicable; however, no royalties were used in this valuation. There are no known royalties payable to previous owners of the project.

# **3.0 BACKGROUND INFORMATION**

## **3.1 Introduction**

This valuation has been determined by way of a detailed study of existing information and field data provided to the author by the Company.

## **3.2 Specific Valuation Methods**

There are several methods available for the valuation of a mineral prospect ranging from the most favoured DCF analysis of identified Proved & Probable Reserves to the more subjective rule-of-thumb assessment when no Reserves have yet been calculated but Resources may exist. These are discussed above in Section 2.0.

For the Project the average of various Expenditure and Ratings Methods has been applied to determine a current value range.

# **4.0 BARKLY AND BABBLER PROJECTS**

## **Location and Access**

The Barkly and Babblers Projects, comprising two tenements, Exploration Licences 28620 and 30701, are located approximately 45 km east of the Tennant Creek township, south of the Barkly Highway in the Northern Territory (Figure 1). The license area falls within the Gosse River (5858) and Tennant Creek (5758) 1:100 000-scale map sheets. The tenement is within NT Portions 494 & 1075, Perpetual Pastoral Lease 1142, Tennant Creek Station.

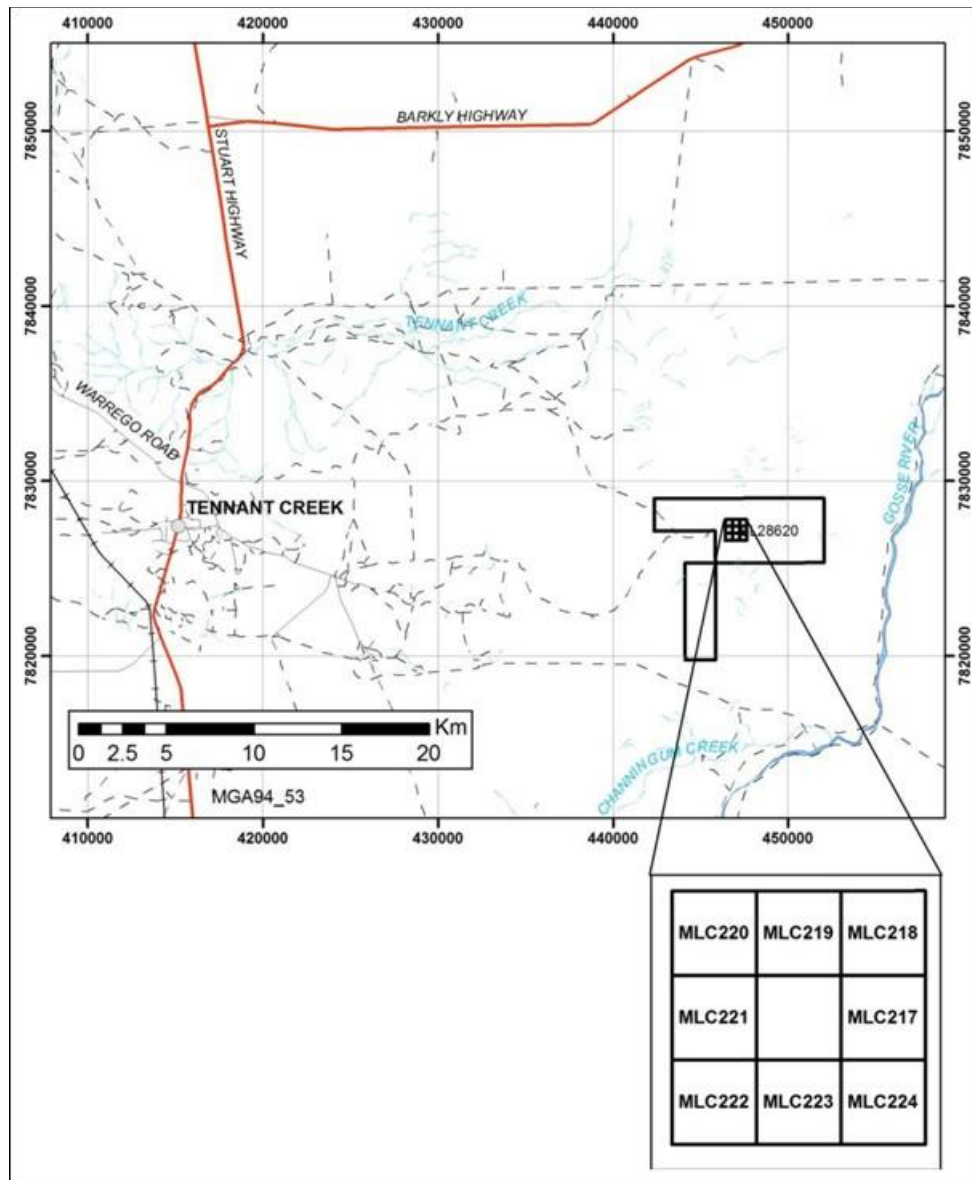
The northern part of EL2860 can be reached from Tennant Creek township along the Barkly Highway, and via secondary unsealed tracks to the south. Access into the central part of the tenements is gained via the



**Table 1: Barkly-Babbler tenements.**

The licences are currently held by Colour Minerals Pty Ltd (100%).

EL28620 surrounds Mineral Leases 217–224 which are excised from the exploration license. These mining leases surround an Exclusion Zone encompassing unusual outcropping rocks deemed to be a sensitive registered sacred site (Figure 1).



**Figure 3: EL28620 tenement configuration – showing excised MLCs.**

The Projects may be subject to territory royalties as stipulated by the Northern Territory Government where currently applicable. The royalty rate will depend on the minerals being mined.

## Native Title and Environmental Studies

The Barkly-Babbler project lies within Tennant Creek Pastoral Lease (Tribunal ID =DC2017/003).

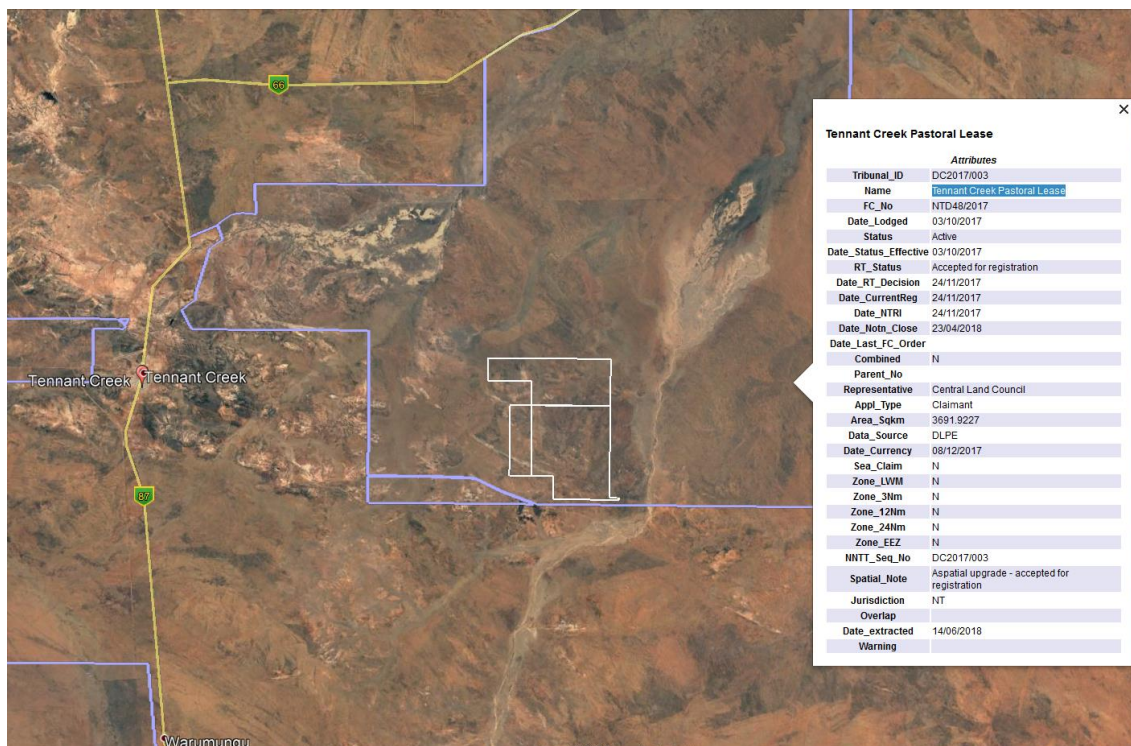


Figure 4: Barkly-Babbler Project and Native Title.

## 5.0 GEOLOGICAL SETTING

### Regional Geology

The Barkly-Babbler projects are located in the Tennant Creek Inlier, an area of Proterozoic rocks consisting of three distinct geological provinces; the Davenport Province to the southeast, the central Tennant Creek Block and the Tompkinson Creek Province to the northwest (Figure 2).

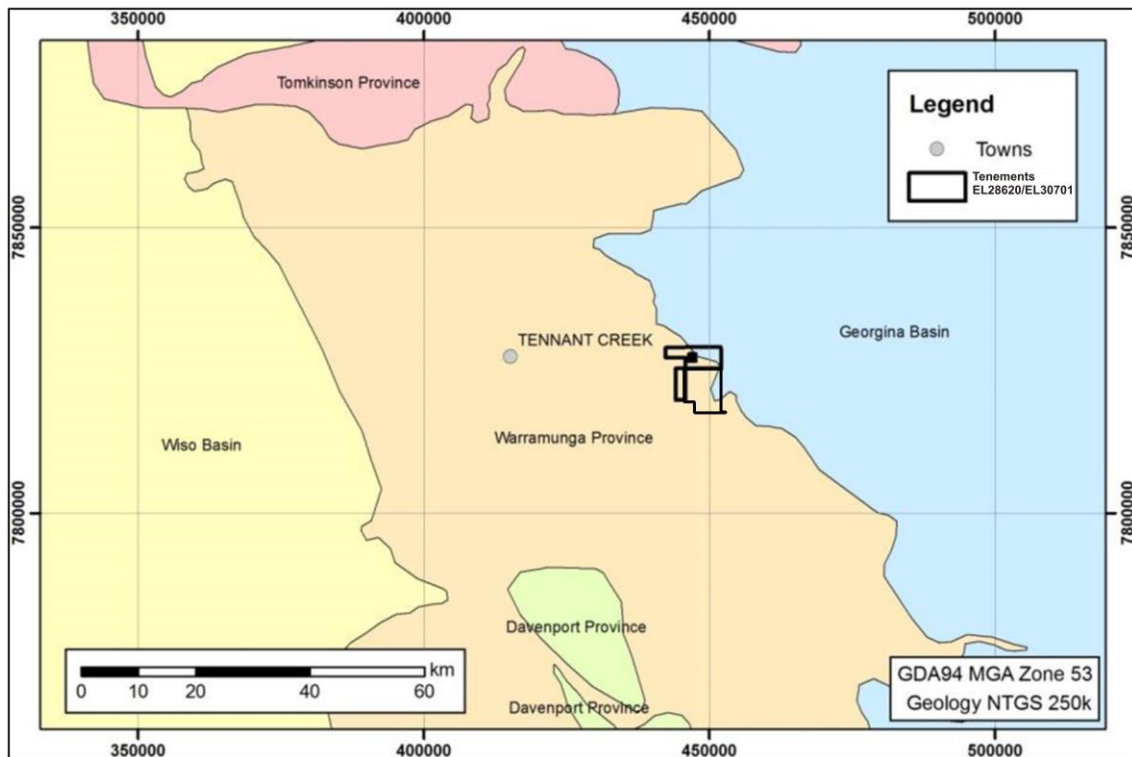
The Tennant Creek Inlier is composed of deformed gneissic basement rocks overlain by Proterozoic metasedimentary rocks of the Warramunga Formation, Hatches Creek Group and the Tompkinson Creek Beds. The Proterozoic sedimentary sequence was intruded by younger Proterozoic granitoids around 1858 to 1845 Ma during the Barramundi Orogeny. The Proterozoic rocks were subsequently overlain by Cambrian sedimentary rocks of the Georgina Basin.

The Tennant Creek Goldfield is located within the central Tennant Creek Block where the oldest rocks are the metasedimentary rocks of the Warramunga Formation. The Warramunga Formation comprises of a metamorphosed sequence of argillaceous sedimentary rocks that includes greywacke, siltstone, shale and units of hematite–magnetite shale. Cross-cutting and conformable quartz–feldspar porphyries occur within the sedimentary sequence.

The Warramunga Formation has been subjected to three phases of deformation, the first of which formed tight to isoclinal folds with an east–west axis. The two later phases formed west-northwest trending faults and shear zones, and finally northwest trending faults. The project covers an area of poor outcrop consisting of Cainozoic and Quaternary aeolian and alluvial sand cover.

The Warramunga Formation underlies most of the Barkly project area and hosts the iron oxide–copper–gold–bismuth (IOCG) mineralisation in the Tennant Creek area.





**Figure 5: Figure 2: Regional geology of the Tennant Creek region showing the location of the Barkly-Babbler Copper-Gold projects.**

The Barkly-Babbler projects cover the southeast extension of the Tennant Creek mineral field which has a production history of 5 Moz of gold and 350,000 tonnes of copper hosted by high-grade ironstones. The tenements cover the old Perseverance workings where previous drilling showed a best result of 3 m at 43.2 g/t Au from 72 m depth. Those workings are covered by a Central Land Council exclusion zone, whereas the shallow Bluebird workings where historical records indicate 172 tonnes of ore at 9.3 g/t Au were produced are outside the exclusion zone.

The ironstones form part of the Golden Mile line of historical workings that strike over a length of 4.5 km outside the prospect area. Mineral Licences 217–224 within EL28620 cover a small wedge of Warramunga Formation sediments at the eastern end of a westerly trending ridge containing a good anticlinal exposure of interbedded siltstones, shale and greywacke along the Golden Mile. Magnetic surveys indicate that this trend extends into the project area through the Perseverance–Bluebird workings.

At the R29 prospect the exposed rocks are reported to comprise a westerly dipping sequence of rhyolitic tuffs and possible flows, and well bedded greywacke-siltstone units. The stratigraphic top is to the west. The R29 magnetic anomaly is situated near a sequence of altered chloritic tuffs in an area of non-outcrop. The tuffs consist of quartz, feldspar and chlorite in a red fine-grained siliceous matrix. Two phases of alteration are recorded; chloritisation of feldspar, biotite and the groundmass; and sericitisation of feldspar and biotite.

Overlying this rhyolitic sequence, 250m W of the magnetic anomaly is a silicified greywacke unit. This unit is characterised by numerous quartz-chlorite stringers throughout. Overlying this is a sequence of chloritic rhyolitic tuffs with 1-5% pyrite as disseminations and fracture fillings. Minor chalcopyrite and bornite occur as fracture fillings. This sequence includes an area of outcrop which is sheared and brecciated and may represent a rhyolite breccia dome. Overlying this pyritic horizon is a sequence of altered rhyolite which in turn is overlain by a tourmalinised rhyolite unit.

To the north of the leases a low-lying granite body that is largely covered by aeolian sands and silts truncates the Warramunga Formation. Overlying both the sediments and the granite to the northeast are Cambrian cherts which form the western margin of the Georgina Basin sequence.

Coarsening quartz-rich sedimentary units and porphyries of the overlying Flynn Subgroup bound the easterly and southerly extent of the Warramunga Formation to the south of the leases. The Warramunga Formation within the leases is host to several small haematite–quartz–(magnetite–jasper) ironstones, hosted by westerly trending haematite-chlorite shear zones.

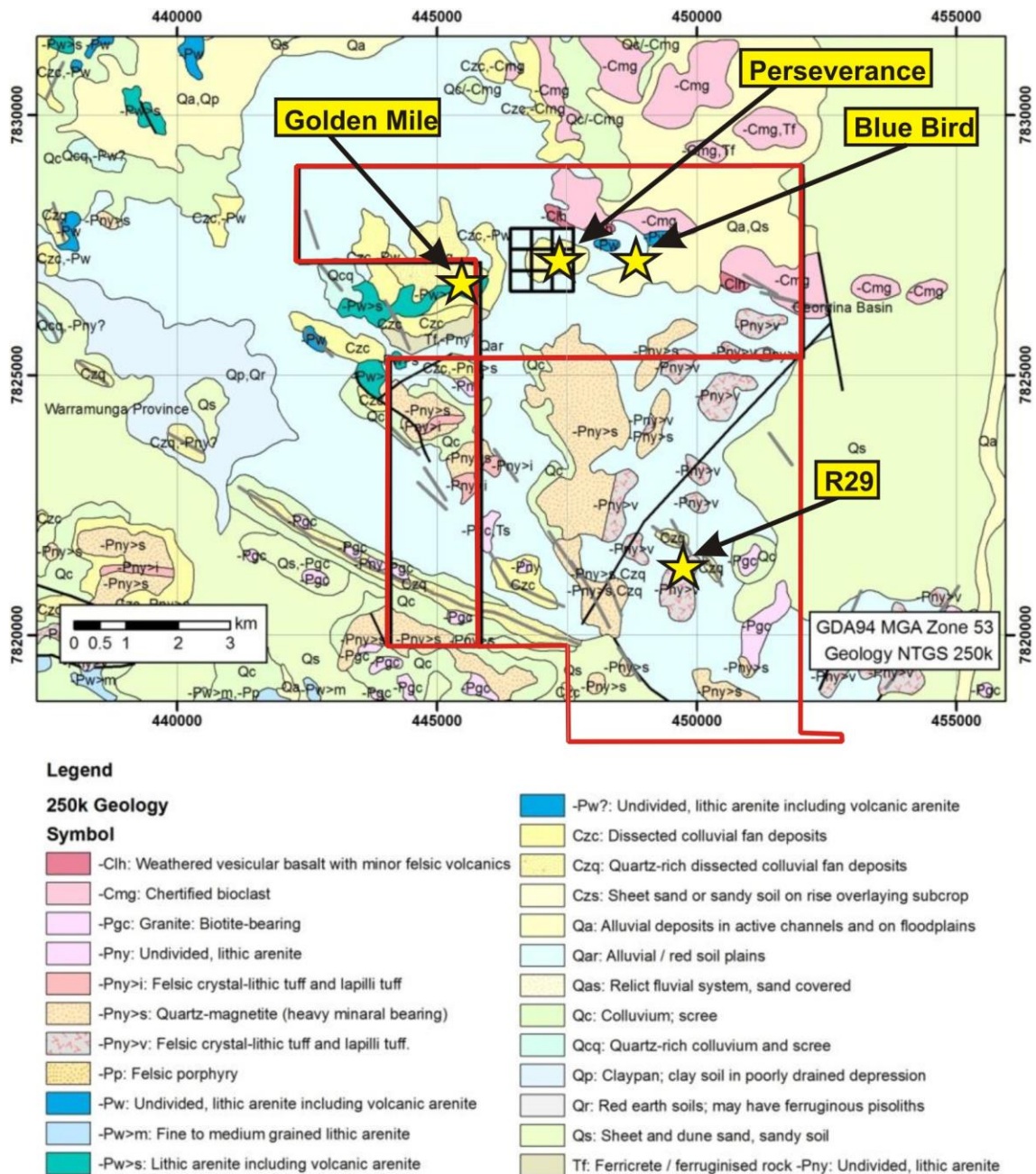
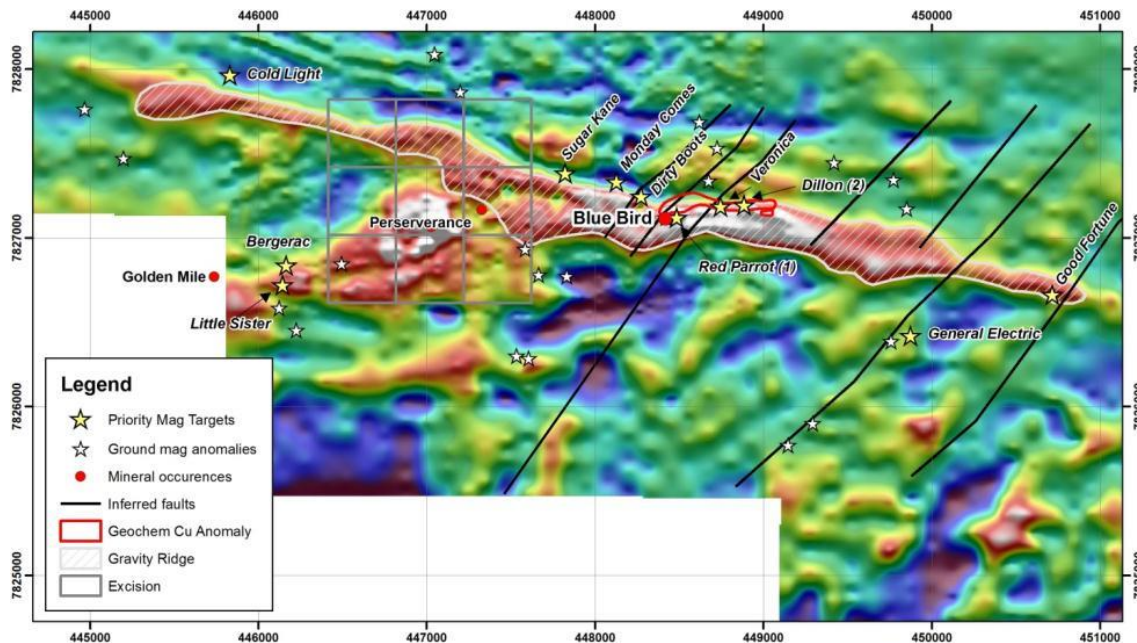


Figure 6: Figure 3: Geology of Barkly-Babbler showing prospects (NTGS 1:250,000 outcrop geology map)

## 6.0 EXPLORATION HISTORY

### EL28620 - Barkly

The Barkly project area has had a long history of exploration.



**Figure 7: Residual gravity image of the Barkly project area showing prospects and exploration targets.**

The nine mineral leases excised from EL28620 cover the Perseverance workings (30 km east of Tennant Creek), where pre-1991 drilling showed a best result of 3 m at 43.2g/t Au from 72 m in hole PERC-01 and 4 m at 4.7 g/t Au from 14 m in hole PERC-06. This high-grade mineralisation is associated with a series of outcropping haematite and magnetite ironstones. Recorded production from the mine was 192 oz gold, but no record of tonnes/grade exists, although the tonnage appears to be small. The workings are covered by a Central Land Council exclusion zone.

Just east of the mineral leases the shallow Bluebird workings with recorded historical production of 172 tonnes at 9.3 g/t Au for a recovered 51 oz of gold are outside the Central Land Council exclusion zone. The Bluebird prospect is a Tennant Creek ironstone-hosted Au–Cu–Bi target within folded siltstones of the Proterozoic Tennant Creek Inlier.

The ironstones form part of the Golden Mile line of historical workings that strike for over 4.5 km. All the ironstones in this line are associated with numerous dipolar bullseye magnetic features with ground magnetic anomalies varying between 100 nT and 5000 nT. Within the Perseverance area the haematite ironstones are associated with ~100 nT anomalies, whereas the magnetite ironstones are associated with ~5000 nT anomalies.

Summary of exploration activities:

- Geological evaluation of the Perseverance area in 1967 by the BMR included a ground magnetic survey indicating that the ironstone (jasper–quartz) bodies were located in the hinge of a west-plunging anticline.
- Peko drilled one diamond hole in 1969 on MLC57 into the main magnetic anomaly intersecting 10.8 m of haematite–quartz–jasper from 36.3 m on the hanging wall of a haematite–magnetite–chlorite ironstone containing minor chalcopyrite and malachite from 47.1 m to 91.4 m. Peak assays were 1.2 m at 1.2 g/t Au from 49.7 m and 1.2 m at 0.2% Cu from 88.4 m.
- ADL then completed a ground magnetic survey over the magnetic anomalies and defined a small intense anomaly 300 m west of the Perseverance Mine workings at Perseverance Extended. Drill intersections included 1.5 m at 3.7 g/t Au from 15.2 m, 3.0 m at 3.1 g/t Au from 18.3 m, 1.5 m at 2.3 g/t Au from 54.9 m, and 1.5 m at 8.2 g/t Au from 62.5 m.



- ADL then Posgold (1987–92) drilled several targets including 20 holes at Perseverance Mine with 8 of these holes returning >1 g/t Au. Best results included 3 m at 43.2 g/t Au from 72 m in PERC-001, 4 m at 4.7 g/t Au from 14 m in PERC-006, 3 m at 3.3 g/t Au from 77 m in PERC-009, 3 m at 50 g/t Au from 42 m in PERC-015. Further ground magnetic and gravity surveys were conducted. Three north-dipping bodies were modelled, 2 sub-parallel bodies in the No.1 (North) Pod, and 1 body in the No.2 (South) Pod.
- Limited work was conducted by Giants Reef Mining from 2000 to 2004.

## **Meteoric Resources Exploration 2004-2019**

Meteoric Resources has explored EL28620 since 2004 with various joint venture partners.

Ground magnetic and gravity surveying followed by soil sampling focused attention on Bluebird. Follow-up RAB drilling during 2006 tested anomalous gold and copper intersections in previous drill holes and also tested a belt of anomalous auger soil geochemistry extending from the Bluebird area to the east.

New haematite Au–Cu-rich ironstone targets within the Barkly tenements were identified adjacent to the Perseverance gold workings covering the potential eastern extension of the Golden Mile line over an area of 2 x 6 km. Another new exploration target with a pronounced Flag aeromagnetic anomaly was identified at R29 in the southern part of the Barkly project area where a number of holes were drilled in 1974 with best results of 3 m at 2.8 g/t from 70 m in hole DDH 468. This drilling failed to intersect any magnetic material that could explain the aeromagnetic anomaly.

Detailed gravity (5,831 stations) and ground magnetic surveys (220 line km) were completed over the two target areas in 2005.

The gravity survey at Perseverance–Bluebird outlined a well-defined west – north westerly trending gravity ridge about 8 km in length flanked by several pronounced gravity anomalies, including the Perseverance gold workings (Figure 7). Twelve other gravity targets were identified for detailed follow-up ground magnetic surveys.

The ground magnetic survey in the Perseverance–Bluebird area outlined 8 discrete haematitic targets, which correlate in part with apparent density anomalies that have been generated from inversion of detailed gravity data. These targets vary in size from 4 Ha up to 22 Ha. These combined magnetic–gravity targets are considered to be worthwhile targets for Nobles Nob-style haematite–Au/Cu deposits. In particular, 5 targets close to the Perseverance and Bluebird historical gold workings represent high-priority areas.

The detailed gravity and ground magnetic surveys at the Flag anomaly identified a coincident magnetic and gravity feature about 600 m in length situated about 15 km along strike from the Golden Kangaroo and Black Snake prospects where Giants Reef announced high-grade gold intersections.

In mid-2005 a 7,544 m shallow vertical RAB drilling programme was completed over combined magnetic–gravity targets in the Perseverance–Bluebird area. The drilling defined a 600 m long bedrock copper anomaly, open to the east, along strike from the Bluebird workings. Follow-up inclined RAB drilling (1,373 m) at Bluebird and on this anomaly gave a best intercept of 8 m at 1.0% Cu and 0.3 g/t Au from 72 m at end of hole in drill hole TBRB-717. The geochemical anomaly coincides with a pronounced gravity ridge indicating the presence of a haematite ironstone or haematite alteration. Weak to moderate Cu–Bi–Au values were intersected near the Bluebird workings, in particular an assay of 1.27% Cu associated with ironstone near the base of TBRB-717.

In 2006 a 36-hole, 2,215 m RAB drilling programme was completed at the Bluebird prospect. The drilling was designed to complete infill drilling around TBRB-717, followed by reconnaissance drilling of the 600 m long east–west gravity and magnetic anomaly extending 600 m east of Bluebird, as outlined in the 2005 program.

The drilling (TBRB-735 to TBRB-770), on 100 m line spacings, intersected haematite ironstone and/or haematite–chlorite alteration over the 600 m strike length tested. This work determined that the Bluebird ironstone body had a southerly dip, and that the earlier south-inclined RAB drilling was in fact sub-parallel to the dip of the target. The steeply south-dipping ironstone unit ranges from 10 to 50 m in thickness and remains open to the east.

Anomalous copper, gold and bismuth values were intersected within haematite alteration in four drill lines over a 100 m strike length with values over various 4 m intervals of up to 0.2% Cu, 1.1 g/t Au and 0.13% Bi. These anomalous values suggest that the mineralised ironstone intersected in TBRB-717 extends at least 100 m to the east.

A second anomalous copper–gold zone was intersected at the eastern end of the ironstone horizon. Massive ironstone was not intersected, but there was haematite stringer alteration with associated anomalous Au, Cu and Bi. Two 100 m spaced lines intersected values up to 0.1% Cu, 0.25 g/t Au and 189 ppm Bi over various 4 m intervals in or adjacent to haematite alteration. This anomalous zone was not adequately tested by the easternmost drill line and remains open in that direction and coincident with a discrete magnetic anomaly.

Both of these anomalous zones remained open at depth.

In 2007 mapping showed that there is little outcrop, except near the Bluebird workings which are sited near small outcrops of ironstone on top of a low hill occupying the centre of a circle of ironstone–siltstone talus 200 m in diameter. Sand–clay overburden overgrown with spinifex and scattered scrub occupies the remainder of the explored area.

Two varieties of ironstone are present. The most common is a red brecciated haematitic chert that forms a bouldery outcrop measuring 50 x 30 m on the hilltop. The second is a black, specular, haematitic ironstone forming a smaller outcrop measuring 20 x 10 m and situated 20 m to the southeast. The haematitic chert is brecciated and shot through with stringers of quartz and specular haematite, suggesting that the cherty phase developed initially and that the specular haematitic phase and quartz are secondary overprints. The third outcropping lithology is a red massive siltstone that outcrops on the sides of the hill below the ironstones.

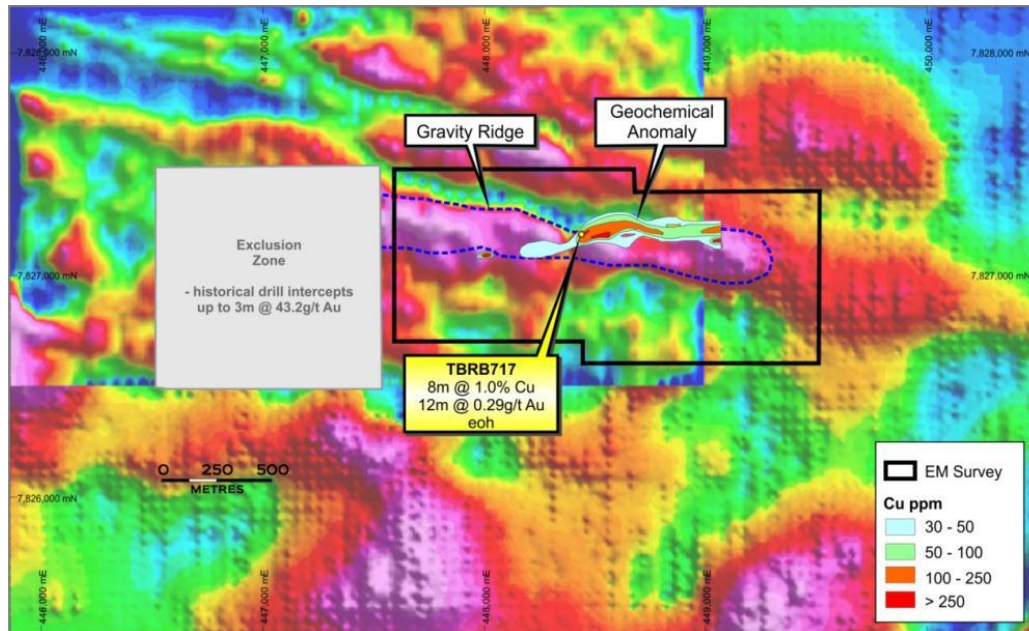
The Bluebird workings consist of a single vertical shaft and two decline shafts in a collapsed pit about 20 m apart, as well as various pits and trenches. The shafts were started in siltstone, presumably to access the margins of the ironstone by drives. The greatest amount of mullock is adjacent to the pit with its two shaft openings suggesting that these were the main mine workings. A previous report cites Bluebird as having recorded a production of 172 tonnes at 9.3 g/t Au.

Minor outcrop or sub crop of brecciated cherty–haematitic ironstone also occurs occasionally to the east of the main outcrop zone in otherwise flat soil-covered terrain.

The results of Meteoric’s exploration to date suggested that the ironstone body at the Bluebird prospect is mineralised with a typical Tennant Creek-style Cu–Bi–Au association. The distribution of spotty anomalous gold and the downward opening configuration of anomalous copper below 50 m vertical depth may be indicative of zonation with depth, another typical feature of mineralised Tennant Creek ironstone. Typically, the smaller deposits have been high grade once the gold-rich zone of alteration was discovered, such as the TC-8 deposit.

There is compelling evidence in favour of downward zonation of mineralisation beneath the Bluebird ironstone, open from 25 to 30 m vertical depth and extending below the depth tested by RAB drilling, and as such deeper drilling to explore this possibility is warranted.

In July 2012 a fixed loop electromagnetic (FLEM) survey was carried out over a 1.8 km long coincident anomalous magnetic, radiometric and gravity trend and coinciding with a bedrock copper anomaly (open to the east) and copper–gold RAB drill intersections at Bluebird (Figure 5). The EM survey was designed to identify conductors associated with high-grade Tennant Creek-style copper–gold mineralisation. The gravity ridge is interpreted to be associated with haematite ironstone or haematite alteration. The gravity ridge extends into an aboriginal sacred site exclusion zone where historical drilling of outcropping ironstones is reported to have intersected high-grade gold mineralisation with a best intersection of 3 m at 43.2 g/t Au, confirming the prospectivity of this trend.



**Figure 8: Bluebird prospect gravity image showing geochemistry, drill intercepts and ground EM survey location**

Geophysical modelling of the ground FLEM data has confirmed a strong localised bedrock conductor (BRK1-C1) at Bluebird with high conductance (3000–8000S) which appears to be a pipe-shaped feature with an EM response characteristic of well-developed sulphides. Anomalous drill hole TBRB717 as shown in Figure 8 does not appear to have tested this conductor.

Four other possible EM anomalies were identified along the gravity trend to the east of BRK1-C1, two of which coincide with anomalous copper–gold in drill holes TBRB-762 (4 m at 0.1% Cu from 20 m and 4 m at 0.11 g/t Au from 44 m) and TBRB-744 (12 m at 0.16% Cu from 68 m and 16 m at 0.35 g/t Au from 64 m). In addition, a moderately strong EM anomaly was identified in a parallel trend to the north of Bluebird, however, this appears to be stratigraphic in nature rather than a discrete Tennant Creek-style copper–gold target.

In October 2012 three reverse circulation drill holes (BBRC1–3) were completed for 392 m drilling below the mineralisation intersected in TBRB717, testing the BRK1-C1 conductor and gravity high about 100 m east of TBRB717. Table 2 summarises the drilling assays. Ironstone alteration was intersected but no massive sulphides were identified.

Table 2: Summary of 2012 drilling results.

Hole Number	Coordinates E	Coordinates N	From m	To m	Interval m	Cu %	Au g/t
BBRC1*	448330	7827205			nsi		
BBRC2	448400	7827050	112	120	8	2.20	0.26
		including	116	120	4	3.70	0.30
BBRC3	448520	7827030	64	72	8	0.03	-

The target ironstone is surrounded by a broad anomalous copper halo with evidence of talc–chlorite alteration and appears to be widening with depth. No sulphides are evident in the ironstone, which appears to be deeply weathered.

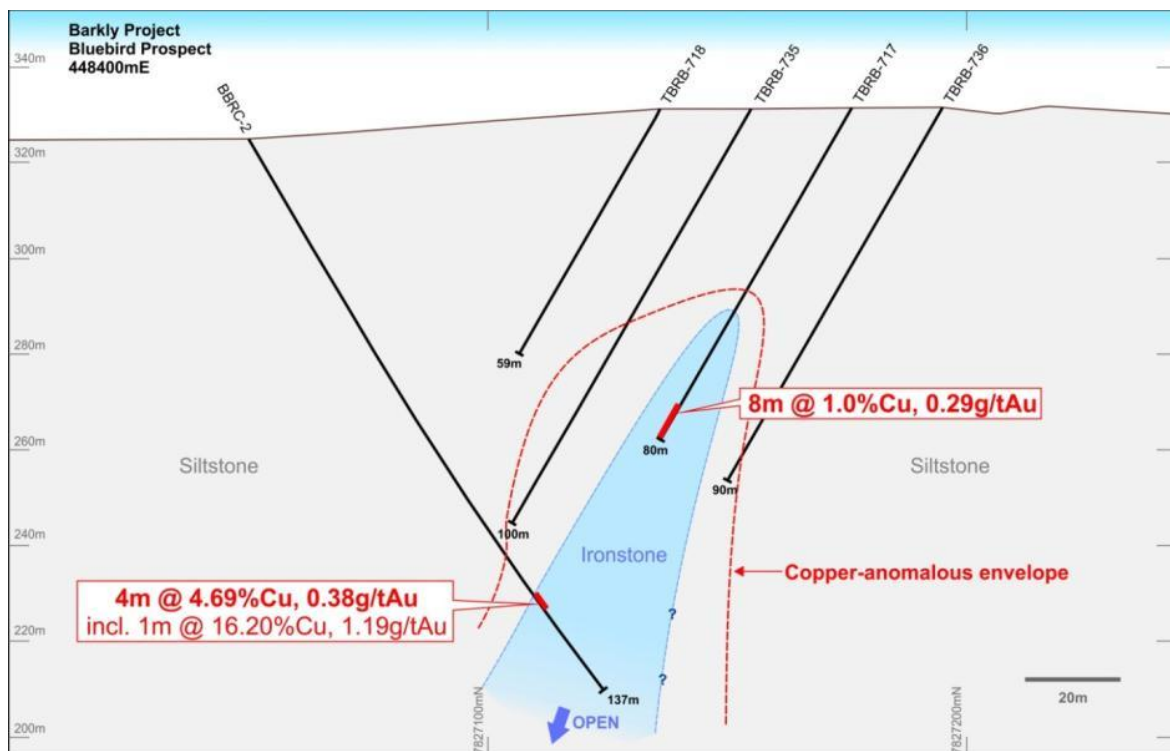
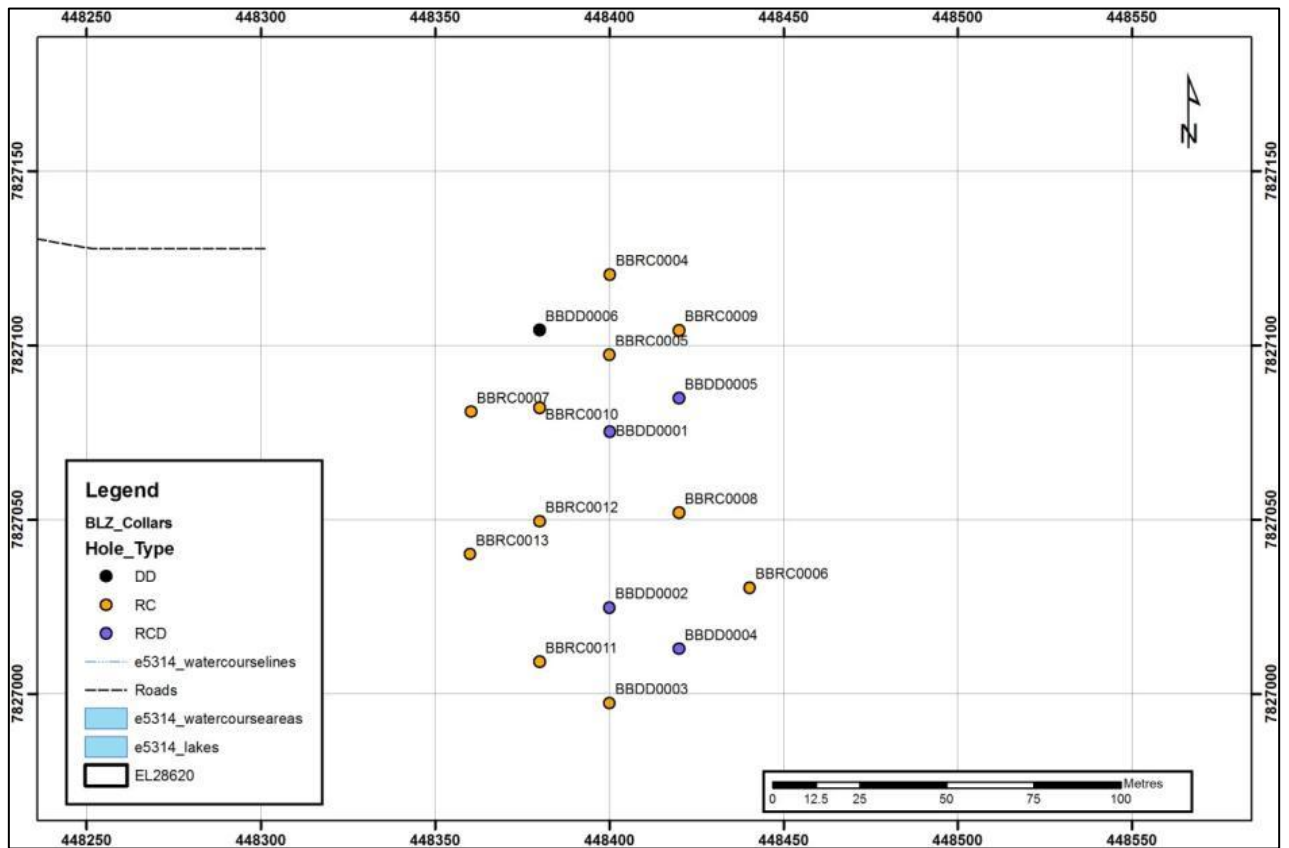


Figure 9: Bluebird drill section 448400mE

### Blaze International Exploration 2014-2016

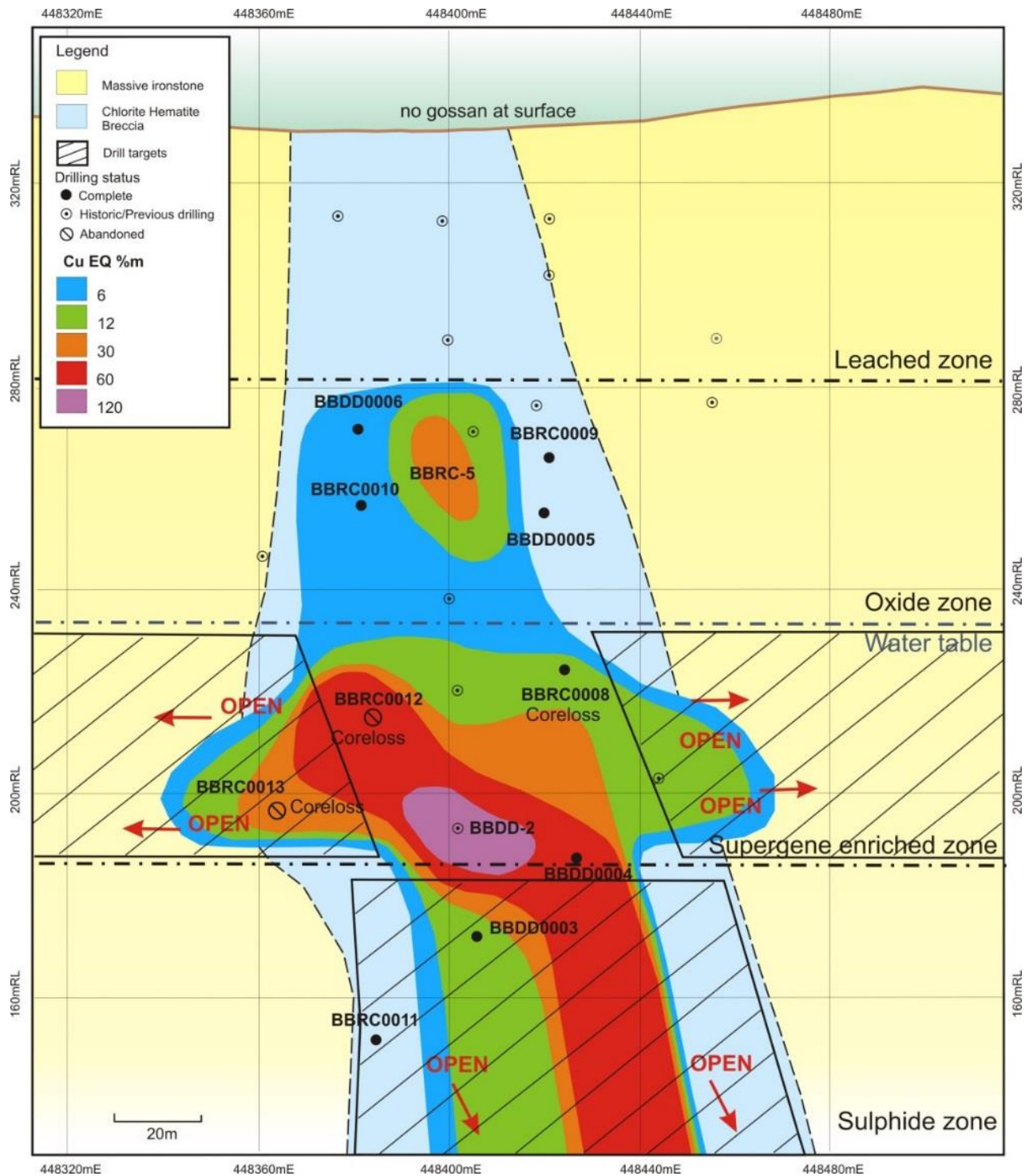
During 2014 a first pass program of deeper RC drilling (Phase I) was initiated to accurately define the grade and geometry of Cu-Au-Bi mineralisation at Bluebird. Four RC holes and two pre-collars for diamond holes were completed. A second phase (Phase II) of drilling confirmed and extended the mineralisation intersected by Phase I. Poor sample recoveries prevented some of the holes from properly testing targeted potential high grade zones. Drill hole locations for Phase I and Phase II drilling are shown in Figure 10.



**Figure 10: Location of drill collars – Phase I and Phase II drilling**

It is common for Tennant Creek style deposits to be zoned with more copper rich mineralisation near the surface and more gold rich mineralisation at depth. The Bluebird mineralisation follows the typical Tennant Creek style model in that it is copper rich near surface and transitions into high grade gold as it gets deeper. Bluebird is interpreted as a Tennant Creek style iron-oxide associated Cu-Au-Bi mineralised system (IOCG). Historically Tennant Creek IOCG-style mineralised systems have produced extremely high grades and highly profitable mines.





**Figure 11: Long section of Bluebird prospect, looking north showing copper equivalent (CuEQ%) x m\*\* contours. Note the priority drill targets marked by dark grey hatching, and the two abandoned holes BBRC0012 and BBRC0013**

\*\*CuEQ grade is calculated by combining the metals of interest based on their prices. In this case  $\text{Cu}\% + (\text{Au ppm} \times 0.66) + (\text{Bi}\% \times 3.84) = \text{CuEQ}\%$ . It is used as a visualisation tool only and is required at Bluebird due to the polymetallic and strongly zoned nature of the mineralisation. In this situation a CuEQ% provides a better picture of the overall geometry of the mineralisation than by using copper or gold grade alone. Metallurgical recoveries were not taken into account when calculating CuEQ%. CuEQ% x m is used for the contouring to give a spatial representation of total metal accumulation.

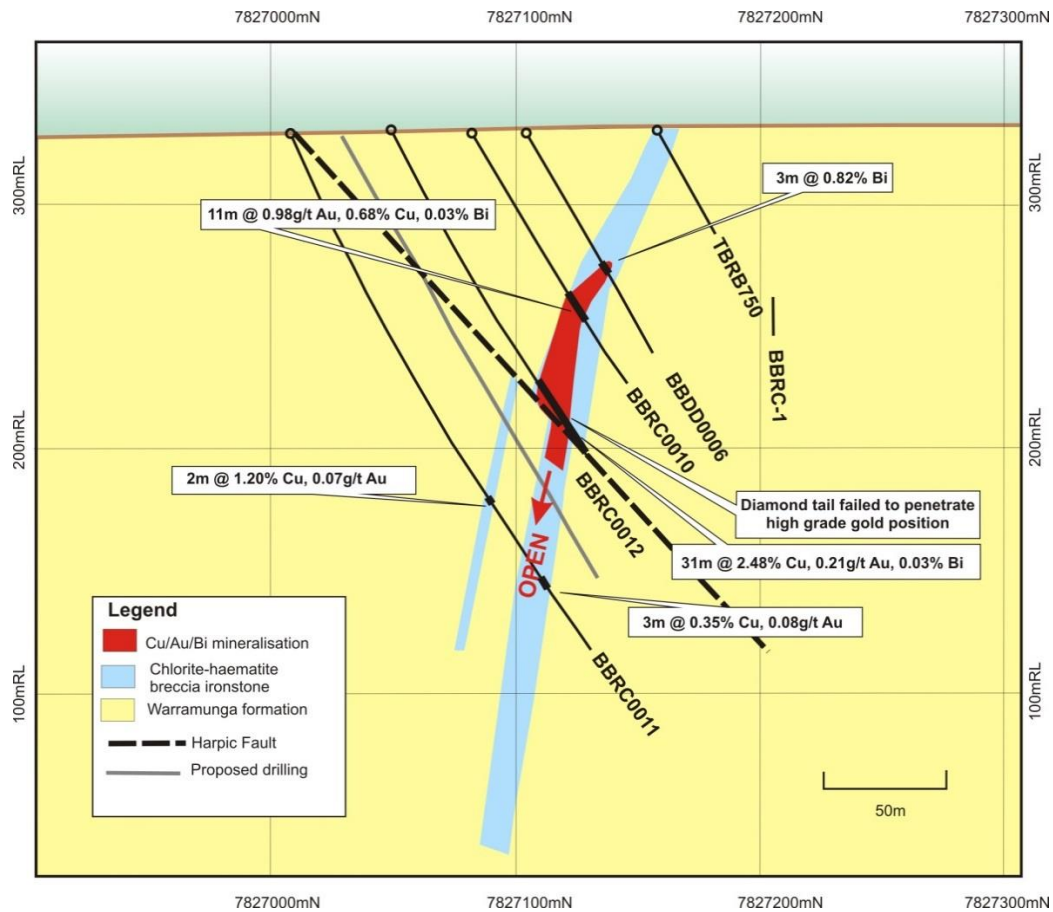


Figure 12: Cross section at 448380mE, looking west. Note that diamond drilling of BBRC0012 was abandoned without any advance beyond the end of the RC hole

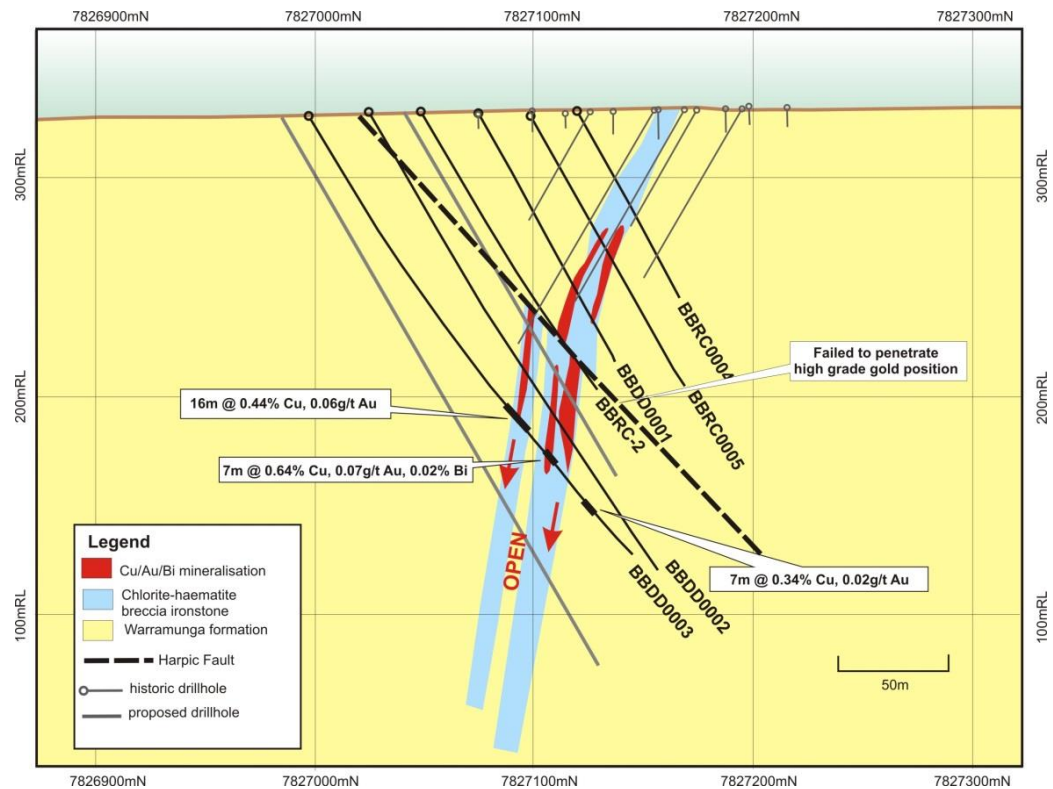


Figure 13: Cross section at 448400mE, looking west. Note the hematite shales and chlorite hematite breccia in the footwall which are anomalous in copper

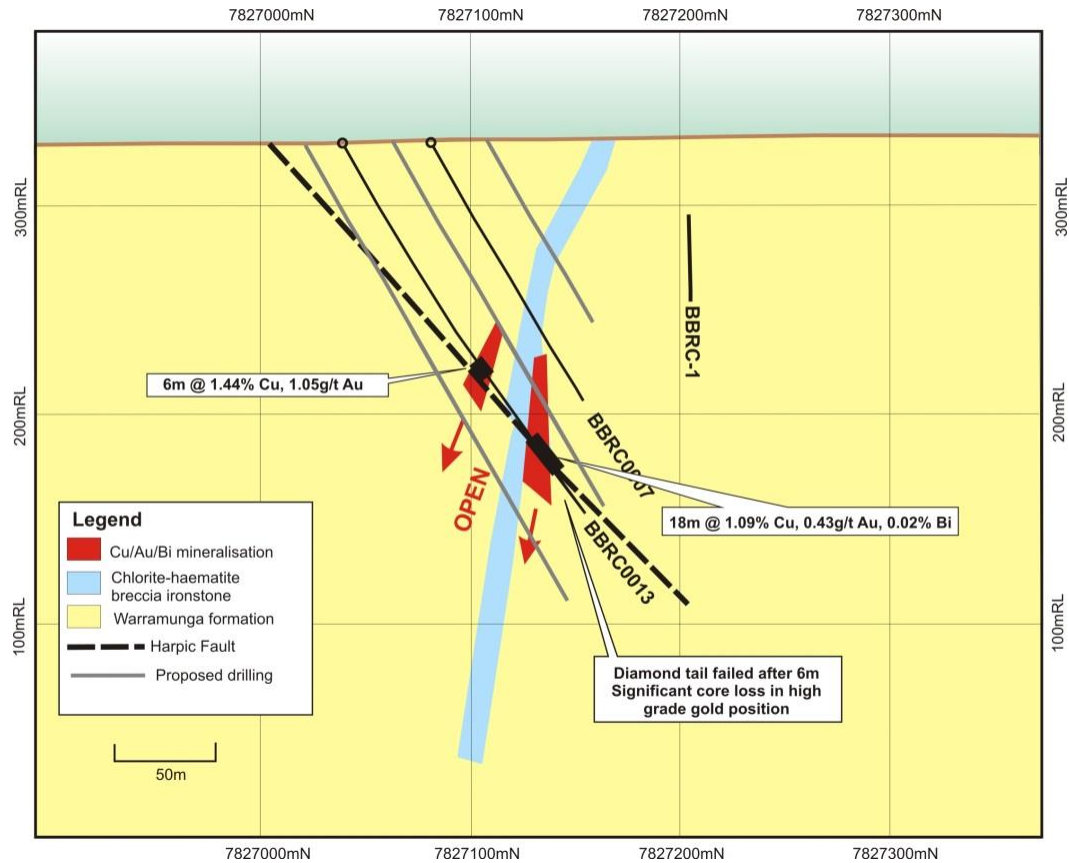


Figure 14: Cross section at 448360mE, looking west, showing recent drilling results. Note BBRC0013 diamond drilling was abandoned at 185m, after 6m of coring

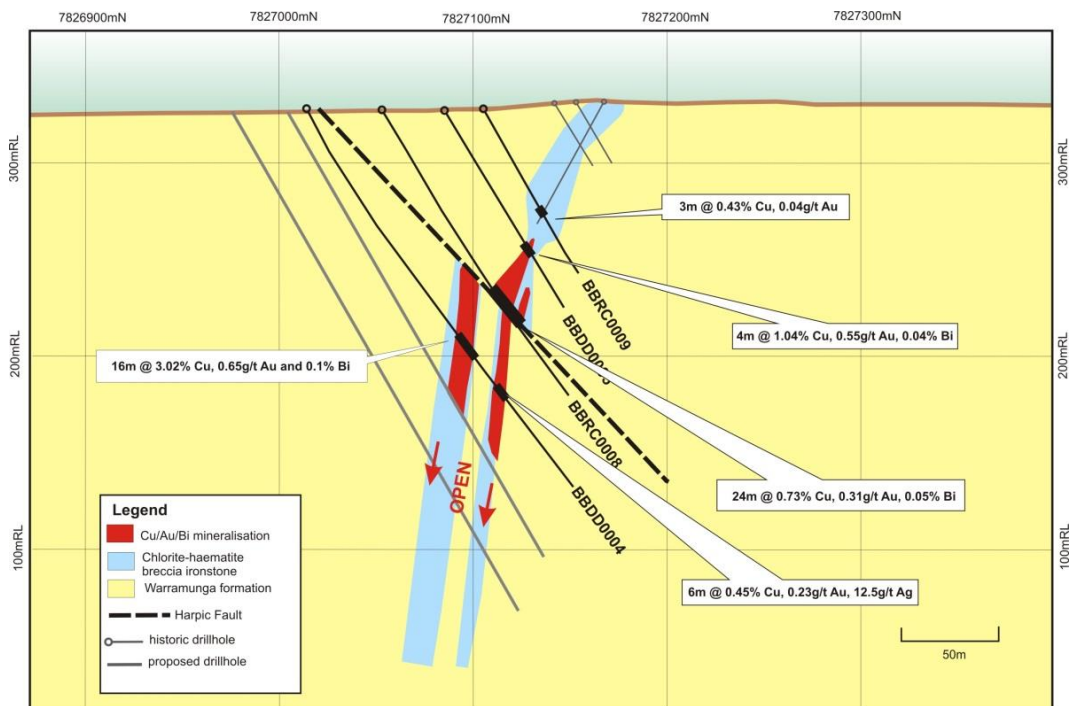
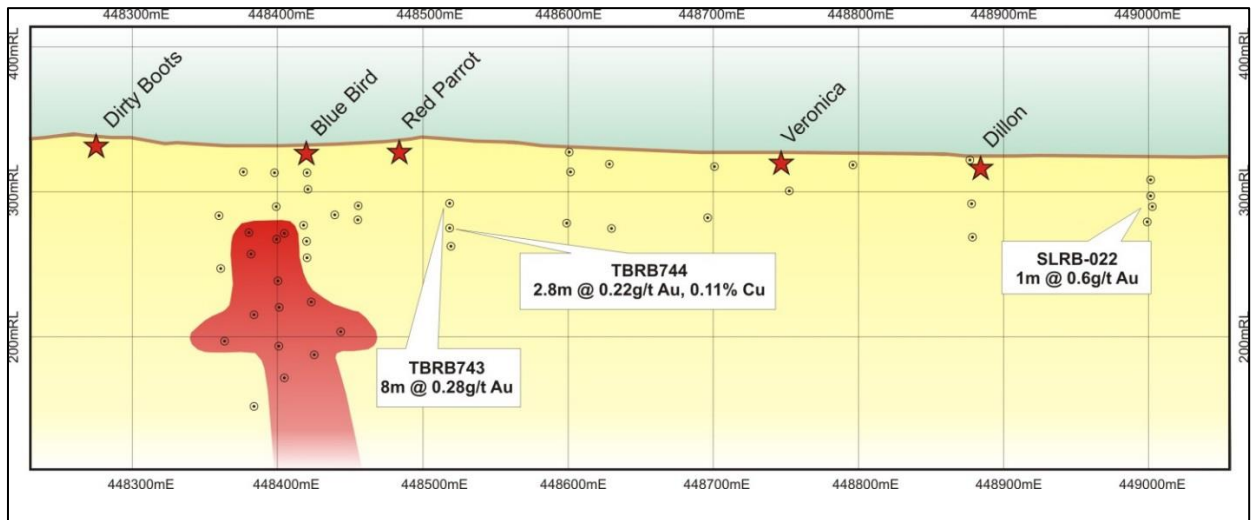


Figure 15: Cross section at 448420mE, looking west. Note the apparent change in dip. BBRC0008 was successfully completed by diamond drilling, but with significant core loss on the lower ironstone contact





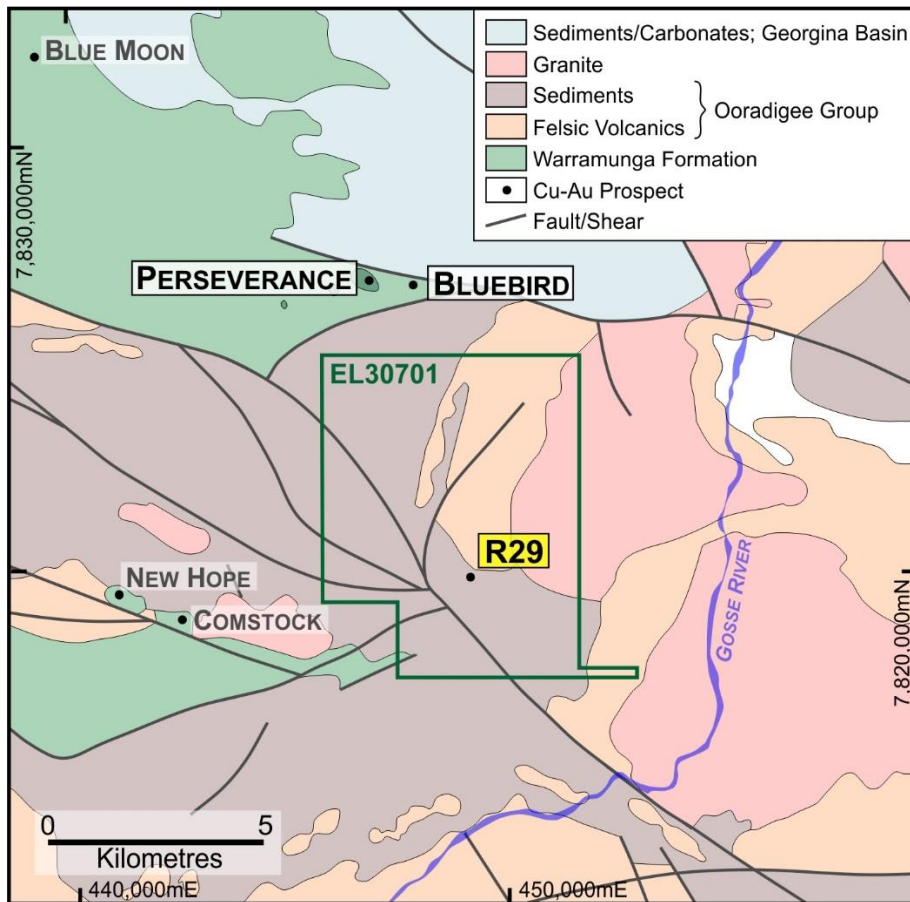
**Figure 16: Longitudinal projection of the Bluebird Trend looking north, showing successful drillhole pierce points in grey circles, labelled with significant intercepts where appropriate, and high priority targets in red stars. Bluebird mineralisation is shown in red. Note the proximity of Dillon and Red Parrot to significant historic intercepts**

Exploration work completed by Meteoric Resources and Blaze International on the Barkly project has confirmed the presence of a high-grade Cu-Au-Bi mineralised ironstone associated with a +600 m long geochemical copper anomaly situated on a gravity ridge interpreted to reflect extensive haematite ironstone at the Bluebird prospect.

The gravity ridge extends to the west but is not currently accessible because of the exclusion zone around an aboriginal site. The copper anomalism, haematite ironstone and talc-chlorite alteration are considered to be favourable indicators of Tennant Creek style copper-gold mineralisation within this 1.6 km-long gravity ridge target.

The mineralisation at Bluebird, which has been drill tested to a depth of approximately 200 m, remains open at depth and along strike, particularly in the supergene zone. The drilling program planned for the 2019 field season will aim to test these extensions as well the interpreted high-grade gold position on the lower ironstone contact and the geophysical targets generated from the downhole surveys of hole BBDD0004.

A JORC 2012 mineral resource estimate is intended to be published after the completion of this next phase of drilling. A high-level scoping study can subsequently be based on the mineral resource estimate.

**EL30701 – Babbler**

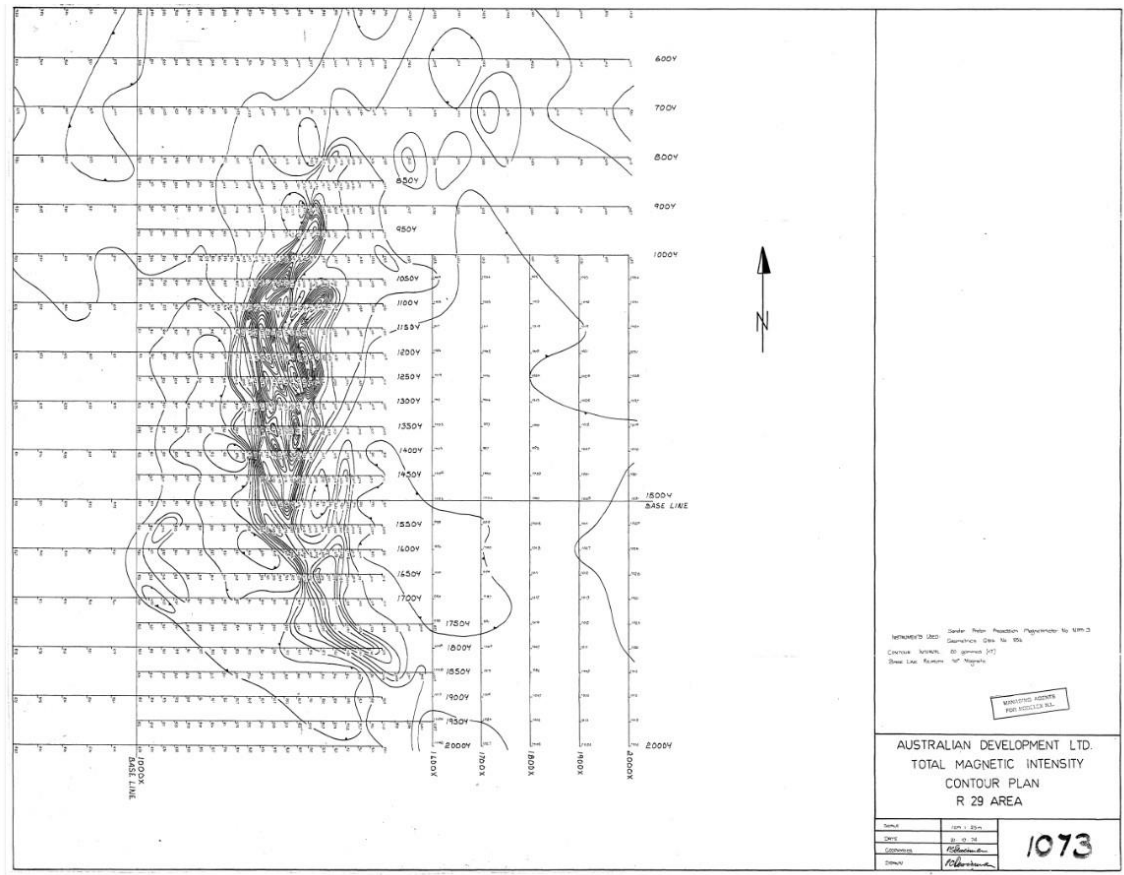
**Figure 17: EL30701 Simplified Geology and R29 Prospect Location.**

Summary of exploration activities:

- 1970: MAT Exploration Pty Ltd carried out a 200m line spacing aeromagnetic survey (N-S lines) over ATP2093.
- 1973: Australian Development Ltd (ADL), on behalf of Nobelex NL, identified the R29 magnetic anomaly and located it using ground magnetic traverses.
- 1974: ADL carried out a 200m line spacing aeromagnetic survey (N-S lines) over EL96, and geological mapping (1:2500 scale), a 50m spaced ground magnetic survey (E-W lines), and a shallow RAB drilling programme (44 holes, total 674m) over R29.
- 1974: ADL drilled diamond holes DDH466 and 469 into the pyritic rhyolite target and DDH468 and percussion holes SHDH169 and 170 into the R29 magnetic anomaly.
- 1975: ADL was granted mineral leases MLC266-271.
- 1975: ADL drilled diamond holes DDH479 and 482 into the R29 magnetic target (cumulative total; 864.5m of diamond and percussion drilling).
- 1991: PosGold Ltd carried out a regional gravity survey.
- 1995: PosGold carried out a review of previous exploration and photogeological mapping.
- 1996: PosGold relinquished MLC266-271 and retained the area as SEL8687.
- 2012: Ao-Zhong International Mineral Resources collected 26 soil samples on EL29335 before relinquishing the area in 2014.
- 2017: Meteoric Resources carried out a 60km ground magnetic survey using a cesium vapour magnetometer (50m-spaced E-W lines).

The ADL ground magnetic survey identified a discrete N-S anomaly some 600m in length with a maximum amplitude of 250nT, Figure 18. The anomaly was interpreted to be a banded iron formation or a magnetite body parallel to the strike of the volcanics and entirely within the volcanics.

Shallow RAB drilling was completed along a profile line to obtain bedrock and geochemical data across the axis of the magnetic anomaly. This drilling delineated a volcanic-sediment contact approximately 100 m W of the anomaly axis, with anomalous gold values up to 2 m @ 2.1 g/t from 18m at bottom of hole, however the location of this drill traverse has not been located.



**Figure 18: R29 Ground Magnetics (1974).**

Two diamond holes (DDH466 and 469) were drilled into the pyritic rhyolite identified during the geological mapping. DDH466 intersected a thick sequence of rhyolite with abundant pyrite. Several gold-anomalous zones were intersected including 10m @ 0.8g/t from 170m in quartz and sulphide veined chloritic tuff and a narrow high-grade intersection of 0.3m @ 200dw/t (310g/t Au) from 124m in a quartz vein (assay not verified). DDH469 intersected minor disseminated pyrite throughout with several gold-anomalous zones including 12m @ 0.6 g/t from 6m.

Three diamond holes (DDH468, 479 and 482) and two percussion holes (SHDH169 and 170) were drilled into the R29 magnetic target on two sections 100m apart. The holes were drilled from both east and west and all failed to intersect the source of the magnetic target. The holes intersected a sequence of massive chlorite altered rhyolite with some gold-anomalous zones including 3m @ 2.6g/t from 70m in DDH468 in quartz veined brecciated rhyolite and 9m @ 0.3g/t from 6m and 39m in SHDH169. DDH479 and 482 did not intersect any anomalous base metal values however they do not appear to have been assayed for gold – see Table 1.

The regional gravity survey carried out by PosGold (station spacing unknown) does not indicate any anomalism at R29. The photogeological interpretation identified a pronounced NW-trending structure passing close to R29. The very wide spaced soil sampling by Ao-Zhong did not reveal any significant anomalism.

## 7.0 PROJECT RESOURCE ESTIMATES

No resource estimates have been made for the project.

## 8.0 MINING

Since the Barkly-Babbler Project is still within its exploration phase no significant mining studies have been carried out on any of the prospects.

## 9.0 MINERAL PROCESSING

Since the Barkly-Babbler Project is still within its exploration phase no significant metallurgical studies have been carried out on mineralisation from any of the prospects.

## 10.0 PROJECT CONCLUSIONS

The Barkly-Babbler Project is still within its exploration phase with the main exploration targets being at the Bluebird prospect along the Golden Mile trend in EL28620 and the R29 prospect in EL30701.

The gold and copper mineralisation intersected by drilling to date at Bluebird is directly comparable in many respects, including grades, to other Tennant Creek style mines. Research by the Company has revealed similarities between the mineralised system at Bluebird and the Peko and Nobles Nob deposits, both located just 20km away. The metal ratio appears to be similar to the Peko deposit. These comparisons are very positive as the Peko Mine produced 3.6Mt @ 3.5g/t Au and 4% Cu for 400,000oz Au and 146,000t Cu, and Nobles Nob produced 2Mt at 17g/t Au for 1.1Moz.

Mineralisation at Bluebird is hosted by a chlorite-hematite breccia body which transitions laterally to a magnetite hematite ironstone. The chlorite-hematite breccia is interpreted to be the result of alteration associated with the Cu-Au-Bi mineralising event of a pre-existing magnetite ironstone body. The main difference between Bluebird and Peko is that the gangue associated alteration at Bluebird is dominated by chlorite-hematite whereas at Peko the dominant gangue associated alteration is hematite-quartz.

The strike length of the Peko deposit was no more than 100m and overall thickness was about 20m. The deposit was made up of a series of ore shoots hosted within a sub vertical hematite breccia host. The ore shoot positions, which measured no more than 40m strike by 80m plunge by 6m thick, were associated with changes in dip of the hematite breccia host. These changes in dip may have been related to cross cutting shears or thrust faults. The general dip of the Peko ore body flattened with depth. Similarly, the Bluebird prospect also appears to be flattening with depth.

To date the strike length of the Bluebird prospect is approximately 120m and the overall thickness is approximately 20m. It should be noted that Bluebird is still open along strike and down dip and appears to be increasing in thickness with depth.

The central cross section at Bluebird has produced two very high-grade intercepts in BBRC-5 and BBDD-2 with relatively subdued intercepts in BBDD-1 and BBRC-2. Grade changes appear to be related to changes in dip, similar to the Peko deposit. Structural observations on the diamond core in BBDD-2 revealed the presence of relatively flat dipping east west striking structures associated with the very high-grade mineralisation. These structures are interpreted to be related to thrust faulting.

Bluebird is interpreted to be a concealed and therefore previously undiscovered Tennant Creek-style copper gold deposit not unlike Peko or Nobles Nob. Further targeted RC and diamond drilling is warranted on this prospect to hopefully define a mineable resource.

The R29 prospect is a magnetic anomaly that has been tested with shallow RAB drilling followed up with three diamond holes and two percussion holes, all prior to 1975. These holes intersected anomalous gold and copper but failed to properly explain the magnetic anomalism. Further geophysical surveys using modern techniques and properly targeted RC and diamond drilling is warranted on this prospect.

## 11.0 VALUATION OF THE PROJECTS

The **Barkly-Babbler Project** consists of two Exploration Licences and is classed as an exploration project. Several methods of valuation are available for such projects where a Mineral Resource has been estimated in accordance with the JORC code. These include the use of valuations based on past exploration expenditure and valuations based on perceived prospectivity.

Exploration projects can be extremely variable in nature and the use of comparable transactions is likely to produce a statistical spread of values for “similar” projects. The *Prospectivity Exploration Multiplier (PEM)* is based on past expenditure while the Kilburn Geoscience Rating (*Geo-factor Rating*) is based on opinions of the prospectivity hence tenements can have marked variation in value between the methods.

The ‘Geo-factor Rating’ method of valuation for exploration tenements is one valuation method for the Company’s current tenements as it focuses on the future prospectivity of the area.

The Geo-factor Rating method systematically assesses and grades of four key technical attributes of a tenement to arrive at a series of multiplier factors. The Basic Acquisition Cost (BAC) is the important input to the method and it is calculated by summing the application fees, annual rent, work required to facilitate granting (e.g. native title, environment) and statutory expenditure for a period of 12 months. This is usually expressed as average expenditure per square kilometre. Equity and grant status are also taken into account. Each factor then multiplied serially to the BAC.

The ‘Base Value’ is multiplied by the prospectivity rating (the assessment of prospectivity factors multiplied together) to establish the overall technical value of each mineral property.

Where exploration expenditure has produced documented results, a PEM can be derived which takes into account the valuer’s judgment of the success of the previous exploration techniques and results.

Paragraph 65 of RG 111 discusses a preference for the use of more than one valuation methodology. In the absence of a resource estimate in accordance with the JORC code an alternative method to the Geo-factor Rating method considers past expenditure on the tenements and the uplift of value provided by encouraging result.

Past expenditures for the Company’s current tenements are not all available from the previous explorers of the same ground over the duration of modern exploration and reliance is also placed on the Geo-factor method.

## 11.1 GEO-FACTOR RATING METHOD

The Exploration potential of the Barkly-Babblers project is based on the potential for additional mineralisation within the tenement. The valuation of the potential resource is considered to be additional to the exploration potential value.

### 11.1.1 Base VALUE

This represents the exploration cost for the current period of the tenements. The current Base Acquisition Cost (BAC) for the exploration projects is considered to be the average expenditure for the first year of the licence tenure. A 10% administration fee is taken into account to imply a BAC of \$1,000 for E30701 and \$6,000 for E28620

The Company has 100% equity in the tenements, which are granted.

### 11.1.2 Prospectivity Assessment Factors

An assessment of the prospectivity of tenements was carried out. This includes a consideration of

- Regional mineralisation, old and current workings and the validity of conceptual models.
- Local mineralisation within the tenements and the application of conceptual models within the tenements.
- Identified anomalies warranting follow up within the tenements.
- The proportion of structural and lithological settings within the tenements and difficulty encountered by cover rocks and other factors.

Assessments in each category are based on a set scale (see above and Appendix 1) and are multiplied together to arrive at a “prospectivity index”.  $\text{Prospectivity Index} = [\text{Off Site Factor}] * [\text{On Site Factor}] * [\text{Anomaly Factor}] * [\text{Geology Factor}]$  – Details are in Appendix 1.

A higher Geology rating is applied to the current valuation as it is assumed that lower value blocks were voluntarily relinquished, leaving the most prospective blocks within the tenement.

### 11.1.3 Technical Value

Exploration Tenements – Alternative Valuation Methods:

There is a preference for the use of more than one valuation methodology for the same tenements expressed in Paragraph 65 of Regulatory Guide 111. An alternative method to the Geo-factor Rating method might consider past expenditure on the tenements and the uplift of value provided by encouraging result indicated by the Prospectivity Enhancement Multiplier (PEM).

PEM Range	Criteria
1.3 – 1.5	Exploration has considerably increased the prospectivity (geological mapping, geochemical or geophysical)
1.5 – 2.0	Scout Drilling has identified interesting intersections of mineralisation
2.0 – 2.5	Detailed Drilling has defined targets with potential economic interest.
2.5 – 3.0	A resource has been defined at Inferred Resource Status, no feasibility study has been completed.
3.0 – 5.0	A Probable or Possible Reserve has been defined

**Table 3: Prospectivity Enhancement Multiplier (PEM) descriptions.**

Complete records of past expenditure for the Project are not available from the previous explorers. The project has been extensively explored in the past with mapping, satellite imagery, geophysics, surface geochemistry and historical drilling forming part of the data base.

### 11.1.4 Market Value

In arriving at a fair market value for a particular exploration tenement, I have considered recent and the current market for exploration properties in Australia and overseas. It is considered appropriate to apply a significant discount to the technical value of the exploration potential of the tenements.

I have considered the Country risk and current market for exploration properties. An assessment of country risk and business climate have been provided by a specialist firm (source: [www.coface.com](http://www.coface.com)). The rating for Australia is 'A2' for country risk and 'A1' for business climate, which are considered to be high. This rating will affect the market factor in assessing market value.

Variations in the gold price and Commodity Metals Price Index have been considered as a proxy for market sentiment. The gold price rose steadily from \$US300 to \$US1,800 from January 2000 to mid-2011 and then stayed within the \$US1,100 - \$US1,400 band between mid-2013 to the present finishing up at US\$1,500 during August 2019. This indicates a generally steady market sentiment for the last more than 5 years.

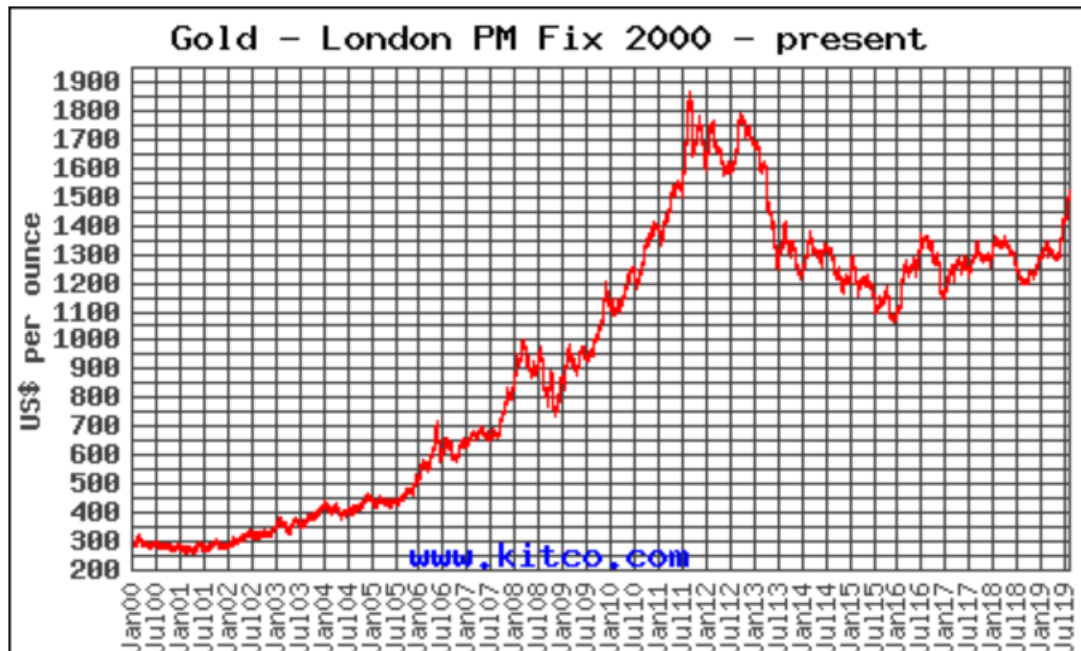


Figure 19: Gold price – 1 January 2000 to 31 August 2019

## 11.2 Valuation opinion

Based on an assessment of the factors involved I estimate the value for the Barkly Babbler Project at the current date to be in the range A\$1.3 million to A\$2.1 million with a preferred value of A\$1.6 million.

This valuation is effective on 23<sup>rd</sup> August 2019.

## 12.0 MINERAL ASSETS VALUATION METHODOLOGY FOR EXPLORATION TENEMENTS

### Fair market value of mineral assets

Mineral assets include, but are not limited to, mining and exploration tenements held or acquired in connection with the exploration, the development of, and the production from those tenements together with all plant, equipment and infrastructure owned or acquired for the development, extraction and processing of minerals in connection with those tenements.

Mineral assets classification	
Exploration areas	Mineralization may or may not have been identified, but where a mineral resource has not been defined.
Advanced exploration areas	Mineral resources have been identified and their extent estimated (possibly incompletely). This includes properties at the early stage of assessment.
Pre-development projects	A positive development decision has not been made. This includes properties where a development decision has been negative, properties on care and maintenance and properties held on retention titles.
Development projects	Committed to production, but which, are not yet commissioned or not initially operating at design levels.
Operating Mines	Mineral properties, particularly mines and processing plants, which have been fully commissioned and are in production.

The fair market value of a mineral asset is the estimated amount of money or the cash equivalent or some other consideration for which the mineral asset should change hands between a willing buyer and a willing seller in an arm's length transaction. Each party is assumed to have acted knowledgeably, prudently and without compulsion.

The value of a mineral asset usually consists of two components,

- The underlying or Technical Value which is an assessment of a mineral asset's future net economic benefit under a set of appropriate assumptions, excluding any premium or discount for market, strategic or other considerations.
- The Market Component, which is a premium relating to market, strategic or other considerations which, depending on circumstances at the time, can be either positive, negative or zero.

When the technical and market components of value are combined the resulting value is referred to as the market value. A consideration of country risk should also be taken into account for overseas projects.

The value of mineral assets is time and circumstance specific. The asset value and the market premium (or discount) changes, sometimes significantly, as overall market conditions, commodity prices, exchange rates, political and country risk change.

### Regulatory Authorities

Mineral asset valuations are prepared in accordance with the Code for Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (the "VALMIN Code", 2005), which is binding upon Members of the Australasian Institute of Mining and Metallurgy ("AusIMM") and the Australian Institute of Geoscientists ("AIG"), as well as the rules and guidelines issued by the Australian Securities and Investments Commission ("ASIC") and the ASX Limited ("ASX") which pertain to Independent Expert Reports (Regulatory Guides RG111 and RG112).

Where mineral resources have been referred to in this report, the classifications are consistent with the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("JORC



Code”), prepared by the Joint Ore Reserves Committee of the AusIMM, the AIG and the Minerals Council of Australia, effective December 2012.

## Valuation of Resources by Comparable Transactions

If a property in the recent past was the subject of an arms-length transaction, for either cash or shares (i.e. from a company whose principal asset was the mineral property) then this forms the most realistic starting point, provided that the deal is still relevant in today’s market. Complicating matters is the knowledge that properties rarely change hands for cash, except for liquidation purposes, estate sales, or as raw exploration property when sold by an individual prospector, or entrepreneur.

Any underlying royalty or net profits interests or rights held by the original vendor of the claims should be deducted from the resultant property value before determination of the company’s interest. Also, reductions in value should be made where environmental, legal or political sensitivities could seriously retard the development of exploration properties.

It should be noted again that exploration is cyclical, and in periods of low metal prices there is often no market, or a market at very low prices, for ordinary exploration acreage (inventory property) unless it is combined with a significant mineral deposit, or with other incentives.

When only a resource or defined body of mineralisation has been outlined and its economic viability has still to be established (i.e. there are no DCF calculations) then a **Comparable Transactions** approach is usually applied, often stated as a percentage of metal value. This can be applied to Mineral Resource estimates and Exploration Targets in accordance with the JORC code with appropriate discounts for risk in the different categories.

When valuing any mineral asset/project it is important to consider as many factors as possible that may either assist or impinge upon the cash value estimates of the mineral asset/project under consideration. In this Report AM&A considers the primary features to be taken into account are the Tenement Security; Mineral Resource Estimates; Sovereign Risk; Available Infrastructure; Relevant Expenditure and the general geological setting.

Basically, these “Boxes are Ticked” as described above with regards to mineral licence security, convenient infrastructure, assessment of mining and favourable geological environment.

## Selection of Valuation Methods

The following valuation methods, as described in section 2, are not considered applicable for the respective reasons provided:

- The Discounted Cash Flow method has not yet been documented
- Joint Venture Terms - as there are no external joint ventures in place;
- Comparable transactions – one very recent transaction has been documented and previous older transactions are also considered as a guide to current market forces.

## 13.0 VALUATION METHODS

Relevant figures and comparable factors to reach a valuation estimate and range are presented in Appendix 1.

## 13.1 Valuation Conclusions

This Report concludes that the current cash value of 100% of the Barkly Babbler project is in the range A\$1.3 million to A\$2.1 million with a preferred value of A\$1.6 million. See Appendix one for details.

<b>Total</b>	<b>A\$1.3M</b>	<b>A\$2.1M</b>	<b>A\$1.6M</b>
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**Table 4: Summary Range of Current Values.**

Yours faithfully,



Allen J. Maynard. BAppSc(Geol), MAIG, MAusIMM

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#### **Company ASX Announcements**

<http://www.meteoric.com.au/announcements>

## Appendix 1: Valuation Estimate Workings.

							Year			\$		RBA	
Tenement ID	Type	Status	Holder	Grant Date	End Date	Area (Km²)	2014	253.334	270,589				
EL28620	Exploration	Active	Colour Minerals Pty Ltd (100%)	16-Dec-11	15-Dec-19	39.16	2015	692,782	728,973				
							2016	36,215	37626				
							2017	42,500	43,312	Low	High	Preferred	
							2018	10,490	10,490	1.2	1.6		
									1,090,990	1,309,188	1,745,584	1,527,386	
									Rounded	A\$1.3 M	A\$1.7M	A\$1.5M	

[illegible]

Kilburn Tenement Prospectivity Factors												
		Off Site		On Site		Anomaly		Geology				
		Low	High	Low	High	Low	High	Low	High	Low	High	Pref
BAC		3.6	4	4	4.5	3	4	4	5			
E28620	6,000	21,600	24,000	86,400	108,000	259,200	432,000	1,036,800	2,160,000	1,036,800	2,160,000	1,598,400
		1.5	2	1.5	2	1.5	2	2	3			
E30701	1,000	1,500	2,000	6,000	9,000	9,000	18,000	18,000	54,000	18,000	54,000	36,000
										1,054,800	2,214,000	1,634,400