



Black Cat Syndicate Limited ("Black Cat" or "the Company") is pleased to announce an update on the Myhree/Trump Open Pit Feasibility Study at the Bulong Gold Project ("Bulong").

#### **HIGHLIGHTS**

- Level 1 Flora and Fauna Survey completed with no threatened flora or fauna identified and no further studies required to progress to mining.
- Excellent metallurgical recoveries using regionally sourced water shows: >=95% overall recovery in oxide, transitional and fresh rock at a grind size of 150µm; and >50% gravity recovery in fresh rock.
- Other testwork and studies are well advanced including:
  - viscosity and comminution testwork are underway to determine processing power requirements. Results will be available in the December 2019 quarter;
  - geotechnical inspection of diamond core has been completed. In addition, optical televiewer surveys have been completed on 18 holes to compliment the geotechnical logging. Uniaxial compressive strength ("UCS") testwork is underway with results due in the December 2019 quarter. Further geotechnical drilling is planned for the December 2019 quarter to finalise the pre-mining geotechnical requirements;
  - hydrological and hydrogeological testwork is scheduled to commence in November 2019 and for fieldwork to be completed in the December 2019 guarter; and
  - environmental testwork is scheduled to commence in November 2019 and includes characterisation of mineralised and unmineralised material, baseline soil characterisation and erosion testing.
- The Project Management Plan and Mining Proposal are underway with submission to the Department of Mines, Industry Regulation and Safety ("DMIRS") scheduled to allow for a potential decision to mine in the June 2020 quarter.

Black Cat's Managing Director, Gareth Solly said:

"We are thrilled with the initial metallurgical results at Myhree. The results indicate that recoveries are high, leach kinetics are fast with the majority of the gold being leached in the first eight hours and sodium cyanide consumption is low. The flora and fauna survey has been completed and there is no impediment to mining on that front.

Other testwork and studies are well advanced with many results expected during the December 2019 quarter. The Feasibility Study remains on schedule for completion in the June 2020 quarter. In the meantime, RC drilling of the Myhree Southern Offset is about to commence and will be followed by drilling at the high-grade Anomaly 38 target later in October 2019."



#### Myhree (M25/024) 100% Owned

### Level 1 Flora and Fauna Survey

In July 2019, Botanica Consulting undertook a Level 1 flora and fauna survey of tenements M25/024 and P25/2286. The report findings conclude that no threatened flora, migratory fauna or threatened ecological communities were present and that no further flora or fauna studies are required to progress to mining.

### Metallurgical Recoveries

Five RC composite ore samples were selected for gold recovery analysis by Australian Laboratory Services ("ALS") using process water sourced from the Kalgoorlie region. For all samples, the gold leach kinetics were fast with the majority of the gold being leached in the first eight hours and sodium cyanide consumptions were low.

Oxide Composite (2.60 g/t Au)										
212μm 150μm 106μm 75μm										
Gravity Recovery (%)	35.42	34.70	34.79	34.89						
Total Recovery (%)	92.85	95.33	96.29	97.26						
Leach Residue (g/t)	0.18	0.12	0.10	0.07						

Transitional Composites (2.24 g/t Au)									
212μm 150μm 106μm 75μm									
Gravity Recovery (%)	20.82	21.15	21.49	21.19					
Total Recovery (%)	96.20	96.54	97.47	97.69					
Leach Residue (g/t)	0.07	0.07	0.05	0.05					

Fresh Composites (4.12 g/t Au)										
212μm 150μm 106μm 75μm										
Gravity Recovery (%)	51.81	51.35	51.94	51.22						
Total Recovery (%)	93.67	95.02	96.71	97.61						
Leach Residue (g/t)	0.15	0.12	0.08	0.06						

Metallurgical recovery data from five RC composite samples summarized by oxidation state at 48-hour residence time.

#### Viscosity and Comminution Testwork

The five RC composite samples are awaiting viscosity testwork. Again, this testwork will use water sourced regionally and the grind sizes will be based on possible processing options. Testwork results will be available in the December 2019 quarter.

Three HQ diamond holes (19MYDD001 – 19MYDD003) have been cut and sampled with results due in October 2019. Intervals from this core will be combined with additional core from drilling to be carried out during the December 2019 quarter and used for comminution testwork. This testwork will



determine Bond Abrasion Index ("Ai"), Bond Rod Mill Work Index ("RWi"), Bond Ball Mill Work Index ("BWi") and SAG Mill Comminution ("SMC").

### Geotechnical Study

In September 2019, Peter O'Bryan and Associates attended site to geotechnically log oriented and unoriented core from three diamond holes 19MYDD001 – 19MYDD003 (Figure 1). The geotechnical report is due in the December 2019 quarter and will include downhole optical telemetry data collected by ABIM Solutions from the three diamond holes and fifteen RC holes. The geotechnical report will provide indicative pit wall angles and will define rock strength. Additional geotechnical drilling is scheduled for the December 2019 quarter.



Figure 1. Oriented diamond core from hole MY19DD001 awaiting geotechnical logging.

#### Hydrological and Hydrogeological Testwork

Groundwater Resource Management have been selected to carry out hydrological and hydrogeological studies commencing in November 2019. The studies will identify flood protection measures and the effects of mining infrastructure on the local drainage patterns. Hydrogeological studies will require a detailed field investigation program comprised of 1,000–2,000m of RC drilling to collect baseline data on aquifer properties. The RC drilling program will be followed by water bore drilling and the installation and testing of production water bores for use during mining.

#### **Environmental Testwork**

Soil Water Group have been selected to carry out baseline soils characterisation (Figure 2), erosion testing and to undertake geochemical characterisation of the waste material and mineralised zones. Work is scheduled to commence in November 2019.



### Project Management Plan

Documentation required for the commencement of a mining operation is being prepared to allow for a potential decision to mine in the June 2020 quarter. The Project Management Plan is well advanced with the fundamentals of the Explosives Management Plan and Ground Control Management Plan established. The Mining Proposal is being updated as baseline data becomes available.

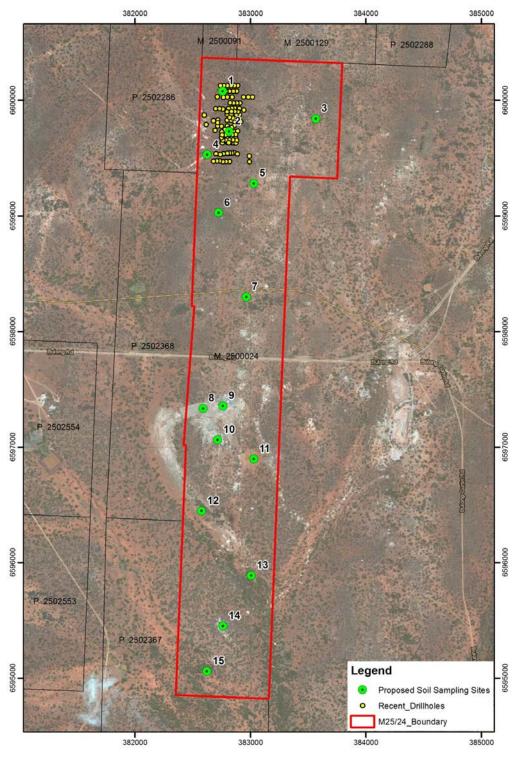


Figure 2. Soil Water Group's proposed soil sampling and drill hole data point locations for soil characterisation on tenement M25/024.



### Trump (M25/024, P25/2286, M25/091) 100% Owned

The Trump Resource will be assessed as part of the Myhree Mining Proposal. Trump contains 227,000t @ 2.3 g/t Au (16,000oz) in an open pit Resource (based on a 1 g/t Au cut-off grade). This Resource is based on drilling to 7 September 2019 and has significant potential to grow further with extensional drilling.

Trump Resource	Cut-Off Category		Tonnes	Grade	<b>Contained Au</b>	
			'000 tonne	g/t	'000 ounces	
Open Pit	1 00 a/t	Indicated	25	3.0	2	
(<75m below surface)	1.00 g/t	Inferred	202	2.1	14	
Sub-total Open Pit			227	2.2	16	
Underground	2.00 g/t	Indicated	-	-	-	
(>75m below surface)		Inferred	29	3.1	3	
Sub-total Underground			29	3.1	3	
Total Trump			256	2.3	19	

Trump Resource split by potential mining method and category (see ASX announcement 23 September 2019).

Approximately 130m of diamond core (18TRDD001 – 18TRDD002) has previously been drilled at Trump. The core is partially oriented and will be included in the final geotechnical assessment of the potential open pit. Metallurgical testwork will be carried out on this core in conjunction with additional core to be drilled during the December 2019 quarter.

Work presently being undertaken will combine the Trump and Myhree Resources into a single model to enable future open pit optimisations to consider the economic potential of both deposits as a single entity.

#### Boundary (M25/091, M25/129, M25/024) 100% Owned

Boundary is located immediately north of Myhree on granted Mining Leases and is highly prospective for potential open pit mining with 475,000t @ 2.0 g/t Au (30,000oz) in an open pit Resource (based on a 1 g/t Au cut-off grade). The Resource is based on drilling to 2 September 2019 and has scope to grow by the June 2020 quarter. Boundary will also be considered for potential open pit mining.

<b>Boundary Resource</b>	Cut-Off	Category	Tonnes	Grade	<b>Contained Au</b>	
			'000 tonne	g/t	'000 ounces	
Open Pit	4 00 ~/4	Indicated	124	2.2	9	
(<90m below surface)	1.00 g/t	Inferred	351	1.9	21	
Sub-total Open Pit			475	2.0	30	
Underground	2.00 ~/4	Indicated	-	-	-	
(>90m below surface)	2.00 g/t	Inferred	150	2.3	11	
Sub-total Underground			150	2.3	11	
Total Boundary			625	2.1	41	

Boundary Resource split by potential mining method and category (see ASX announcement 23 September 2019).



#### **Recent and Planned Activities**

Black Cat continues to be extremely productive with concurrent Resource extension, exploration and Feasibility Studies. Recent and upcoming activities include:

- September 2019 quarter 3.5km SAM survey along the Myhree-Boundary, Trump and Queen Margaret Corridors completed;
- 23 September 2019 upgrade of Boundary and Trump Resources completed;
- 16 17 October 2019 Black Cat to present at the RIU Brisbane Resources Roundup;
- October 2019 commence extensional drilling at Myhree Southern Offset and Trump North;
- October 2019 diamond core uniaxial compressive strength testing;
- October 2019 commence viscosity testwork on five RC samples;
- October 2019 optical televiewer data interpretation from 15 RC and three diamond holes complete for inclusion in the geotechnical report;
- October 2019 commence drilling on priority SAM targets in the Greater Woodline area;
- November 2019 begin hydrological, hydrogeological and environmental testwork;
- November 2019 SAM survey results from extensions to Myhree-Boundary area available;
- November December 2019 additional geotechnical and metallurgical drilling;
- March 2020 quarter receive and collate data from December quarter testwork and studies;
- March 2020 quarter upgrade Resources and commence open pit optimisation;
- March 2020 quarter ongoing extensional and exploration drilling; and
- June 2020 quarter complete the Feasibility Study leading to potential decision to mine at Myhree/Trump.

For further information, please contact:

### Gareth Solly Managing Director

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#### **COMPETENT PERSON'S STATEMENT**

The information in this announcement is based on information compiled by Mr Alistair Thornton, who is a Member of the Australian Institute of Mining and Metallurgy and is an employee, shareholder and option holder of the Company. Mr Thornton consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original reports.

Where the Company refers to the Mineral Resources in this report (referencing previous releases made to the ASX), it confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimate with that announcement continue to apply and have not materially changed.



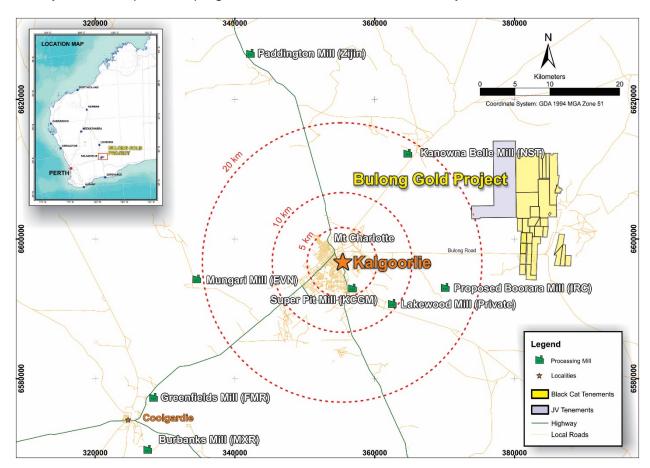
### ABOUT BLACK CAT SYNDICATE (ASX: BC8)

Black Cat controls<sup>1</sup> ~128km<sup>2</sup> of the Bulong Gold Project ("Bulong") of which ~97% of tenements are granted.

Bulong is situated just 25km east of Kalgoorlie by sealed road and has a pre-WW1 history of small scale, high grade gold production, recorded as ~152,000oz @ >1 oz/t Au, predominantly from the Queen Margaret mine. Mains power runs through Bulong with five regional mills, support services and a residential workforce nearby.

Since listing on the ASX in January 2018 Black Cat has achieved the following outcomes:

- delineated the Queen Margaret, Myhree-Boundary and Trump Corridors which total 17km in length (which includes the Myhree discovery);
- estimated a qualitative Resource totalling 2.6Mt at 2.4 g/t Au for 206,000oz within these three corridors just 18 months from commencement of drilling;
- determined that 168,000oz of the current Resource are potentially open pit minable;
- delineated over 13km of under-tested Resource potential exists within the three corridors; and
- interpreted that the domain to the immediate north and north west of Bulong contains similar characteristics to +5Moz Kanowna Belle deposit. A medium-term objective is to commence a systematic exploration program to test this area for Kanowna style mineralisation.



Regional map of Kalgoorlie showing the location of the Bulong Gold Project and nearby infrastructure.



#### 2012 JORC BULONG RESOURCE TABLES

The current in-situ, drill-defined and developed Resources for the Queen Margaret, Boundary, Trump and Myhree deposits have been reported at a cut-off of 1.0 g/t Au for potential open pit material, and at 2.0 g/t Au for potential underground material. Open pit depths have been selected based on the depth of A\$1,800 optimisation shells generated for each deposit (for the Queen Margaret deposit refer ASX announcement 18 February 2019, for the Myhree deposit refer ASX announcement 16 July 2019 and for the Trump and Boundary deposits refer to ASX announcement 23 September 2019).

## **Bulong Mineral Resources**

MINERAL RESOURCE ESTIMATE FOR BULONG – 2019 (A\$1,800 SHELLS RL SELECTED)													
	Cut-		Measured		Indicated			Inferred			Total		
Deposit	Off	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
Queen Margaret OP	1.0	-	-	-	36,000	2.2	3,000	154,000	1.7	9,000	190,000	2.0	12,000
Queen Margaret UG	2.0	-	-	-	2,000	-	-	72,000	2.4	6,000	74,000	2.4	6,000
Melbourne United OP	1.0	-	-	-	-	-	-	67,000	2.8	6,000	67,000	2.8	6,000
Melbourne United UG	2.0	-	-	-	-	-	-	29,000	3.0	3,000	29,000	3.2	3,000
Boundary OP	1.0	-	-	-	124,000	2.2	9,000	351,000	1.9	21,000	475,000	2.0	30,000
Boundary UG	2.0	-	-	-	-	-	-	150,000	2.3	11,000	150,000	2.3	11,000
Trump OP	1.0	-	-	-	25,000	3.0	2,000	202,000	2.1	14,000	227,000	2.2	16,000
Trump UG	2.0	-	-	-	-	-	-	29,000	3.1	3,000	29,000	3.1	3,000
Myhree OP	1.0	-	-	-	377,000	2.7	33,000	851,000	2.6	71,000	1,228,000	2.6	104,000
Myhree UG	2.0	-	-	-	-	-	-	160,000	2.9	15,000	160,000	2.9	15,000
Total	-	-	-	-	564,000	2.6	47,000	2,065,000	2.4	159,000	2,629,000	2.4	206,000

The preceding statements of Mineral Resources conforms to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2012 Edition. All tonnages reported are dry metric tonnes. Minor discrepancies may occur due to rounding to appropriate significant figures.