

## Pre-Feasibility Study - Bardoc Gold Project

POTENTIAL FOR SIGNIFICANT NEW LONG-LIFE, MID-TIER AUSTRALIAN GOLD PROJECT



## PFS Highlights



#### ✓ TECHNICALLY AND FINANCIALLY ROBUST

Pre-tax Free Cash Flow of \$551M at A\$2,100/oz gold price Pre-tax Free Cash Flow of \$921m at A\$2,530/oz gold price

✓ PEAK GOLD PRODUCTION OF OVER 150,000 OZ PA FOR 5 YEARS

Average Gold Production of 2.6g/t for 135,000 oz pa over 8 year mine life at LOM recovery of 93%

#### ROBUST ECONOMICS

LOM AISC OF A\$1,220/oz. Pre-production capex of A\$142M (inclusive of \$25M contingency) Pre-tax NPV $_8$  of A\$332M and IRR of 32% at A\$2,100/oz gold price; Pre-tax NPV $_8$  of A\$600M and IRR of 55% at A\$2,530/oz gold price

## ✓ SIGNIFICANT EXPLORATION UPSIDE

In excess of 250km<sup>2</sup> of underexplored tenure in a Tier-1 mining jurisdiction Mayday North deposit provides a significant exploration target

## Investment Snapshot





#### TIER-1 MINING JURISDICTION

Strategic 250km<sup>2</sup> (and growing) land-holding ~40km north of Kalgoorlie



#### LARGE AND GROWING RESOURCE BASE

+3Moz Resource with three cornerstone deposits — Aphrodite, Zoroastrian and Excelsior — plus a well-established growth pipeline of Resources and exploration targets



#### SIGNIFICANT BROWNFIELD AND GREENFIELD EXPLORATION POTENTIAL

Potential to significantly grow Resource base demonstrated by success of recent drilling programs



#### STRONG NEWSFLOW

Resource expansion and infill drilling programs, Definitive Feasibility Study work commenced



#### **COMMERCIALISATION PATHWAYS**

Multiple opportunities to develop the Bardoc Gold Project



#### STRONG BOARD AND MANAGEMENT TEAM

Proven explorers and developers, with high-quality technical teams

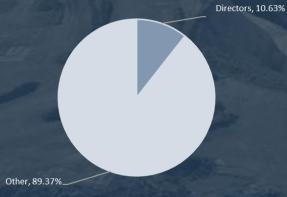
# **Corporate Overview**



CAP	HAL	.516	(UCI	UKE

Shares	Bn	1.395
Options	М	117.7
Performance Rights	М	60.0
Share price (27 March 2020)	A\$	\$0.050
Market Capitalisation	A\$	\$69.8m
Cash & Investments (as of 27 March 2020)	A\$	\$14.3m
Enterprise Value	A\$	\$55.5m







#### BOARD & MANAGEMENT

Tony Leibowitz	Chairman
John Young	Director
Neil Biddle	Director
Rowan Johnston	Director
Peter Buttigieg	Director
Robert Ryan	Chief Executive Officer
Russell Hardwick	CFO / Company Secretary

## **Project Location**

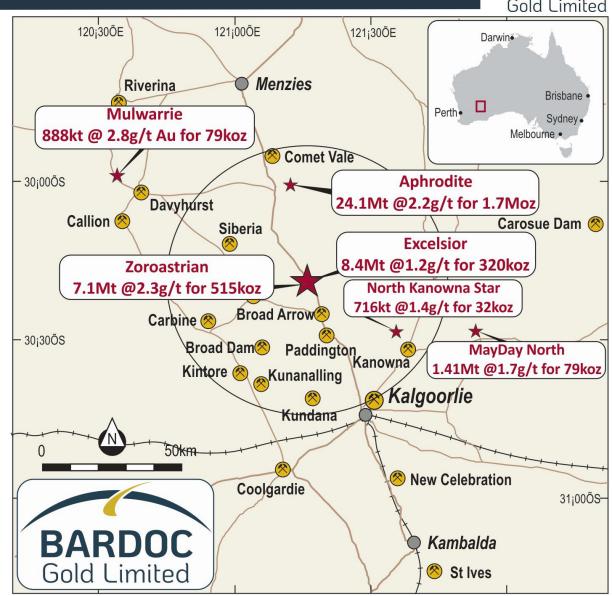


Bardoc Gold Project (BGP)

Located 40km North of Kalgoorlie

Tier-1 Mining Jurisdiction

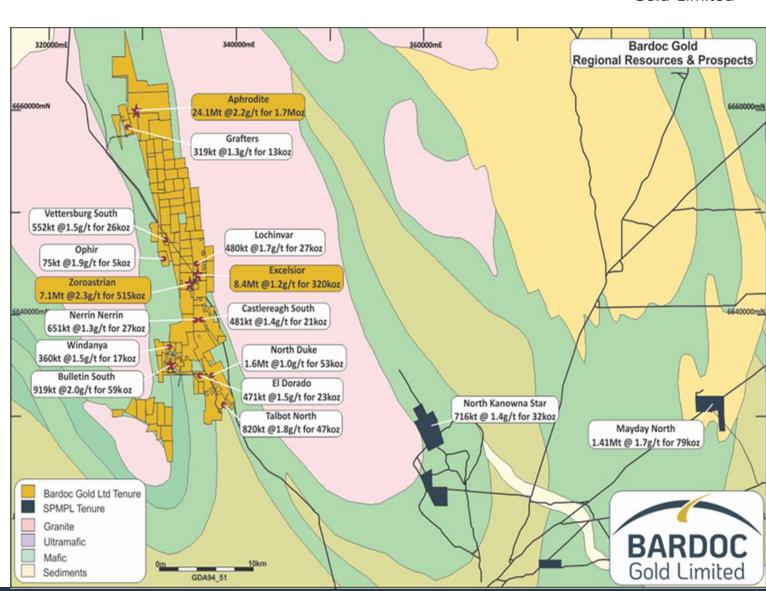
Located close to Power, Road and Rail infrastructure



## Consolidating the Bardoc Tectonic Zone/Black Flag Fault



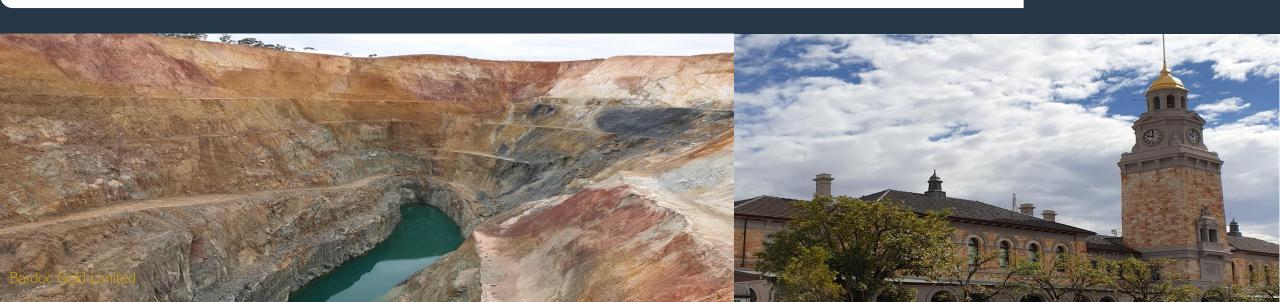
- Two corporate mergers underpinned the consolidation of Bardoc Tectonic Zone:
  - Aphrodite deposit acquired via the merger with Aphrodite Gold in 2017
  - Excelsior and Zoroastrian deposits acquired via merger with Excelsior Gold in 2018
- Recent focus on low-cost, complementary acquisitions with potential to add mine life:
- Acquired 40 tenements from Torian Resources May 2019)
- Purchase of Vettersburg tenement (Aug 2019) – opportunity to explore for extensions to historical Slug Hill gold mine (production of 26,535t at 23.5g/t Au for 20,008oz)
- Acquisition of Mayday North and North Kanowna Star in September 2019





# Pre-Feasibility Study

Key Findings



# PFS – Key Metrics



PROJECT ECONOMICS	BASELINE	SPOT
Gold Price (US\$/oz)	1,449	1,635
Exchange Rate (US\$:A\$)	0.69	0.65
Gold Price (A\$/oz)	2,100	2,530
Life of Mine Revenue (A\$M)	1,912	2,304
C1 Cash Costs (C1) (A\$/oz)	978	984
All-in Sustaining Costs (AISC) (A\$/oz)	1,220	1,242
Pre-Tax Cashflow (A\$M)	551	921
Pre-Tax Net Present Value (8%) (A\$M)	332	600
Pre-Tax Internal Rate of Return (IRR)	32%	55%
Payback Period (Months)	32	22
Post-Tax Net Present Value (8%) (A\$M)	252	445
Post Tax Internal Rate of Return (IRR)	27%	47%

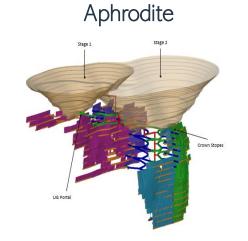
## **Production Summary**

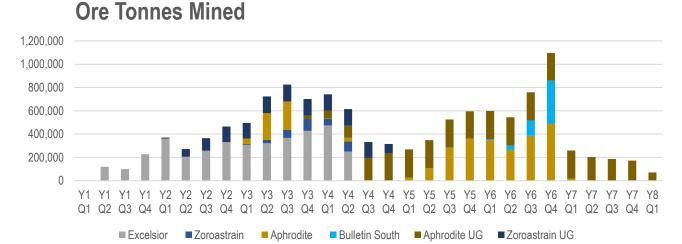


- Current mine life 7.8 years
- Production rate of 1.8 Mtpa
- Life of mine Inventory, Reserves and Resources, of 1.02 Moz Au
- Life of mine Reserves 10.43 Mt at 2.4 g/t Au (790 koz Au)
- Open pit and underground mining from deposits

PRODUCTION SUMMARY									
Life of Mine	7.8 Years								
LOM Open Pit Strip ratio (Waste t: Ore t)	9.5 : 1								
Nominal Processing Rate	1.8 Mtpa								
LOM Processed Grade	2.6 g/t Au								
LOM Processing Recovery	93 %								
Total Gold Recovered	951 koz								

# Zoroastrian





## Aphrodite - Cornerstone Deposit



Significant 1.7Moz Resource to underpin a long life operation

Resource

OP: 18Mt at 1.6 g/t Au for 916 koz

UG: 6Mt at 4.1g/t Au for 765 koz

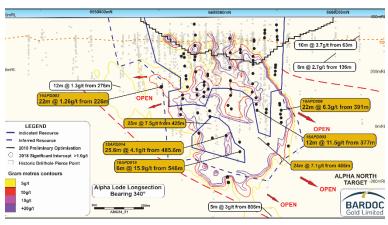
Reserves

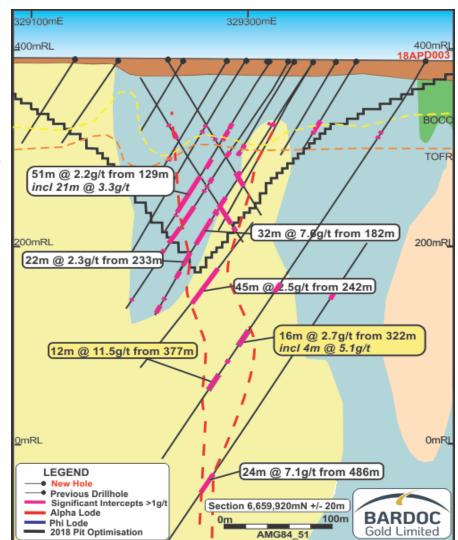
OP: 2.8Mt at 2.3 g/t Au for 210 koz

UG: 2.4Mt at 3.7 g/t Au for 290 koz

Significant Upside Potential Resource remains open along strike and depth







## Zoroastrian – Cornerstone Deposit

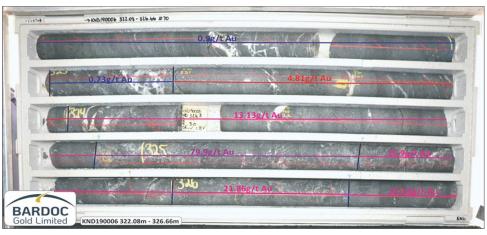


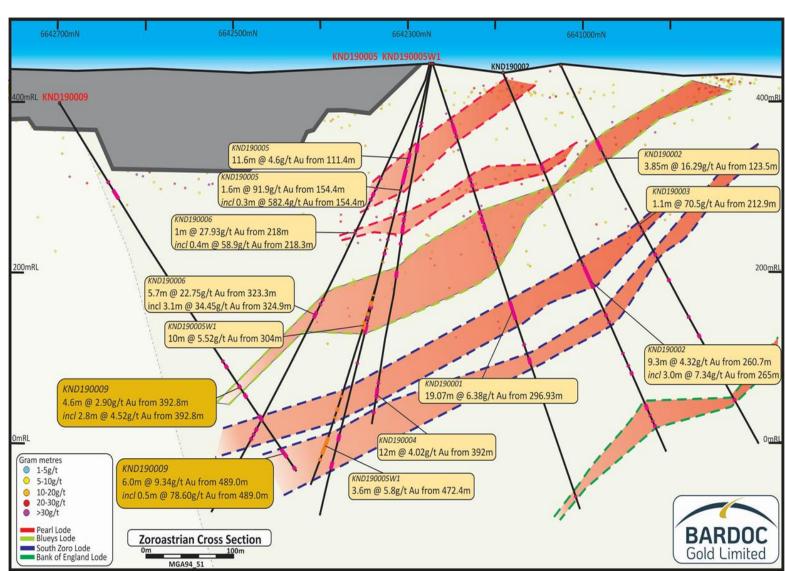
#### Resource of 7.1 Mt at 2.3 g/t Au for 515 koz:

- 318 koz open pit Resource
- 197 koz underground Resource

#### Reserves of 1.2 Mt at 2.9 g/t Au for 100 koz:

- Open Pit 350kt @ 1.9g/t 20koz
- Underground 810kt @ 3.2g/t 80koz
- Significant Opportunity to grow the Resource and Reserve





## Excelsior – Cornerstone Deposit

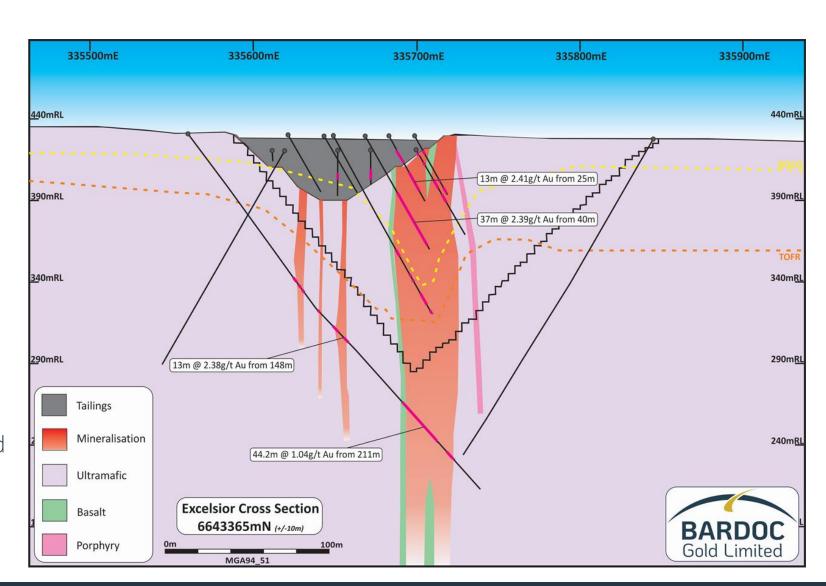


#### Open Pit Resource

▶ 8,478kt at 1.2 g/t Au for 320koz

#### Reserve

- ▶ 3.5Mt at 1.4g/t Au for 160koz
- Broad shear with wide 20-50m true width mineralised zone
- Mined from 1985 1989
  - ▶ 2.02Mt at 1.5 g/t Au for 97koz
- Large, medium grade, low strip ratio deposit that is highly amenable to low cost bulk open pit mining
- Deposit is open at depth with widths and grades amenable to bulk underground mining methods



# Processing and Metallurgy



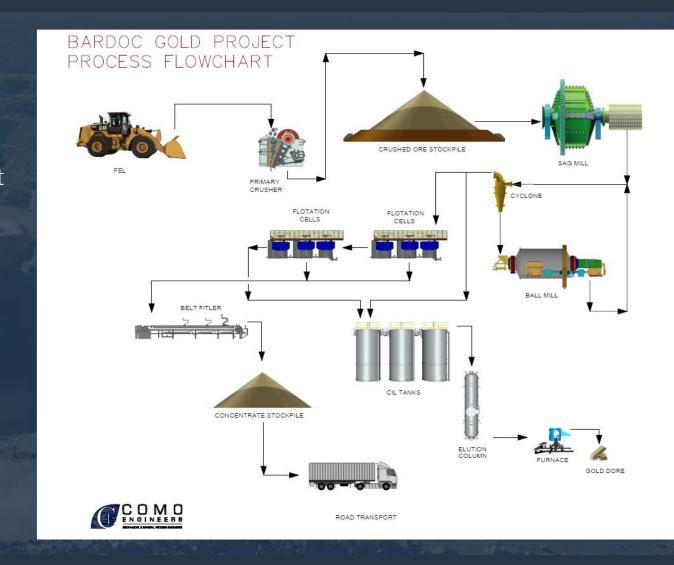
Mineral Processing to consist of standard CIL and flotation plant

#### Stage 1:

- Primary Jaw, SAG and Ball Mill comminution circuit
- CIL tanks
- Elution circuit and gold room

#### Stage 2:

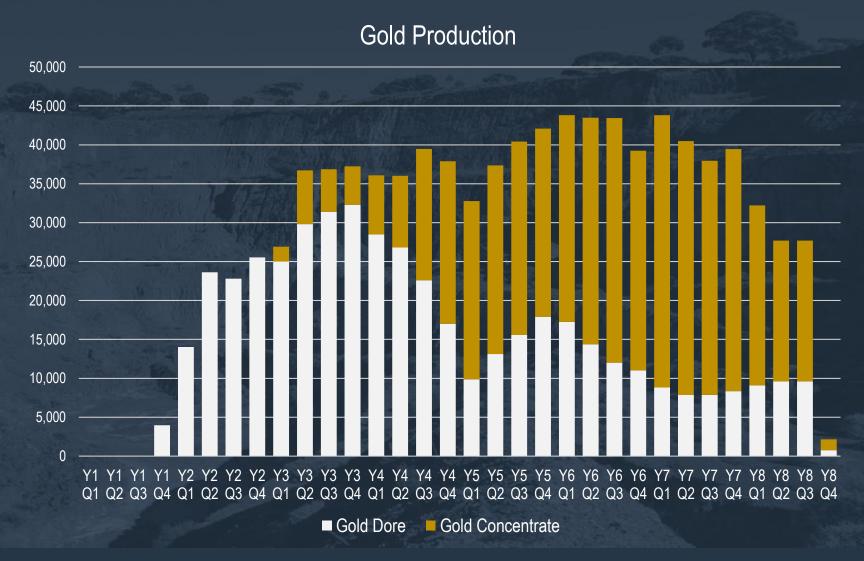
- Floatation tanks
- Concentrate dewatering circuit



## **Gold Production**



- Average Production 135 kozpa
- Peak Gold Production+150 kozpa for 5 years
- 1 Moz Mined, 951 koz Recovered
- Gold in Dore of 476koz
- Gold in Concentrate of 475koz



## Concentrate Sales



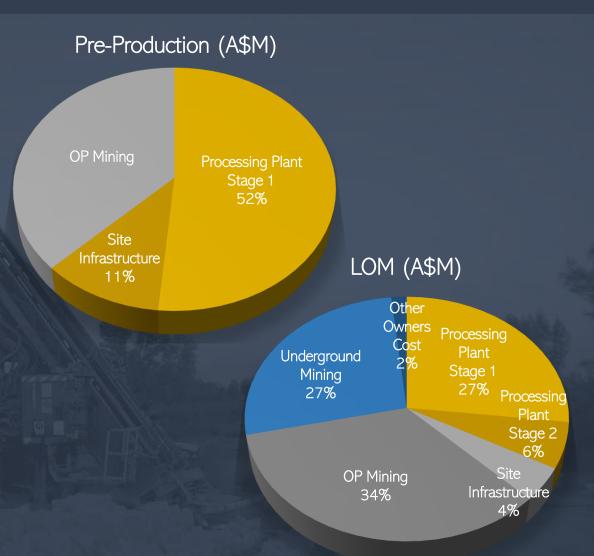
- Bardoc is progressing discussions with offtakers a number of parties have expressed interest in the Bardoc Gold Concentrates
- Gold Concentrates a burgeoning market:
  - Strong demand from smelters across China, Japan, Korea and India
  - Low deleterious mineral concentrates in high demand
- Multiple operations currently conducting concentrate sale arrangements:
  - Evolution Mining Mount Carlton, QLD (ASX: EVN)
    - >100 kozpa production, operating since 2013
    - Concentrate shipped to China
  - Mandalay Resources Costerfield, VIC (TSX: MND)
    - >20 kozpa production, operating since 2020
    - Concentrate shipped to China
  - Diversified Minerals Dargues Gold Mine, NSW
  - Project approved for construction
- No new technology required for proven gold processing route



# **Capital Costs**



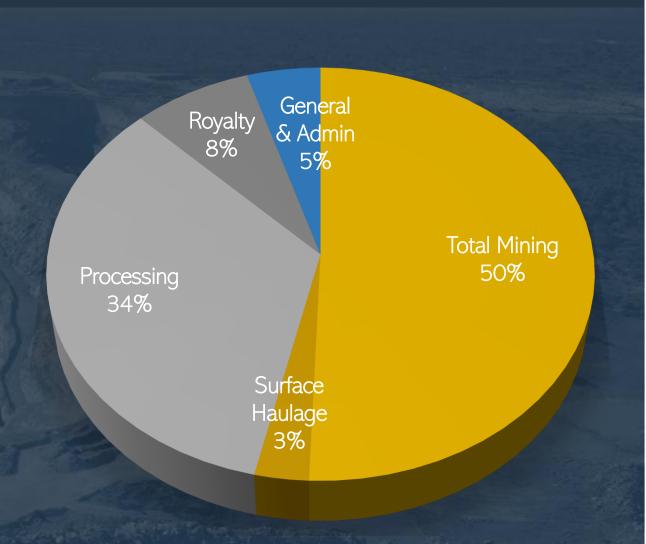
	A (3)	(CA11) . (CA11)		
CAPITAL COSTS	PRE-PROD. (A\$M)	LOM (A\$M)		
Processing Plant - Stage 1	73.3	95.0		
Processing Plant - Stage 2		21.5		
Site Infrastructure	15.9	15.9		
OP Mining	53.2	120.5		
Underground Mining		95.0		
Other Owners Costs		5.9		
Total	142.4	353.8		



# Costs of Production per Tonne



OPERATING COSTS	Unit Rate (A\$/t Ore)
OP Mining	26.8 <sup>1</sup>
UG Mining	64.5 <sup>2</sup>
Total Mining	41.5
Surface Haulage	2.4
Processing	27.9
Royalty	6.3
General and Administration	3.9
Total	82.0



<sup>&</sup>lt;sup>1</sup> Tonne of ore used in unit rate refers to open pit ore tonnes

<sup>&</sup>lt;sup>2</sup> Tonne of ore used in unit rate refers to underground ore tonnes

# All-in Sustaining Costs



Low Cost mining operations

Flexibility of multiple operations

Opportunity to grow

PROJECT	AISC (A\$/oz)
Aphrodite OP	1,418
Zoroastrian OP	1,291
Excelsior OP	1,045
Bulletin South OP	1,211
Aphrodite UG	1,196
Zoroastrian UG	1,207
Total	1,220



# **Growth Potential & Next Steps**



## Mayday North – Exceptional Growth Potential



## Successful drilling campaign defines Exploration Target

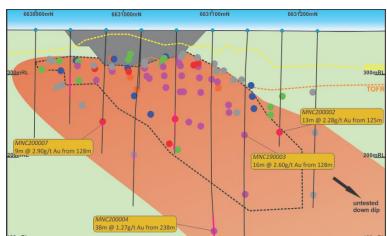
- JORC Compliant 79 koz Resource
- Potential for Open Pit and underground development
- Thick consistent grade HG intersections

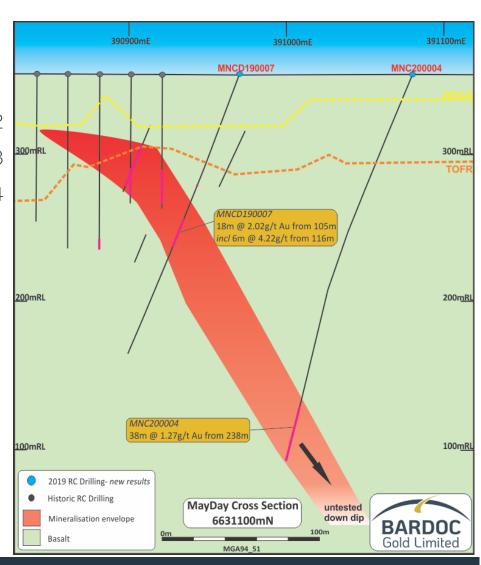
- 12m at 2.45g/t Au from 125m in MNC200002
- 14m at 2.96g/t Au from 130m in MNC190003
- 24m at 1.55g/t Au from 252m in MNC200004
- 18m at 2.57g/t Au from 108m in MNC190011

## Target Additional: 1.5 to 2.2 Mt at 2 to 2.4g/t Au for 96 to 171 koz

Exploration Target: The potential quantities and grades are conceptual in nature and there has been insufficient exploration to date to define a Mineral Resource. It is not certain that further exploration will result in the determination of a Mineral Resource under JORC 2012\*







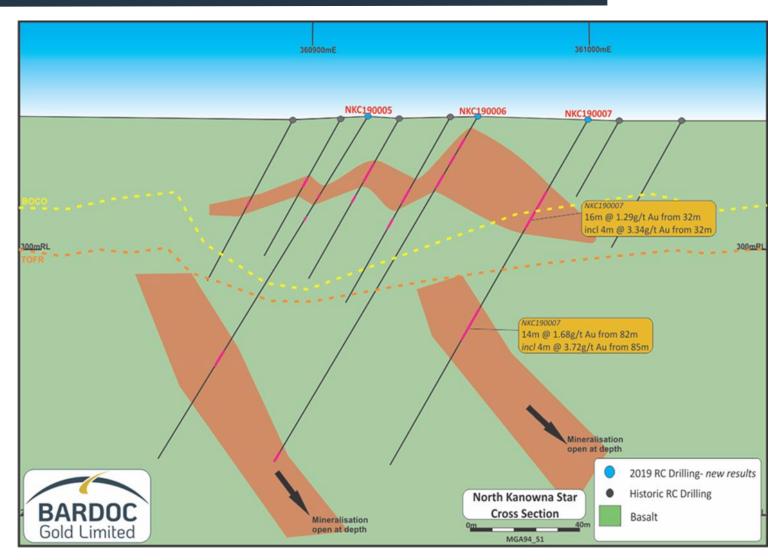
## North Kanowna Star



## Large Anomalous Gold System

- Up to 45m of alteration in recent drilling
- Significant Results Include:
  - ▶ 8m at 1.26g/t Au from 132m in NKC190001;
  - ▶ 17m at 1.59g/t Au from 26m including;
    - 4m at 4.44g/t Au from 33m in NKC190002;
  - ▶ 4m at 2.23g/t Au from 17m in NKC190006
  - ▶ 16m at 1.29g/t Au from 32m including;
    - 4m at 3.34g/t Au from 32m and;
  - ▶ 14m at 1.68g/t Au from 82m including;
    - 4m at 3.72g/t Au from 85m in NKC190007
- All drill holes to date have hit mineralisation

Target definition underway



## Next Steps



#### Definitive Feasibility Study (DFS)

- Resource infill drilling at Zoroastrian and Aphrodite
- Road and rail realignment design and approval
- Environmental Approvals commencing
- Secure binding offtake for the gold concentrate
- Ability to fast track DFS

## Discovery - Resource growth and development

- 250km² land package with little modern expansion
- Resource extension drilling to continue at Mayday North and North Kanowna Star
- Geophysical surveys underway

M&A - opportunities still exist to add quality ounces within economic haulage distance to BGP Advance discussions to secure binding finance proposals prior to Final Investment Decision



Appendices



# Appendix A: Global Mineral Resource



	T	0 : 055		MEASURI	ED	II	NDICATED		ī	NFERRED		TOTA	L RESOUR	CES
Deposit	Туре	Cut-Off (g/t Au)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)									
Aphrodite	OP	0.4	-	-	16 136	11,622	1.7	619	6,676	1.4	298	18,288	1.6	916
Aphrodite	UG	2.0	-	-	167	3,458	3.9	436	2,391	4.3	330	5,848	4.1	765
Aphrodite	TOTAL		_	-	TAX-	15,080	2.2	1,055	9,067	2.2	628	24,136	2.2	1,681
Zoroastrian	ОР	0.4	-	-	1 26	3,862	1.8	229	1,835	1.5	89	5,698	1.7	318
Zoroastrian	UG	2.0	111-	-		580	4.4	82	823	4.3	114	1,403	4.4	197
Zoroastrian	TOTAL		_	-	-	4,442	2.2	311	2,658	2.4	203	7,101	2.3	515
Excelsior	ОР	0.4	-	-	The same	6,729	1.2	266	1,749	1.0	54	8,478	1.2	320
Mulwarrie	ОР	0.5	-	-	-	11/10	-	-	881	2.8	79	881	2.8	79
Mayday North	ОР	0.5	_	19-	9 1	199	1 (41)-	_	1,410	1.7	79	1,410	1.7	79
<b>Bulletin South</b>	ОР	0.4	152	2.2	11	546	2.1	36	150	2.1	10	849	2.1	57
<b>Duke North</b>	ОР	0.4		iil/ /—	4	851	1.0	28	795	1.0	25	1,646	1.0	53
Talbot North	ОР	0.4	-46	Less.	SE D	698	1.8	40	123	1.8	7	820	1.8	47
North Kanowna Star	ОР	0.5	-0-		ALL A				716	1.4	32	716	1.4	32
Lochinvar	ОР	0.4			171-14	423	1.8	24	57	1.6	3	480	1.7	27
Nerrin Nerrin	ОР	0.5				EALS!		1600/2	651	1.3	26	651	1.3	26
Vettersburg South	ОР	0.6	MASS.	16	1	BEE.		MIN .	552	1.5	26	552	1.5	
El Dorado	ОР	0.5		-	IL ad-	10 g (2-			471	1.5	23	471	1.5	23
South Castlereagh	ОР	0.5	_	- 1		111	1.6	6	369	1.3	15	481	1.4	21
Windanya	ОР	0.6	4 7 4	H. U.					360	1.5	17	360	1.5	
Grafters	ОР	0.5	_	1 7 12	A Facilia	America.	, S. D.		319	1.3	14	319	1.3	14
Ophir	ОР	0.6		2444	MARCH 1		170.75	AGE	75	1.9	5	75	1.9	5
TOTAL RESC	URCES		152	2.3	11	28,880	1.9	1,766	20,403	1.9	1,247	49,426	1.9	3,022

## Appendix B: High Confidence Mine Plan



	l)	NDICATED			INFERRE	)	TOTAL		
PROJECT	Tonnes (kt)	Grade (g/t)	Gold (koz)	Tonnes (kt)	Grade (g/t)	Gold (koz)	Tonnes (kt)	Grade (g/t)	Gold (koz)
Excelsior OP	3,540	1.4	160	210	0.8	5	3,750	1.3	161
Zoroastrian OP	350	1.9	21	0	0.7	0	350	1.8	21
Aphrodite OP	2,830	2.3	210	20	3.0	2	2,840	2.3	211
Bulletin OP	520	2.0	34	30	1.2	1.	550	2.0	35
Zoroastrian UG	830	3.4	89	550	3.6	63	1,380	3.4	153
Aphrodite UG	2,570	3.7	303	850	5.0	137	3,420	4.0	440
TOTAL	10,587	2.4	810	1,670	3.9	209	12,300	2.6	1,021

Over 79% of the Mine Plan in Indicated Material

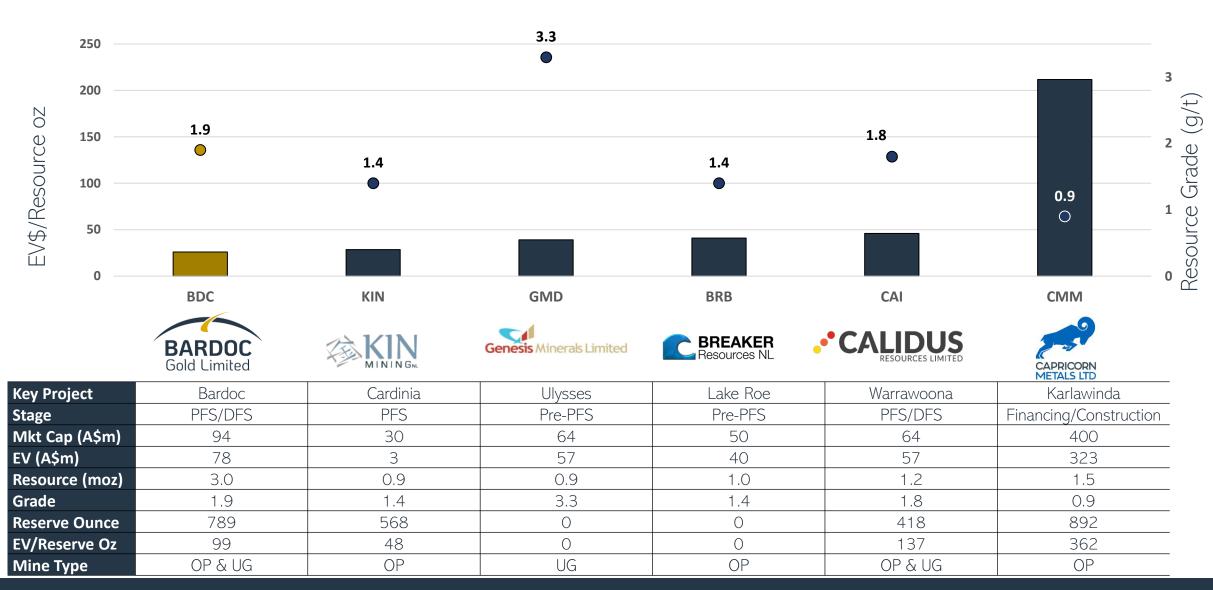
# Appendix C: Mining Reserve



		PROBABI	LE	TOTAL			
PROJECT			Gold (koz)	Tonnes Grade (kt) (g/t)		Gold (koz)	
Excelsior OP	3,540	1.4	160	3,540	1.4	160	
Zoroastrian OP	350	1.9	20	350	1.9	20	
Aphrodite OP	2,830	2.3	210	2,830	2.3	210	
Bulletin OP	520	2.0	30	520	2.0	30	
Zoroastrian UG	810	3.2	80	810	3.2	80	
Aphrodite UG	2,380	3.7	290	2,380	3.7	290	
TOTAL	10,430	2.4	790	10,430	2.4	790	

## Appendix D: Peer Comparison





# Peer Comparison Supporting Information



Company	Mineral Resource Ounces (,000 oz)				Information Source	ASX Release Date	Share Price
	Measured	Indicated	Inferred	Total			28-2-2020
Kin Mining Ltd	12	591	341	945	RIU Explorers Conference Presentation - February 2020	18 February 2020	0.058
Genesis Minerals Ltd	133	441	294	867	RIU Explorers Conference Presentation - February 2020	19 February 2020	0.030
Breaker Resources NL		803	178	981	RIU Explorers Conference Presentation - February 2020	20 February 2020	0.215
Calidus Resources Limited		795	453	1248	RIU Explorers Conference Presentation - February 2020	19 February 2020	0.300
Capricorn Metals LTD	365	1010	150	1525	Quarterly Activities Report Company Website	31 January 2020 Accessed 10th March 2020	1.005

## Appendix E: Gold Price Variations



	Base Case	Scenario 1*	Scenario 2*	Scenario 3*	Scenario 4*	Scenario 5*
Gold Price (AU\$/oz)	2,100	2,500	2,600	2,700	2,800	3,000
Exchange Rate (AUD:USD)	0.69	0.60	0.60	0.60	0.60	0.60
Gold Price (US\$/oz)	1,449	1,500	1,560	1,620	1,680	1,800
All-in Sustaining Costs (AISC) (A\$/oz)**	1,220	1,248	1,252	1,255	1,259	1,267
Pre-Tax Cashflow (A\$M)	551	889	976	1064	1151	1326
Pre-Tax Net Present Value (8%) (A\$M)	332	577	641	704	767	894
Pre-Tax Internal Rate of Return (IRR)	32%	53%	58%	63%	68%	78%
Payback Period (Months)	32	22	21	20	19	17
Post-Tax Cashflow (A\$M)	426	662	723	785	846	968
Post-Tax Net Present Value (8%) (A\$M)	252	428	473	518	562	652
Post Tax Internal Rate of Return (IRR)	27%	46%	50%	55%	59%	68%

<sup>\*</sup>All material assumptions other than US\$ Gold Price and Exchange Rate (AUD:USD) as per ASX announcement 17<sup>th</sup> March 2020 \*\*ASIC changes are due to increasing royalties with increasing Gold Price

## Disclaimer



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  - b) rights and liabilities attaching to the Company's securities.
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#### Forward Looking Statements

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## Competent Person's Statement



#### Competent Person's Statement – Exploration Results/Target

Information in this announcement that relates to exploration results and exploration targets is based on information compiled by Mr. Bradley Toms who is the Exploration Manager of Bardoc Gold Limited. Mr. Toms is a Member of The Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Toms consents to the inclusion in the document of the information in the form and context in which it appears.

**Exploration Target¹:** The potential quantities and grades are conceptual in nature and there has been insufficient exploration to date to define a Mineral Resource. It is not certain that further exploration will result in the determination of a Mineral Resource under the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code" (JORC 2012). The Exploration Target is not being reported as part of any Mineral Resource or Ore Reserve. Full details on the Exploration target are contained in the ASX announcement dated 25th February 2020 – "Further Drilling Success at Mayday North as Wide Gold Hits Confirm Strong Potential for Resource Growth".

#### Competent Person's Statements - Mineral Resources

The Company confirms it is not aware of any new information or data that materially affects the information included in the 30 September 2019 Bardoc Resource Estimate and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its resource announcement made on 30 September 2019.

#### Competent Person's Statements - Ore Reserves - Open Pit & Underground

The information referred to in this announcement has been extracted from the Pre-Feasibility Report and Ore Reserve Statement dated 17 March 2020 and available to view on www.bardocgold.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Ore Reserves Statement and that all material assumptions and technical parameters underpinning the estimates in the Ore Reserves Statement 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 Ore Reserves Statement.

## Approval for Release



Approved for release by:

Robert Ryan

Chief Executive Officer

For further information contact:

**INVESTORS**:

Robert Ryan Bardoc Gold Limited

Telephone: (08) 6215 0090

Email: <u>admin@bardocgold.com.au</u>

MEDIA:

Nicholas Read Corporate

Telephone: 0419 929 046

Email: <u>info@readcorporate.com.au</u>