

# Acquisition of Tick Hill Gold Project Past Production 511koz @ 22.5g/t Gold<sup>1</sup> New Board Appointments

Berkut Minerals Ltd (ASX: BMT) ('Berkut' or 'Company') is pleased to announce that it has entered into binding Heads of Agreements with various parties to acquire a 323km<sup>2</sup> ground position including the historical high grade Tick Hill Gold Project ('Tick Hill'), located in the Mt Isa region of Queensland, Australia.

# Highlights

Tick Hill was one of Australia's highest grade and most profitable gold mines

Produced 511,000oz at 22.5g/t gold to a depth of only 235m from 1991 until 1995 under the ownership of MIM Holdings Ltd<sup>1</sup>

Acquisition includes 100% interest in the Tick Hill granted mining leases (4km<sup>2</sup>) and an 82.5% and up to 100% interest in the broader 319km<sup>2</sup> exploration tenements

- Near mine drill intersections at Tick Hill include (refer Appendix One):
  - o 2m @ 104.2g/t Au fr 92m
- o 2m @ 40.2g/t Au fr 17m
- o 3m @ 84.8g/t Au fr 15m
- o 2m @ 20.2g/t Au fr 3m
- o 5m @ 20.6g/t Au fr 66m
- o 3m @ 16.9g/t Au fr 59m

Tick Hill has been largely unexplored over past 20 years and this will be the first time since 1995 that the package has been amalgamated

Berkut will apply modern exploration techniques to target near mine local/regional structural analogies and potential offsets

Regional exploration package contains numerous historical gold and copper occurrences including (refer Appendix Two):

- o Grassano Large IOCG target with up to 114 g/t gold in rock chips
- Duchess historically produced 205kt @ 12.5% copper<sup>2</sup>
- o Ivanhoe Intercepts up to 11m @ 2.7% copper from 86m (refer Appendix Two)
- Nil Desperandum intercepts up to 19m @ 2.3% copper, 0.6 g/t gold, 12m
   @ 3.3% copper, 0.4 g/t gold and 6m @ 5.2% Cu, 0.8 g/t Au (refer Appendix Two)
- Experienced mining executives Mr Peter Bowler and Mr Rob Watkins to be appointed Non-Executive Chairman and Managing Director respectively, to lead the strategic growth of the Company
- Commitments from new management team and other sophisticated investors for a \$1.6M equity raising, placing Berkut in a strong financial position with \$4.9M cash<sup>3</sup>

#### Fact Facts

Shares on Issue 54.3M Market Cap (@ 7.8 cents) A\$4.2M Cash (31 December 2018) A\$3.3M Enterprise Value A\$0.9M

#### Board and Management

Neil Inwood, Managing Director Justin Tremain, Non-Exec Chairman Paul Payne, Non-Exec Director Aaron Bertolatti, Company Secretary

#### Company Highlights

- Opportunity to acquire 100% of the Tick Hill Gold Project, historically one of Australia highest grade and most profitable gold mines
- Past production of 511koz at 22g/t gold
- 323km<sup>2</sup> exploration package containing numerous gold and copper targets
- 100% owned European cobalt and nickel projects in Norway and Sweden to be retained
- Tight capital structure and strong cash position

#### Registered Office

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<sup>&</sup>lt;sup>1</sup> Source: Forrestal P. J. et al, 1998; Tick Hill Gold Deposit.

<sup>&</sup>lt;sup>2</sup> Source: Blake, D. H. et al, 1994 BMR Bulletin 219

<sup>&</sup>lt;sup>3</sup> Being \$3.3M as at 31 December 2018 plus A\$1.6M Placement, before transaction costs



Berkut's Managing Director, Neil Inwood commented:

"The Company is excited to be acquiring this extensive, high-quality brownfields land package in Queensland. Tick Hill was historically one of Australia's most profitable gold mines with a mined grade of 22g/t gold for 511,000oz<sup>1</sup>. There is a well-defined exploration plan for Tick Hill and the broader area which is being consolidated for the first time in 20 years. The Company is in a strong funding position to pursue a focussed and aggressive exploration program. The addition of Peter Bowler and Rob Watkins to the Board will also strengthen the company both technically and commercially."

Berkut Minerals Limited (ASX: BMT) ('Berkut' or the 'Company') is pleased to announce that it has entered into four binding Heads of Agreements ('HoA') with Syndicated Metals Ltd ('Syndicated'), Superior Resources Ltd ('Superior'), Diatreme Resources Ltd ('Diatreme') and Carnaby Resources Ltd ('Carnaby') to acquire significant historical mine and exploration assets in Queensland including 100% of the historical high grade Tick Hill Gold Project. Additional regional gold exploration assets covering 972km² located in Western Australia will also be acquired by Berkut as part of the proposed transaction (refer Figure 1).



Figure 1 | Project Locations

## Tick Hill Project | Gold - Copper - Cobalt

The Tick Hill Gold Project and broader exploration package covers a substantial landholding of 323km<sup>2</sup> within the highly prospective Mt Isla Inlier. The acquisition comprises of a 100% interest in three granted Mining Leases (4km<sup>2</sup>) over the historic Tick Hill gold mine, 82.5% interest in 293km<sup>2</sup> (Syndicated free carried to Decision to Mine for the remaining 17.5% interest) and 100% interest in a further 26km<sup>2</sup> of surrounding and regional exploration tenements (refer Figure 2).



Figure 2 | Queensland Tenements



## Tick Hill (to be 100% owned)

The historical Tick Hill gold mine and surrounds has been largely unexplored for over 20 years following the mine closure by Carpentaria Gold Ltd (subsidiary of MIM Holdings Ltd) in 1995. Tick Hill has not benefited from any modern exploration techniques and this provides an opportunity to revitalise one of Australia's highest-grade gold mines in an exceptional mining jurisdiction and location.

Tick Hill produced 511,000oz of gold at 22.5g/t gold between 1991 and 1995<sup>1</sup>. It was mined to only 235m below surface at an average of 2,184oz of gold per vertical metre, with an average strike length of just 80m (refer Figure 3). It is believed that the Tick Hill orebody was faulted off at depth with the offset extension yet to be discovered. Historical reported metallurgical gold recoveries were 97% with a highly positive mill reconciliation reported against resource estimates.

Multiple high priority near mine targets for testing include (refer Figures 3 and 4):

- High grade extensions
- Potential high grade offset mineralisation
- Potential structural repetitions
- Unexplored areas along strike and with the near mine corridor

Near mine drilling intersections include (refer Appendix One):

- 2m @ 104.2g/t Au fr 92m (Hole TH047RD)
   2m @ 40.2g/t Au fr 17m (Hole 767-1890-1)
- 3m @ 84.8g/t Au fr 15m (Hole 767-1890-3)
   2m @ 20.2G/T Au fr 3m (Hole 767-1900-9)
- 5m @ 20.6g/t Au fr 66m (Hole U8401)3m @ 16.9g/t Au fr 59m (Hole U8503)



Figure 3 | Tick Hill Mine Corridor Target Regions

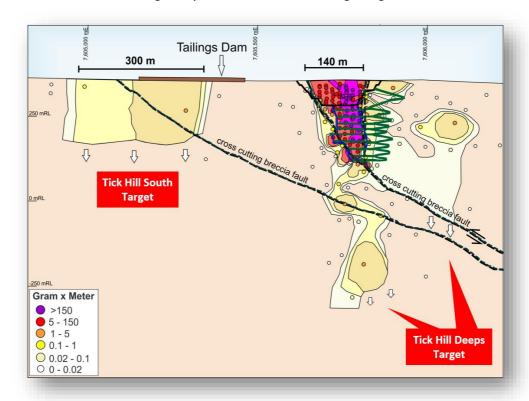
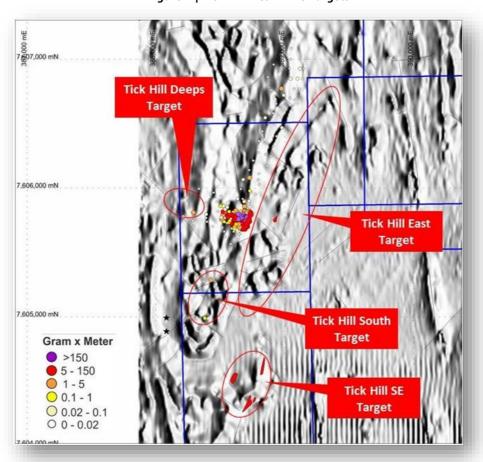


Figure 4 | Tick Hill Near Mine Targets





A small JORC (2012) Indicated Mineral Resource Estimate has been defined within the Tick Hill tailings dam of 630,000t @ 1.08g/t gold for 22,000oz (refer to Diatreme Resources Ltd's ASX announcement dated 19 January 2016).

## Tick Hill Regional (to be 82.5% -100% owned)

The acquisition of the Tick Hill regional exploration tenements covering 319km² (refer Figure 5) allows, for the first time in 20 years, for the consolidation of a previously fragmented and highly prospective land tenure surrounding the historic Tick Hill gold mine. The Tick Hill tenement package will enable a consolidated exploration approach to be taken to the area including detailed structural geology interpretation, modern day low-level detection limit geochemistry and modern geophysical techniques developed over the last 20 years. The Tick Hill deposit style is characterised by a highly discrete gold, copper and cobalt footprint that can easily be missed with wider spaced drilling.

Nil Desperandum 1 km Copper Gold workings 19m @ 2.3% Cu & 0.6 g/t Au 12m @ 3.3% Cu & 0.4g/t Au 6m @ 5.2% Cu & 0.8 g/t Au **Duchess Cu-Au** Historical production 205kt @ 12.5% Cu 11m @ 2.7% Cu 15m @ 2.6% Cu Freckle 6m @ 1.5% Cu & 0.9g/t Au 6m @ 3.2% Cu & 1.3 g/t Au **Mount Erle** Grassano **Undrilled Tick Hill Style Target** Large IOCG target Stream Sediment > 1 g/t Au Up to 114 g/t Au rock chip 200 m strike soil max 82 ppb Au 15km Tick Hill Au **Tenements Historical production** 100% Berkut ML's (Ex Diatreme) 706kt @ 22.5 g/t Au 511,000oz 100% Berkut (Ex Carnaby)

Figure 5 | Queensland Projects (refer Appendix Two for detailed historical results)

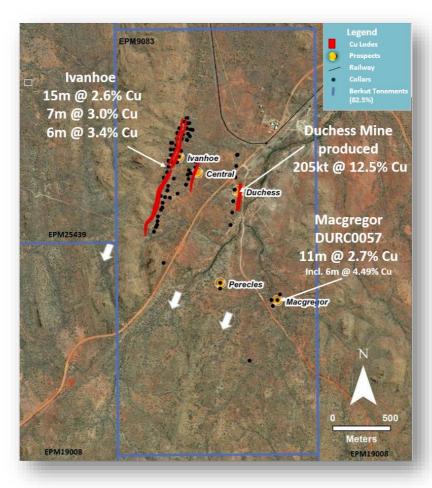
The broader land package includes the historical Duchess copper-gold mine and contains targets for Iron Oxide Copper Gold deposits (IOCG) and epigenetic Tick Hill style gold deposits. Tick Hill is considered to be an epigenetic end member of the IOCG mineralisation that exists throughout the belt.



At Duchess (refer Figure 6), historical production was approximately 205,000t at 12.5% copper from 1900-1940<sup>2</sup>. Duchess provides the potential to define high-grade, shallow open-pitable resources adjacent to existing railway infrastructure. Significant drilling intercepts at Duchess include (refer Appendix Two):

- 11m @ 2.7% copper from 86m (hole DURC0057);
- 15m @ 2.6% copper from 27m (hole DURC0048);
- 12m @ 2.0 % copper from 26m (hole DUNQ0051); and
- 7m @ 3.0 % copper from 11m (hole DURC0003).

Figure 6 | Duchess



Several additional targets (refer Figure 5) have been defined over the Mount Isa exploration package including:

- Mt Erle Prospect | extensive undrilled gold-copper anomalism and historical open pits on the west margin of the Duchess granite, characterised by a large stream sediment anomaly with up to 1.1g/t gold
- Grassano Prospect | large underexplored epigenetic IOCG target with rock chip results up to 114 g/t gold (7623426mN 391518mE) in quartz-carbonate veining and drill results up to 21m @ 0.79% copper and 7m @ 0.6 g/t gold from surface (refer Appendix Two)
- Nil Desperandum Prospect | historical workings over 1km in strike with historical drill intercepts including (refer Appendix Two):
  - o 19m @ 2.3% copper and 0.56 g/t gold from 112m (hole NDR017)
  - o 6m @ 5.2% copper and 0.84 g/t gold from 21m (hole NDR021)
  - 20m @ 2.4% copper and 0.28 g/t gold from 111m, including 12m@ 3.3% copper and 0.38 g/t gold from 111m (hole ND010)



- Freckle Prospect | numerous copper and gold targets supported by a large soil anomaly and untested off hole EM, with significant historical intercepts including (refer Appendix Two):
  - o 6m @ 1.5% copper and 0.9g/t gold from 109m (hole FR-1)
  - o 6m @ 3.2% copper and 1.33g/t gold from 121m (hole FR-1)
  - o 5m @ 2.5% copper from 34m (hole FR-6)
  - o 0.63m @ 3.5% copper and 6.9g/t gold from 172.6m (hole FR001D)

## Western Australia Gold Exploration Properties (to be 100% owned)

The transaction will also see Berkut acquire 100% interest in 972km<sup>2</sup> of exploration tenements and applications in Western Australia (refer Figure 7). The package is prospective for orogenic gold, sedimentary exhalative (SEDEX) and volcanogenic massive sulphide (VHMS) base metals deposits, and nickel and platinum group elements (PGE's). The tenements comprise of the Malmac Project and Throssel Project.

The Malmac Project covers 810km<sup>2</sup> within the northern Yilgarn margin mobile belt. The tenements are focussed on the Imbin rift associated with the highly mineralised Glenburgh Orogen with host rocks similar in age and geology to the Karalundi Formation that host Sandfire's Degrussa deposit.

The Throssel Project application covers 162km<sup>2</sup> located 70km north of the 6.2Moz Gruyere Gold Deposit being developed by the Gold Road Resources and Goldfields Ltd. The project area covers a potential 20km strike of unexplored greenstone belt under shallow cover.

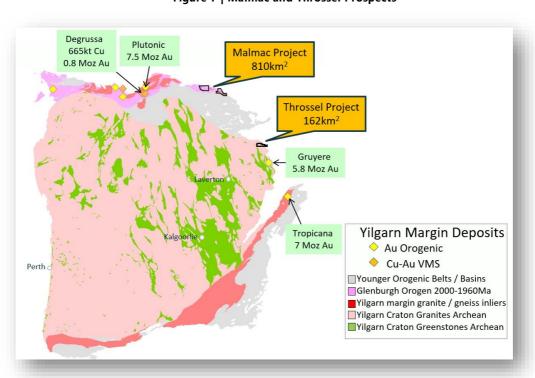


Figure 7 | Malmac and Throssel Prospects

## **Equity Placement**

Commitments have been received to raise \$1.6M through an equity placement of 20.5M shares at 7.8 cents ('Placement'). Shares under the Placement will be issued following shareholder approval (below) and will be made to existing and new sophisticated investors. Proceeds from the Placement, combined with the Company's existing cash reserves, will provide funding for an aggressive exploration program across the Company's projects.



## **Board and Management Changes**

It is proposed that Mr Peter Bowler will be appointed as Non-Executive Chairman and Mr Rob Watkins appointed as Managing Director, to lead the strategic growth of the Company. Mr Bowler was previously the founding Managing Director of Beadell Resource Ltd from 2007 to 2015 and, prior to that, founding Managing Director of Agincourt Resources Ltd from 2003 to 2007. Under his leadership those companies grew to a peak market capitalisation of approximately A\$800M and A\$500M respectively. Mr Watkins is a geologist with over 20 years exploration experience and a proven track record of exploration success. He was previously a founding Executive Director of Beadell Resources Ltd and Exploration Manager of Agincourt Resources Ltd.

The new management team will make a \$0.5M investment into the Company through participation in the \$1.6M Placement.

Current Managing Director, Mr Neil Inwood will remain as a Non-Executive Director. The current Chairman Mr Justin Tremain will remain as a Non-Executive Director and Mr Paul Payne will remain as a Non-Executive Director.

To reflect the new direction of the Company, it is proposed to rename the Company to 'Carnaby Resources Limited'.

## **Acquisition Terms**

Completion of the acquisition is subject to standard conditions precedents for acquisitions of this type including, but not limited to, Berkut shareholder approval, regulatory approvals and novation or consent of third-party agreements.

The acquisition comprises of a 100% interest in three granted Mining Leases (4km²) over the historic Tick Hill gold mine, 82.5% interest in 293km² of exploration permits (Syndicated retains a 17.5% free carried interest to 'Decision to Mine') and 100% interest in a further 26km² of surrounding and regional exploration tenements. The three Mining Leases are subject to a royalty on gold production payable to MIM Holdings Ltd using the following formula: Up to \$5M in total royalty, royalty percentage equals annual recovered grade divided by 5 minus and above \$5M in total royalty, royalty percentage equals annual recovered grade divided by 10 minus 0.5.

The total consideration for the acquisition will be 21.1M shares to the following vendors ('Consideration Shares'):

- Diatreme Resources Ltd 7.2M shares
- Syndicated Metals Ltd 5.1M shares
- Superior Resources Limited 2.4M shares
- Carnaby Resources Ltd 6.4M shares and 6M 5-year options exercisable at 9 cents and 3M 5-year options exercisable at 10 cents

The Carnaby, Syndicated and Diatreme shares will be subject to a voluntary 12-month escrow period. None of the vendors are related parties to Berkut.

The indicative capital structure of the Company following Placement and issue of the Consideration Shares will be:

	Shares	Cash*
Current	54.3M	\$3.3M
Placement <sup>2</sup>	20.5M	\$1.6M
Consideration Shares	21.1M	-
Total Shares on Issue	95.9M	\$4.9M
Market Capitalisation (7.8 cents)	\$7.5M	
Enterprise Value	\$2.6M	

<sup>\*</sup> As at 31 December 2018 and before transaction and equity raising costs.



Berkut has consulted with the ASX which has confirmed that the acquisition will not be subject to a re-compliance with the admission requirements under Listing Rule 11.1.3 or to shareholder approval under Listing Rule 11.1.2.

## **Shareholder Approval**

Shareholder approval will be sought for the issue of the Consideration Shares and options, the \$1.6M Placement, appointment of Mr Peter Bowler and Mr Rob Watkins as Directors and change of company name to Carnaby Resources Ltd.

A Notice of Meeting is expected to be dispatched to shareholders shortly with a likely shareholder meeting date of late April 2019 (may be subject to change).

## Skuterud Cobalt Project, Norway and Lainejaur Nickel Project, Sweden

The Company will continue with its exploration activities and review of its Skuterud Cobalt Project in Norway and the Lainejaur Nickel Project in Sweden which has a JORC<sub>(2012)</sub> Inferred Mineral Resource Estimate of 460kt @ 2.2% Ni, 0.15% Co and 0.7% Cu (0.5% Ni cut-off) (refer ASX announcement dated 12 February 2018).

### **Competent Persons Statement**

The information in this document that relates to exploration results is based upon information compiled by Mr Robert Watkins and Mr Neil Inwood. Mr Watkins is a Director of Carnaby Minerals and a Member of the AUSIMM. Mr Inwood is a Director of Berkut Minerals and a fellow of the AUSIMM. Both Messrs Watkins and Inwood consent to the inclusion in the report of the matters based upon the information in the form and context in which it appears. Both Messrs Watkins and Inwood have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is undertaken to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code).

## Notes regarding reporting of Minerals Resources in this announcement

Berkut is not aware of any new information or data that materially affects this information. Other than as specified in this announcement and the mentioned announcements. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources, Exploration Target or Ore Reserves that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements. The Company confirms that the information in the announcement relating to exploration results is based upon, and fairly represents the information and supporting documentation prepared by the named Competent Persons.

Detailed information on all aspects of Berkut's projects can be found on the Company's website www.berkutminerals.com.au.

For further information please contact Berkut Minerals Limited Neil Inwood, Managing Director



## Appendix One: Tick Hill Gold Project Drill Hole Intersections

Hole 1	ID	Location	<b>East</b> (MGA94/54)	<b>North</b> (MGA94/54)	RL	Dip	Azimuth	From	Thickness	Au g/t
767-1	890-1	Underground	388,678	7,605,969	118	0	239	17	2	40.2
767-1	890-2	Underground	388,678	7,605,969	119	1	256	19	3	13.2
767-1	890-3	Underground	388,678	7,605,969	119	1	230	15	3	84.8
767-1	900-9	Underground	388,681	7,605,978	119	1	249	3	2	20.2
780-H	HW-1	Underground	388,696	7,605,997	129	0	199	61	2	9.3
L8404	1	Underground	388,661	7,605,921	197	-42	108	54	1	1.4
L8605	5	Underground	388,668	7,605,940	196	-60	107	63	1	4.1
L9008	3	Underground	388,681	7,605,978	196	-89	110	88	2	1.6
TH002	2D	Surface	388,757	7,605,901	348	-58	91	81	2.37	9.9
TH023	3RD	Surface	388,726	7,605,874	345	-60	95	98	1	2.2
TH023	3RD	Surface	388,726	7,605,874	345	-60	95	105	1	2.6
TH046	6RD	Surface	388,765	7,605,895	347	-58	90	79	3	12.5
TH047	7RD	Surface	388,746	7,605,894	346	-60	91	79.5	2.5	5.2
TH047	7RD	Surface	388,746	7,605,894	346	-60	91	92	2	104.2
TH049	9RD	Surface	388,745	7,605,874	345	-60	96	86	1	1.9
TH057	7RD	Surface	388,546	7,605,972	345	-68	94	260	2	1.4
TH058	8RD	Surface	388,545	7,605,991	345	-67	93	263	1	8.6
TH079	9RD	Surface	388,726	7,605,894	345	-60	92	105	2	1.1
THDR	X001	Surface	388,764	7,606,053	339	-60	110	96.5	2.5	1.7
U8401	1	Underground	388,725	7,605,899	277	-4	110	66	5	20.6
U8402	2	Underground	388,725	7,605,899	276	-16	110	67	1	9.5
U8403	3	Underground	388,724	7,605,899	276	-68	112	69	2	3.0
U8501	1	Underground	388,728	7,605,908	277	0	110	65	3	1.7
U8501	1	Underground	388,728	7,605,908	277	0	110	80	3	3.5
U8502	2	Underground	388,728	7,605,907	276	-10	110	64	2	8.2
U8503	3	Underground	388,728	7,605,908	276	-22	110	59	3	16.9
U8504	4	Underground	388,728	7,605,908	276	-35	110	59	1	1.8
U8601	1	Underground	388,731	7,605,918	276	-5	110	69	3	3.5
U8603	3	Underground	388,731	7,605,918	276	-28	110	54	3	1.6
U8604	4	Underground	388,731	7,605,918	275	-41	109	55	1	1.1
U8604	4	Underground	388,731	7,605,918	275	-41	109	69	1	3.6
U8703	3	Underground	388,735	7,605,927	276	-22	111	70	1	16.8

The reported drilling is understood to have been by diamond core. The bulk of the intercepts occur within 50m of the Tick Hill mine workings. Efforts have been made to ensure that reported intercepts fall outside of the underground mined regions, it is possible that several intercepts may be within or adjacent to mined voids.



## Appendix Two | Regional Drill Hole Intersections

	Prospect	Hole ID	<b>East</b> (MGA94/54)	North (MGA94/54)	RL	Dip	Az	From	Width	Au g/t	Cu %
	Freckle	FR-1	384,466	7,631,597	385	-60	90	109 121	6 <b>6</b>	0.9 <b>1.33</b>	1.45 <b>3.15</b>
-	Freckle	FR-6	384,315	7,632,232	388	-60	90	34	5	0.41	2.49
_	Freckle	FR-001D	384,145	7,632,316	382	-60	90	172.6	0.63	6.9	3.5
	Freckle	FR-002D	384,175	7,632,216	383	-60		180.8 220.5	<b>1</b> 5	<b>0.45</b> 0.2	<b>5.29</b> 1.13
\		08RCDU005	391,597	7,632,216	300	-50	270	0	7	0.59	0.07
)	Grassano	CDAC042	391,758	7,623,499	300	-90	0	12	3	0.39	0.07
,	Grassano Grassano	PDH16	391,730	7,625,586	300	-60	270	18	21	0.74	0.07
	Duchess	DUNQ0037	381,532	7,623,380	373	-67	282	175	6	0.18	1.58
	Duchess	DUNQ0037	381,375	7,637,863	378	-55	92	115	10	0.10	1.64
)	Duchess	DUNQ0049	381,363	7,637,757	378	-66	102	104	10	0.07	1.6
	Duciicss	D011Q0043	301,303	1,031,131	370	00	102	26	16	0.07	0.69
\	Duchess	DUNQ0050	381,416	7,637,695	374	-57	282	52	8	0.45	1.43
	Duciness	501120030	301,110	1,031,033	37.	3,	202	65	2	2.54	0.88
								26	12	0.34	1.95
7	Duchess	DI INIO 0054	204 244	7.627.740	270	60	100	75	2	0.19	1.73
		DUNQ0051	381,341	7,637,710	378	-62	103	89	3	0.13	3.19
								99	6	0.03	1.21
	Duchess	DURC0003	381,350	7 627 705	270	-58	102	11	7	0.47	2.97
	Duchess	DURC0003	301,330	7,637,705	378	-50	102	70	11	0.03	1.01
	Duchess	DURC0008A	381,915	7,637,459	364	-60	92	80	3	0.06	1.65
)	Duchess	DURC0010	381,408	7,637,845	377	-65	102	52	8	0.09	1.58
_	Duchess	DURC0011	381,390	7,637,805	377	-67	102	79	9	0.07	1.17
	Duchess	DURC0016	381,339	7,637,491	379	-61	282	84	4	0.06	1.56
	Duchess	DURC0018	381,246	7,637,185	376	-60	282	108	5	0.04	1.13
\	Duchess	DURC0027	381,418	7,637,950	378	-51	102	25 57	3 10	0.31 0.07	1.34 1.52
	Duchess	DURC0028	381,435	7,637,990	379	-48	102	76	6	0.66	3.37
	Duchess	DURC0029	381,502	7,638,035	375	-59	282	88	8	0.69	1.17
	Duchess	DURC0042	381,457	7,637,899	375	-57	281	19	10	0.08	1.09
	Duchess	DURC0048	381,432	7,637,745	374	-57	285	27	15	0.28	2.64
	Duchess	DURC0052	381,533	7,637,602	380	-68	96	75	7	1.15	1.5
	Duchess	DURC0057	382,283	7,636,502	380	-63	95	86	11	0.02	2.71
\	Duchess	DURC0060	373,008	7,646,316	400	-60	216		4	0.03	1.78
	Nill Desperandum	ND005	381,435	7,637,990	379	-48	102	20	13	0.47	1.23
	Nill Deep eren dune	NDOOG	272.005	7,646,297	400	Γ0	226	Inc 29	4 7	1.2	2.61
)	Nill Desperandum Nill Desperandum	ND006 ND007	372,985		400	-50 -50	226 216	37 88	7 <b>3</b>	0.19 <b>0.67</b>	1.1 <b>4.81</b>
	iviii Desperandum	ND007	372,928	7,646,223	400	-30	210	111	20	0.87	2.4
	Nill Desperandum	ND010	372,879	7,646,137	400	-60	40	Inc 111	12	0.28	3.27
	IVIII Desperandum	NDOTO	312,019	7,040,137	400	-00	40	and 126	5	0.30	1.65
								96	6	0.41	1.41
\	Nill Desperandum	ND012	372,907	7,646,172	398	-90	0	113	24	0.18	1.54
)	riii 2 coperanaani		3.2/30.	.,6.6,2	330	30	Ů	Inc 113	5	0.63	4.29
								101	2	0.34	4.22
	Nill Desperandum	ND013	372,876	7,646,136	399	-90	0	136	5	0.2	1.09
								150	16	0.2	1.96
1	Nill Desperandum	NDD028	372,935	7,646,156	400	-60	312	117.65	4.2	0.17	1.42
	Nill Desperandum	NDR017	372,954	7,646,140	400	-56	331	112	19	0.56	2.32
	Nill Desperandum	NDR021	373,386	7,646,156	400	-61	42	Inc 113 21	6 6	1.19 0.84	4.31 5.22
	Revenue	RE003	381,401	7,641,686	330	-60	90	48.8	6.9	1.02	1.32
	Revenue	REOUS	301,401	1,041,000	330	00	50	70.0	0.9	1.02	1.32



# Appendix Three | JORC Code, 2012 Edition | 'Table 1' Report

## **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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'). 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.</li> </ul>	<ul> <li>Drilling results pertaining to the Queensland projects have been completed by several previous explorers in the region. Historical sampling has been documented in old reports and government records with key reports reviewed by the Competent Person.</li> <li>Historical diamond core at Tick Hill is understood to have been sampled halved (diamond saw cut – surface drill holes) or whole/halved (underground drill holes).</li> <li>Previous explorers (e.g. Carpentaria Gold Pty Ltd – a subsidiary of MIM Holdings Ltd), Cullen Resources and Barrick were Australian domiciled companies and are believed to have undertaken industry standard protocols at the time.</li> <li>Sampling methods employed in the projects assessed include stream sediment sampling, soil sampling and rock-chip sampling, as well as drilling (various methods).</li> <li>MIM Holdings regional sampling protocols in the 1990's included: Soils - 2mm sub fractions collected in the field for subsequent -80# sieving and ICP-OES analysis by ALS in Townsville; Rock chip samples - included analysis by AAS for base metals and 50g Aqua Regia for gold; Drill samples - included analysis by AAS for base metals and 50g fire assay for gold from Pilbara Laboratories in Townsville.</li> <li>Cullen Resources regional sampling protocols in the 1990's included: Percussion Drilling - 2-4m composite samples, fire assay AAS for gold and using total acid ICP-OES for base metals; Soil geochemistry - collecting -2mm fraction in the field for subsequent -80# analysis using total acid ICP-OES for base metals and BCM or aqua regia/AAS for gold. Rock chip samples were analysed by ALS using 30g fire assay with AAS finish, or the gold dilution (Au-Dil) method for Au &gt; 100g/t.</li> <li>The location and tenor of historical drill records cannot be absolutely verified until key drill holes have been reviewed and collars located on the ground. It is uncertain as to how much key exploration information will be re-verifiable past the current exploration reports.</li> <li>The exploration</li></ul>
Drilling techniques	Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>projects.</li> <li>Historical drilling was reported to be primarily AC, RAB, and RC on regional projects; and significant amounts of RC and diamond drilling in the vicinity of the Tick Hill Gold Mine. Information pertaining to the type of drilling is recorded in a compiled database.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>No recovery information was available (e.g. drilled interval vs. core recovered). Very few core photos are available for analysis.</li> <li>Further investigation is required to assess core recovery from available historical drill holes.</li> </ul>



Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Records available indicate that logging completed by geologists formerly employed by various companies working on the Tick Hill Project, is at a level sufficient to generate maps, plans and sections found in company reports.</li> <li>488 out of 1,537 currently compiled drill holes &gt; 10m deep have logging information available in a compiled database, further work is required to verify this data against original company reports; and to compile additional drill logs.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> <li>The nature, quality and appropriateness of the</li> </ul>	<ul> <li>No original records of subsampling have been found for drilling; it is possible that this information can be sourced in the future. Database records indicates that a nominal 1m sampling regime was used in the Tick Hill Mine Corridor, with localised smaller intervals (to 30cm) based upon lithology.</li> </ul>
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> <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> <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>	No detailed records of assaying QAQC is available and it is not possible to comment absolutely on the quality of assaying work undertaken. The work carried out by previous workers used reputable assay laboratories within the region and it is reasonable to assume that the assay results stated in the exploration reports are indicative of mineralisation styles in the area. It is possible that further information can be sourced in the future.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Original laboratory reports for assaying services have been sighted for a small number of drilling and geochemical results. Spot checks have been made to original company reports/diagrams for selected anomalous soils geochemical results and significant drill hole intercepts. No material errors have yet been identified.</li> <li>At the prospect scale the quality of data is currently considered acceptable for exploration purposes. Further investigation and validation will be undertaken as work programs progress.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The method of collar coordinate determination is recorded in the compiled drill-hole database with a combination of gps, surveyed and geographical and local gridding methods used. Spot checks of drill hole locations against original company reports has not indicated any material collar differences (+/- 20m) for the purposes of exploration targeting.</li> <li>Grid systems used by previous explores included AMG84/54, MGA95/54, local mine grids and local soil grids.</li> <li>The quality of data location points is considered acceptable for the purposes of initial exploration targeting. Additional work is</li> </ul>



Criteria	JORC Code explanation	Commentary
		required to verify collar locations on the ground on a project level basis; and for the use in any potential future project and resource estimation studies.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	Many of the projects feature early stage exploration drilling on a broad (>200-500m) scale. The Tick Hill Deposit features drilling on a sub 50m scale over the core of the mined mineralisation. Broader exploration drilling around the tick hill deposit ranges from 80m x 100m (RC and DDH) to >200m and localised regions of 50m x 50m of shallow percussion. Drilling in the Duchess region ranges from 100m x 100m to 50m x 50m.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>At the broader prospect level, early-stage drilling is considered to be appropriately oriented. The Tick Hill mine drilling is comprehensive and drilled near orthogonal to the mineralisation trend. Drilling at Duchess appears to be predominantly orthogonal to the main mineralisation trend.</li> <li>Based upon reviews undertaken to date, the prospect scale orientation of data is considered acceptable for exploration targeting and review purposes. Additional verification work will be undertaken as project targets are derived through future exploration.</li> </ul>
Sample security	The measures taken to ensure sample security.	No detailed information is available for the sample security undertaken over the various prospects.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No detailed information is available for the sampling techniques and data. Data analysis of the shallow percussion based geochemistry indicates that it is less effective than soil-based geochemistry. Selected reviews of hard-copy data against data contained in the compiled exploration database has not identified any material issues.</li> </ul>

## **Section 2 Reporting of Exploration Results**

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

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Queensland projects comprise the Tick Hill Mine Project Region (105.5km²) and the Regional Leases (217.3km²). The projects comprise of three Mining Leases at Tick Hill (3.9km² - 100% interest to be acquired from Diatreme and Superior – ML's 7094, 7096 and 7097), twelve surrounding and regional tenements (293.3km² - 82.5% interest to be acquired from Syndicated – EPM's 9083, 11013, 14366, 14369, 17637, 18980, 19008, 25435, 25439, 25853, 25972,); and two additional tenements from Carnaby associated entities (25.6km² – 100% beneficial interest which will become a wholly owned subsidiary of Berkut – EMP26651 and 27101).</li> <li>Beneficial interest in the Western Australian tenements (969.3km²) is held by Carnaby which will become a wholly owned subsidiary of Berkut (E69/3510, E69/3509 and E38/3289).</li> <li>The three Tick Hill Mining Leases are subject to a royalty on gold production to MIM Holdings using the following formula: Production Royalty = Percent Royalty Rate X Recovered Gold / 100. The Percent Royalty Rate (below \$5M in total royalty) = (Annual Recovered Grade (g/t) / 5) – 1. The Percent Royalty Rate (above \$5M in total royalty) = (Annual Recovered Grade (g/t) / 10) – 0.5. For gold produced from the tailings dam, the Percentage Royalty Rate will be 10% for gold recovered above 1g/t Au.</li> <li>MIM Holdings also has the right to purchase any copper ore or concentrates produced from the three Tick Hill Mining Leases on commercial terms.</li> </ul>



Criteria	Explanation	Commentary
Acknowledgment and appraisal of exploration by other parties.	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>There has been exploration work conducted over the Queensland project regions for over a century by previous explorers. The project comes with significant geoscientific information which covers the tenements and general region, including: a compiled database of 6658 drill hole (exploration and near-mine), 60,300 drilling assays and over 50,000 soils and stream sediment geochemistry results. This previous is understood to have been</li> </ul>
		undertaken to an industry accepted standard and will be assessed
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>in further detail as the projects are developed.</li> <li>The Tick Hill project area is located in the Mary Kathleen domain of the eastern Fold Belt, Mount Isa Inlier. The Eastern Fold Belt is well known for copper, gold and copper-gold deposits; generally considered variants of IOCG deposits. The region hosts several long-lived mines and numerous historical workings. Deposits are</li> </ul>
		structurally controlled, forming proximal to district-scale structures which are observable in mapped geology and geophysical images. Local controls on the distribution of mineralisation at the prospect scale can be more variable and is understood to be dependent on lithological domains present at the local-scale, and orientation with respect to structures and the stress-field during D3/D4 deformation, associated with
		mineralisation.  • Consolidation of the ground position around the mining centres of Tick Hill and Duchess and planned structural geology analysis enables Berkut to effectively explore the area for gold and copper-gold deposits.
		The Malmac Project in Western Australia is within the Palaeoproterocic Earaheedy basin abutting the northern part of the Yilgarn Craton. All projects are perspective for orogenic gold while the Malmac Project is also considered perspective for base metal mineralisation.
		The Throssel Project in Western Australia is positioned within the Archaean granite greenstone terrane of the Eastern Goldfields which forms part of the Yilgarn Craton.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> </ul> </li> </ul>	<ul> <li>Material drill results have been included in the body of the report, which is considered appropriate for a brownfields exploration project of this type. Owing to the vast size of the project holdings, summary plan and section diagrams have also been included. The company is still in the process of compiling exploration information over the project areas and intends to provide</li> </ul>
1	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	additional updates in the future on a project basis  No drilling information is reported for the Western Australian projects.
	If the exclusion of this information is justified on the basis that the 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	<ul> <li>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.</li> <li>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.</li> </ul>	Significant exploration intercepts have been reported above a nominal 0.15% Cu lower cut off and 1g/t Au lower cut-off. The company is still in the process of compiling and processing the historical exploration data and additional data will be presented as it becomes available. Intercepts at the Tick Hill Gold Mine have been reported above a nominal 1g/t cut off, and where they are understood to be outside of existing mine workings. The bulk of the intercepts occur within 50m of the Tick Hill mine workings. Efforts have been made to ensure that reported intercepts fall outside of the underground mined regions, it is possible that several intercepts may be within or adjacent to mined voids



Criteria	Explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	<ul> <li>Higher grade intercepts have been separately reported where applicable.</li> <li>Metal equivalents have not been used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	The true relationship between intercepts is not known. All exploration intercepts should be considered downhole lengths as the true width is not known.
Diagrams	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.	See 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.	<ul> <li>The exploration results should be considered indicative of mineralisation styles in the region. Exploration results stated indicated highlights of the drilling and are not meant to represent prospect scale mineralisation. As the projects are brownfields exploration targets, and there are large numbers of holes drilled over the region, it is considered appropriate to illustrate mineralised and non-mineralised drill holes by the use of diagrams, with reference to the table of significant intercepts.</li> <li>At Malmac little exploration work has been conducted on the leases. A number of companies have previously held the area, however the work typically consisted of data reviews, geophysical interpretation and some field reconnaissance.</li> </ul>
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.	The company is working through the available geophysical data sets for the projects. This includes surface and airborne geophysical data (EM, Magnetic), surface geochemical data and rock chip samples.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Planned exploration works are detailed in the announcement.

A JORC Table 1 (Sections 1–3) pertaining to the Tick Hill Tailings Resource can be found in the Diatreme Resources Limited ASX release (19 January 2016) titled "Maiden Gold Resource for Tick Hill Tailings" located at <a href="https://www.asx.com.au/asxpdf/20160119/pdf/434g775sqwl2k0.pdf">https://www.asx.com.au/asxpdf/20160119/pdf/434g775sqwl2k0.pdf</a> and <a href="https://www.diatreme.com.au/">https://www.diatreme.com.au/</a>