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# MAGNETIC AND GRAVITY TARGETS IDENTIFIED AT THE BARKLY PROJECT



Figure 1 –Residual ground gravity image of the Barkly Project showing remnant magnetic anomalies in white stars, structural interpretation in black lines and Bluebird copper geochemical anomaly in a red polygon. Note the "gravity ridge" running from WNW to ESE through the centre of the image

## HIGHLIGHTS

- At least nine very high priority targets have been identified, all with coincident magnetic and gravity anomalies
- Numerous untested "Bluebird lookalike" remnant magnetic anomalies identified in re-processed ground magnetic data
- Coincident (overlapping) ground gravity anomalies, in particular along the "gravity ridge" provide strong support for magnetic interpretation
- Targets will be further refined and rationalised by geological mapping and surface geochemistry before drill testing

### GEOPHYSICAL DATA REVIEW AND TARGETING

The two most important geophysical techniques for targeting Tennant Creek style Cu-Au-Bi mineralisation are magnetics and gravity. A number of companies have collected ground magnetic, aeromagnetic and gravity data within the Barkly Project area in numerous surveys over several decades. Blaze has now located and acquired all of the historic gravity and ground magnetic data located within the Barkly Project area. Some closed file aeromagnetic data are still being acquired.

The magnetite rich ironstones hosting the mineralisation strongly contrast with the relatively weakly magnetic Warramunga Formation country rock sediments. The ironstones and associated sulphide mineralisation are also denser than the country rock and may therefore be amenable to detection by gravity surveying. Gravity is particularly important in targeting nonmagnetic hematite hosted deposits. Peko and Nobles Nob are both examples of hematite hosted orebodies within the TCMF.

The reprocessed, gridded and imaged geophysical datasets have allowed Blaze geologists to fingerprint the signature of the Bluebird mineralisation and find other similar features within the Barkly Project area. A series of targets have been generated and are to be ranked based on coincident magnetic, gravity and/or geochemical anomalies similar to Bluebird or other deposits in the Tennant Creek Mineral Field (TCMF).



Figure 2 – First vertical derivative ground magnetic image of the Barkly project showing remnant magnetic anomalies with white stars, NE trending structural interpretation as black lines and the gravity ridge hatched in light grey.

Many of the remnant magnetic anomalies have coincident (overlapping) gravity and geochemical anomalies. Features with coincident magnetic, gravity and geochemical anomalies will be the targets of future exploration activity. The targets will be ranked and prioritised before follow-up work takes place.

Of particular interest is a large magnetic body "General Electric" located near the south east corner of figure 2. This is a large body of strongly magnetic material with a deep root system. 3D inversion modelling of the ground magnetics has substantially refined the anomaly.



General Electric hosts several remnant magnetic anomalies and coincident gravity anomalies. These will be the initial focus of follow-up activity over this high priority target.

Figure 3 –3D cut-away showing a 3D magnetic inversion model of the General Electric anomaly in the foreground in green, structural interpretation in black lines, tenement outlines in blue and remnant magnetic anomalies as white stars.

The surface geochemistry dataset is not yet extensive or complete enough to assist in refining the targets further at this stage. An orientation survey will be conducted in the Bluebird area before a full scale detailed program of surface geochemistry is undertaken over the entire exploration licence, starting over the highest ranked targets. If the orientation survey finds surface geochemistry not to be an effective tool then a cost effective shallow drilling technique will be evaluated.

## DRILL PLANNING AND LOGISTICS

The revised Mine Management Plan has been approved by Department of Mines and Energy.

This planned drilling program is designed to follow-up on the standout holes from the previous program at Bluebird, including;

• BBDD-2: 20m at 8.17g/t Au, 0.61% Cu and 0.22% Bi from 157m (Including 4 metres at 37.9g/t Au, 0.66% Cu and 0.80% Bi from 169m)

BBRC-5: 25m at 1.9% Cu and 0.3g/t Au from 69m (Including 4 metres at 8.99% Cu and 1.06g/t Au from 74 metres)<sup>1</sup>.



Figure 2 - Cross section at 448400mE, looking west, showing follow-up drilling down dip of BBDD-2

The aim of the follow-up drilling program is to enable the estimation of an initial JORC 2012 mineral resource estimate for the Bluebird Prospect and to assist in the assessment of the economics of a potential mining project at the site.

Nobles Nob and Peko were studied in 3D to help plan this phase of drilling. The use of deposit models will expedite the targeting process and maximise the cost effectiveness of future drilling.

\*Previously announced 17 June and 23 July 2014



Figure 3 – Long section of Bluebird, looking north, showing recent drilling, historic drilling, planned drilling and new geological interpretation

## **BARKLY COPPER-GOLD PROJECT**

Blaze International Limited is in a Farm-In Joint Venture Agreement with Meteoric Resources NL over the highly prospective **Barkly Copper-Gold Project**. Blaze has the right to earn up to an 80% interest in the project. The project is located around 30 km east of the town of Tennant Creek in the Northern Territory (Figure 9).

The Bluebird copper-gold Prospect at the Barkly Project comprises a 1.6km-long gravity ridge open to the east where shallow geochemical drilling by Meteoric Resources identified a 600m-long copper anomaly, also open to the east. Previously reported follow-up drilling confirmed Tennant Creek-style copper-gold mineralisation associated with ironstone. The ironstones and mineralisation are often discordant to the host sediments and are considered to be a high-grade variant of the iron oxide-copper-gold (IOCG) deposits found in Proterozoic terranes in Australia.



Figure 4 – Location of the Barkly Cu-Au Project

As part of the earn-in to the Barkly Project, Blaze has recently completed an RC and diamond drilling program targeting copper-gold mineralisation at the Bluebird Prospect.



Figure 5 – Regional prospectivity map of the Barkly Cu-Au project. Blue lines show ironstone structural trends throughout the licence. Ironstones are prospective for other high-grade Tennant Creek style deposits.

## DRILL RESULTS SUMMARY TABLE

Table 1 below contains summary intersections using nominal 0.2% Cu and 0.2g/t Au cut-off grade. These cut-off grades were selected as they best represent the overall mineralised envelope at the Bluebird Prospect.

Hole ID	Length	Collar Location GDA94				A	From	То	Cu Grade	Au Grade Bi Grade Width	Internetion Description		
		East	North	RL	Dip	Azimuth	m	m	%	g/t	%	m	Intersection Description
BBDD-1	129.2	448400	7827075	328	-60	0	89	92.8	1.26	0.08	0.01	3.8	3.8m @ 1.26% Cu, 0.08g/t Au, 0.01% Bi
							107.2	114	0.45	0.08	0.01	6.8	6.8m @ 0.45% Cu, 0.08g/t Au, 0.01% Bi
BBDD-2	198	448400	7827025	324	-60	0	135.5	140	1.35	0.22	0.03	4.5	4.5m @ 1.35% Cu, 0.22g/t Au, 0.03% Bi
							157	177	0.61	8.17	0.22	20	20m @ 8.17g/t Au, 0.61%Cu, 0.22% Bi
						includes	169	173	0.66	37.90	0.80	4	4m @ 37.90g/t Au, 0.66% Cu, 0.80% Bi
						and	171	172	0.94	62.30	1.11	1	1m @ 62.30g/t Au, 0.94% Cu, 1.11% Bi
BBRC-1	100	448329	7827204	326	-60	90							Meteroric Resources Hole NSI
BBRC-2	137	448400	7827050	323	-60	0	115	119	4.69			4	Meteroric Resources Hole 4m @ 4.69% Cu, 0.38g/t Au, 170g/t Bi
BBRC-3	155	448519	7827033	323	-60	0							Meteroric Resources Hole NSI
BBRC-4	77	448400	7827120	331	-60	0							Anomalous Zone 37-55m @ 213ppm Cu
BBRC-5	113	448400	7827097	328	-60	0	62	87	1.89	0.27	0.03	25	25m @ 1.89% Cu, 0.27g/t Au, 0.03% Bi
						includes	66	68	2.98	0.42	0.12	2	2m @ 2.98% Cu, 0.42g/t, 0.12% Bi
						and	74	78	8.93	1.05	0.01	4	4m @ 8.93% Cu, 1.05g/t Au, 0.01% Bi
						includes	75	77	16.50	0.15	0.01	2	2m @ 16.50% Cu, 0.15g/t Au, 0.01% Bi
						and	75	76	24.20	0.21	0.01	1	1m @ 24.2% Cu, 0.21g/t Au, 0.01% Bi
						and	76	77	1.20	3.81	0.01	1	1m @ 3.81g/t Au, 1.20% Cu, 0.01% Bi
BBRC-6	203	448440	7827030	328	-60		126	135	0.89	0.36	0.04	9	9m @ 0.89% Cu, 0.36g/t Au, 0.04% Bi
						includes	126	128	0.09	1.21	0.01	2	2m @ 1.21g/t Au, 0.09% Cu, 0.01% Bi
						and	128	130	2.50	0.13	0.06	2	2m @ 2.50% Cu, 0.13g/t Au, 0.06% Bi
							146	149	0.80	1.57	0.02	3	3m @ 1.57g/t Au, 0.80% Cu, 0.02% Bi
							154	160	0.05	0.56	0.03	6	6m @ 0.56g/t Au, 0.05% Cu, 0.03% Bi
BBRC-7	137	448360	7827081	321	-60	0	87	90	0.38	0.69	0	3	3m @ 0.69g/t Au, 0.38% Cu
							100	105	0.29	0.06	0	5	5m @ 0.29% Cu, 0.06g/t Au
Table '	able 1 - Drill hole intersection summary results, Bluebird Prospect. Copper cut-off grade 0.2%. Gold cut-off grade 0.2g/t.												

Reverse circulation (RC) drilling samples are collected as 1m composite samples through a cyclone which are cone split for analysis. Each 1m split sample is analysed with a handheld XRF analyser. Anomalous 1m split samples are submitted to Bureau Veritas Laboratory in Perth for more precise analysis. All other samples are sampled as 4m composites by sampling with a spear and submitted to the laboratory. Diamond drill core is cut in half with an almonte core saw and sampled on nominal 1m intervals for analysis.

All drill samples submitted to the laboratory are crushed and pulverised followed by a four acid total digest and multielement analysis by inductively coupled plasma optical emission spectrometry (ICP-OES) and inductively coupled plasma mass spectrometry (ICP-MS). Gold and precious metal analysis are completed by a 40g fire assay collection and inductively coupled plasma optical emission spectrometry (ICP-OES). Sample preparation and analysis are undertaken at Bureau Veritas Laboratory in Darwin, NT and Perth, WA.

#### **Competent Person Declaration**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based, on and fairly represents, information and supporting documentation prepared by Luke Marshall who is an employee of Golden Deeps Limited, a consultant to Blaze International Limited, and a member of The Australasian Institute of Geoscientists. Mr Marshall has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr Marshall consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Blaze International Limited's planned exploration programme and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Blaze International Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.