



BARRA RESOURCES LIMITED

Mt Thirsty Cobalt PFS Progressing

Sean Gregory | Managing Director & CEO



KEY MESSAGES



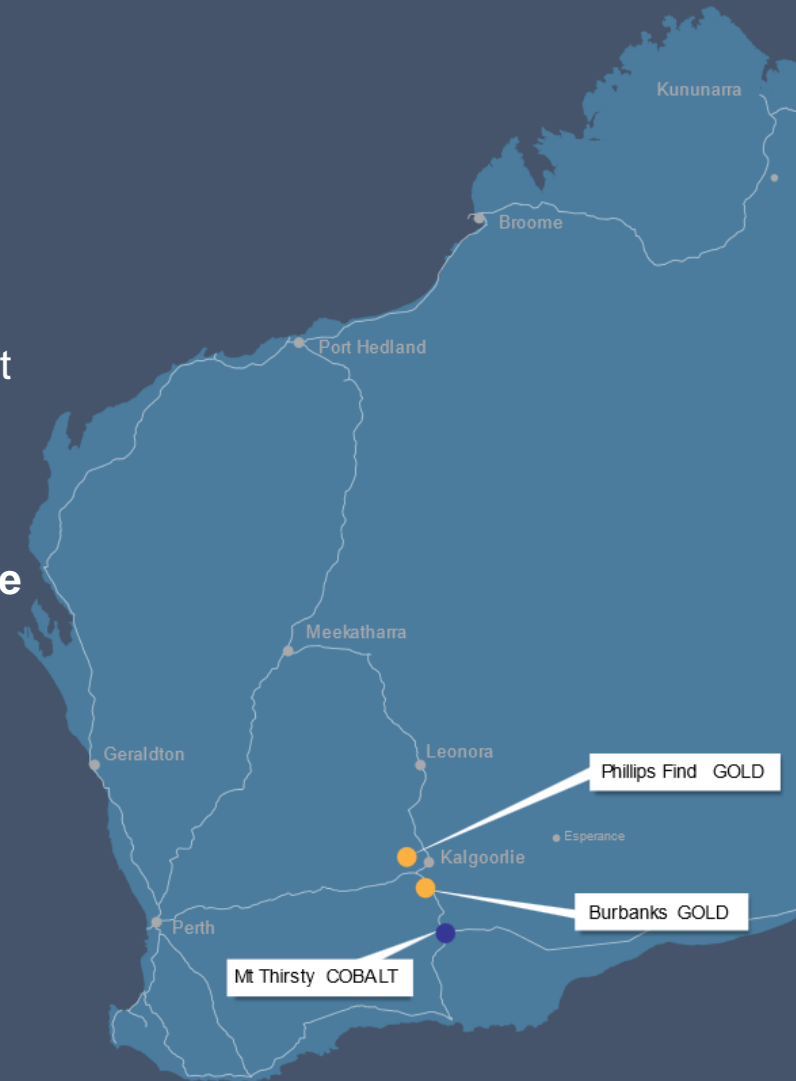
Mt Thirsty Pre-Feasibility Study underway

- Advanced, high grade, low capex, undervalued cobalt nickel project
- Highly leveraged to long term cobalt market dynamics
- Norseman emerging as 'Cobalt Valley'

Dual commodity strategy in play with Coolgardie gold projects

- Burbanks– Resource modelling underway for Main Lode
- Phillips Find – Aircore drilling planned at Truth
- Not discussed further today as the conference theme is battery metals

Projects all located in WA's stable and ethical goldfields



CORPORATE OVERVIEW

ASX:BAR

- 531M shares outstanding
- Market cap \$23m @ 4.5c
- Cash \$3.0M
- Shareholders
 - FMR Investments Pty Ltd 15.4%
 - Mineral Resources Ltd 10.8%
 - >3000 Other shareholders
- Experienced board and management
 - Sean Gregory, MD & CEO
 - Gary Berrell, Chairman
 - Grant Mooney, NED & Co Sec
 - Jon Young, NED
 - Gary Harvey, Exploration Manager



ELECTRIC VEHICLES TO DRIVE DEMAND

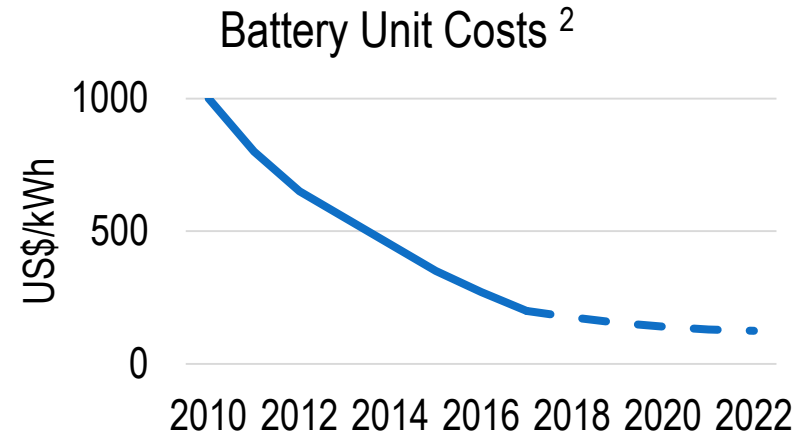


- Electric vehicles are already **cheaper** than petrol vehicles in USA, UK & Japan on a total cost of ownership basis and after subsidies¹
- **Major automakers respond**³
 - BMW – 100,000 EV sales achieved in 2017
 - Tesla – Model 3 shipments ramping up now
 - Volvo – 100% EVs and Hybrids by 2019
 - Renault Nissan – 1.5 M EV sales by 2020
 - Ford – will invest US\$11 Bn by 2022
 - Volkswagen – 2-3 M EV sales by 2025
 - GM – 1,000,000 EV sales by 2026
 - Toyota – 5.5 M EV sales by 2030

¹ Palmer et al, 2018, Journal of Applied Energy v.209

² Bloomberg

³ Auto Company Announcements





CHINA LEADING THE WAY

- China is the biggest and fastest growing car market
- Government mandated 12% EVs by 2020
- Brand names unfamiliar in western markets

BYTON



知豆 | ZD



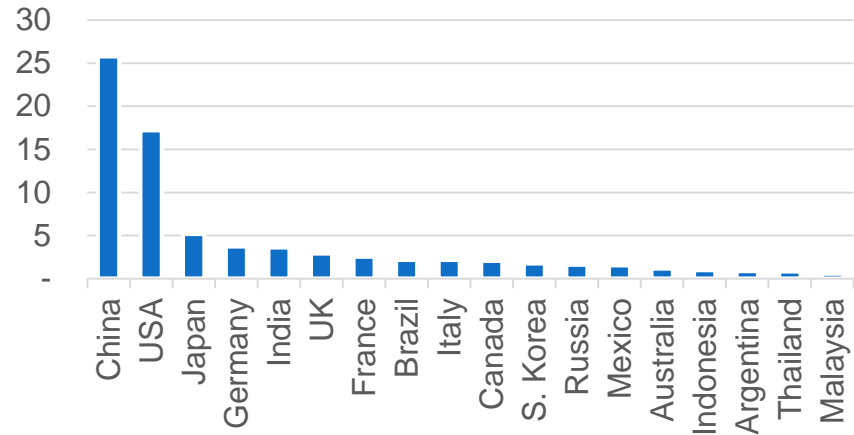
KANDI



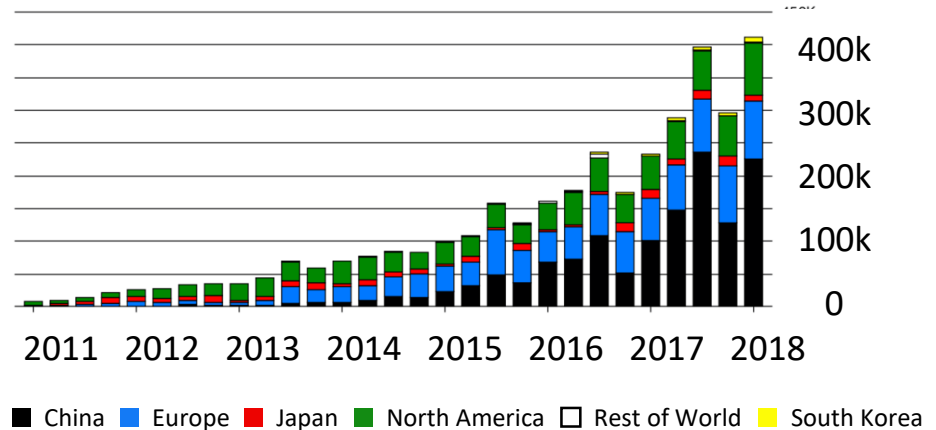
Great Wall



2017 All Car Sales (millions)¹



Qtly EV Sales Growth - led by China²



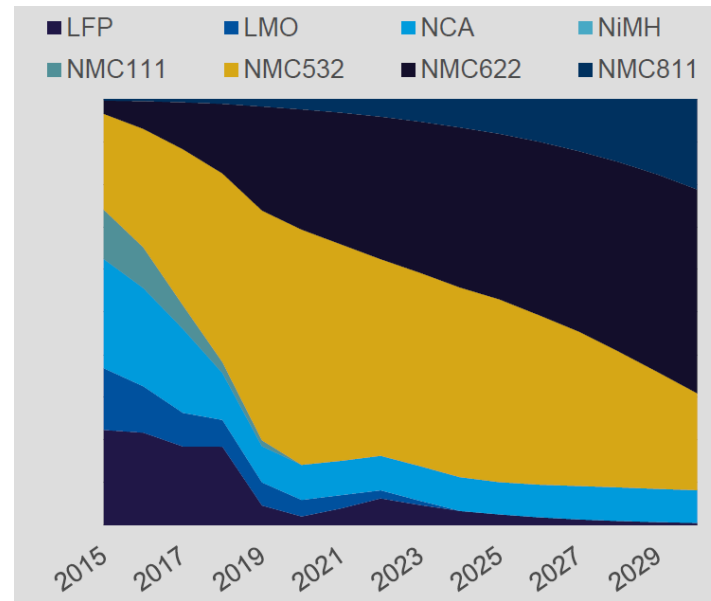
¹ Jato

² Bloomberg



BATTERY CHEMISTRY REQUIRES COBALT

- Cobalt shortage will necessitate substitution to lower cobalt cathode chemistries
- Cobalt remains essential for thermal stability and energy density
- New technology adoption is slow (5-10 years)



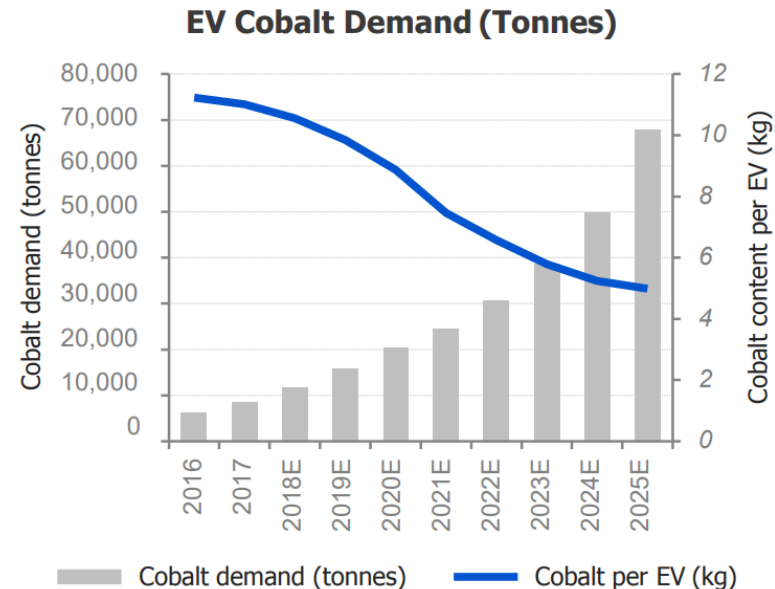
LFP
Lithium Iron Phosphate

LMO
Lithium Magnesium Oxide

NCA
Nickel-Cobalt-Aluminum

NMC
Nickel-Magnesium-Cobalt
(numbers denote relative proportions)

NiMH
Nickel-Metal-Hydride

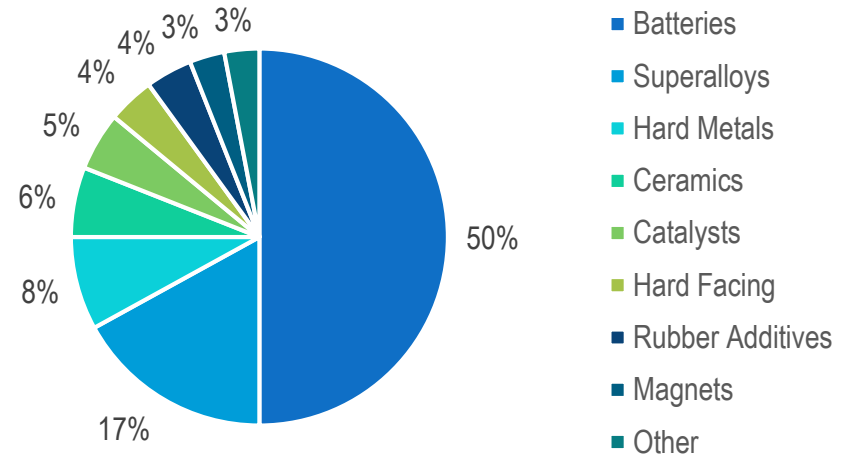




SOLID BASE OF ESTABLISHED DEMAND

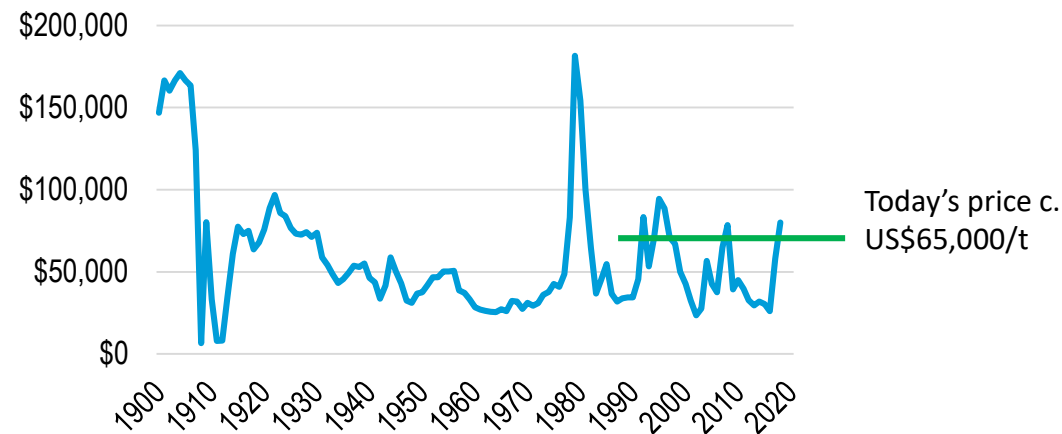
- Batteries half of current Cobalt consumption
- Over 34 other uses with no ready substitutes
- Cobalt a small proportion of final product prices
- Recent cobalt price increases are not out of step with 100 year history

2017 Cobalt Uses ¹



¹ Darton Commodities, Cobalt 27

Long Term Real US\$/t Cobalt Price ²



Today's price c.
US\$65,000/t

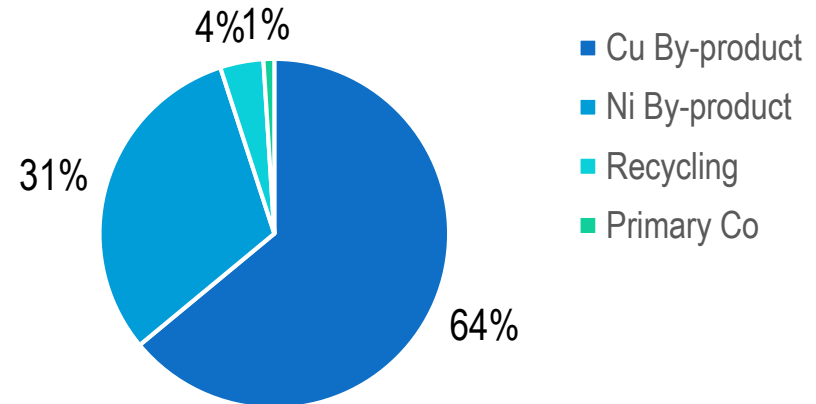
² US Geological Survey



COBALT SUPPLY SCARCE

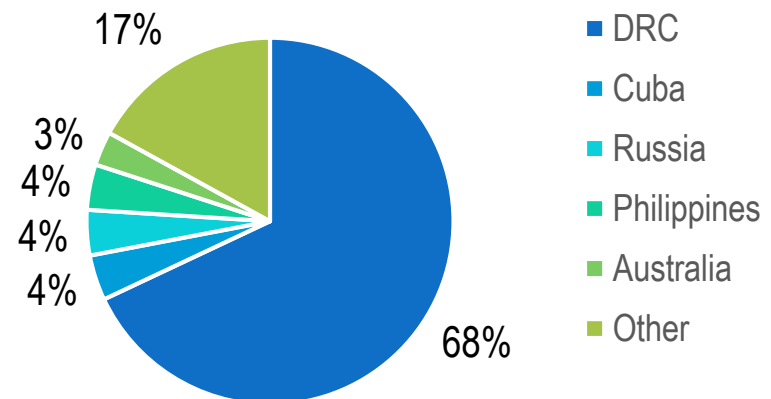
- 99% of cobalt is mined as a by-product
- Other new mines require higher Cu and Ni price
- HPAL capital cost is a barrier to entry for others
- 68% of cobalt sourced from DRC with sustainability concerns

2017 Global Mined Cobalt ¹



Global Cobalt Mine Production

2017 Total: 120 kt¹



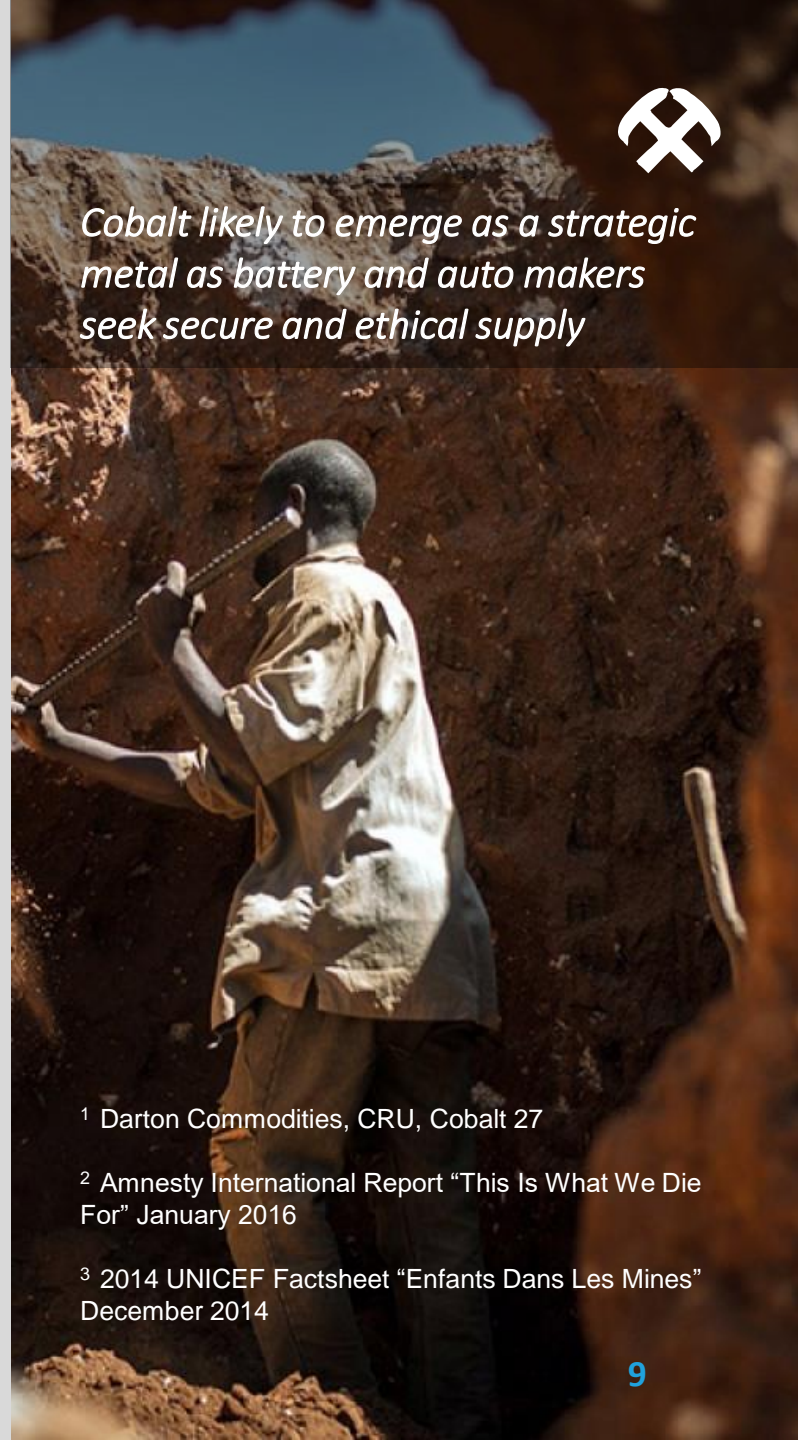
¹ Darton Commodities, CRU, Cobalt 27

SUSTAINABLE SUPPLY

- **68%** of cobalt mined from **DRC** ¹
- 20% of this is from 110,000 – 150,000 Artisanal Miners ²
- 80 fatalities reported annually; many unreported ²
- 40,000 children work in DRC mines for A\$1-3/day ³
- Multinational companies will be increasingly seeking to trace their cobalt supply to sustainable sources
- Jan 2018 – DRC Parliament enacts super-profits tax
- 50% tax on profits if price rises 25% above BFS assumption
- Royalty to increase from 2% to 10% if a “strategic mineral”



Cobalt likely to emerge as a strategic metal as battery and auto makers seek secure and ethical supply



¹ Darton Commodities, CRU, Cobalt 27

² Amnesty International Report “This Is What We Die For” January 2016

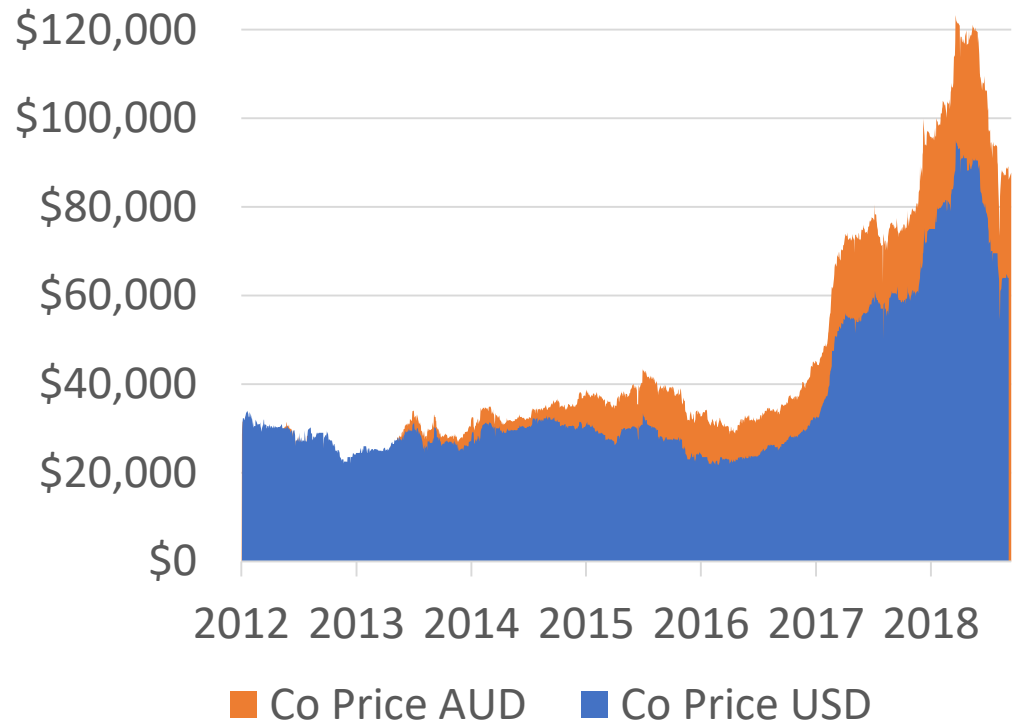
³ 2014 UNICEF Factsheet “Enfants Dans Les Mines” December 2014



COBALT PRICE

- Project economics are driven by long term price not spot price
- Demand Growth and Supply Constraints ahead
- Commodities offset by AUD:USD movements

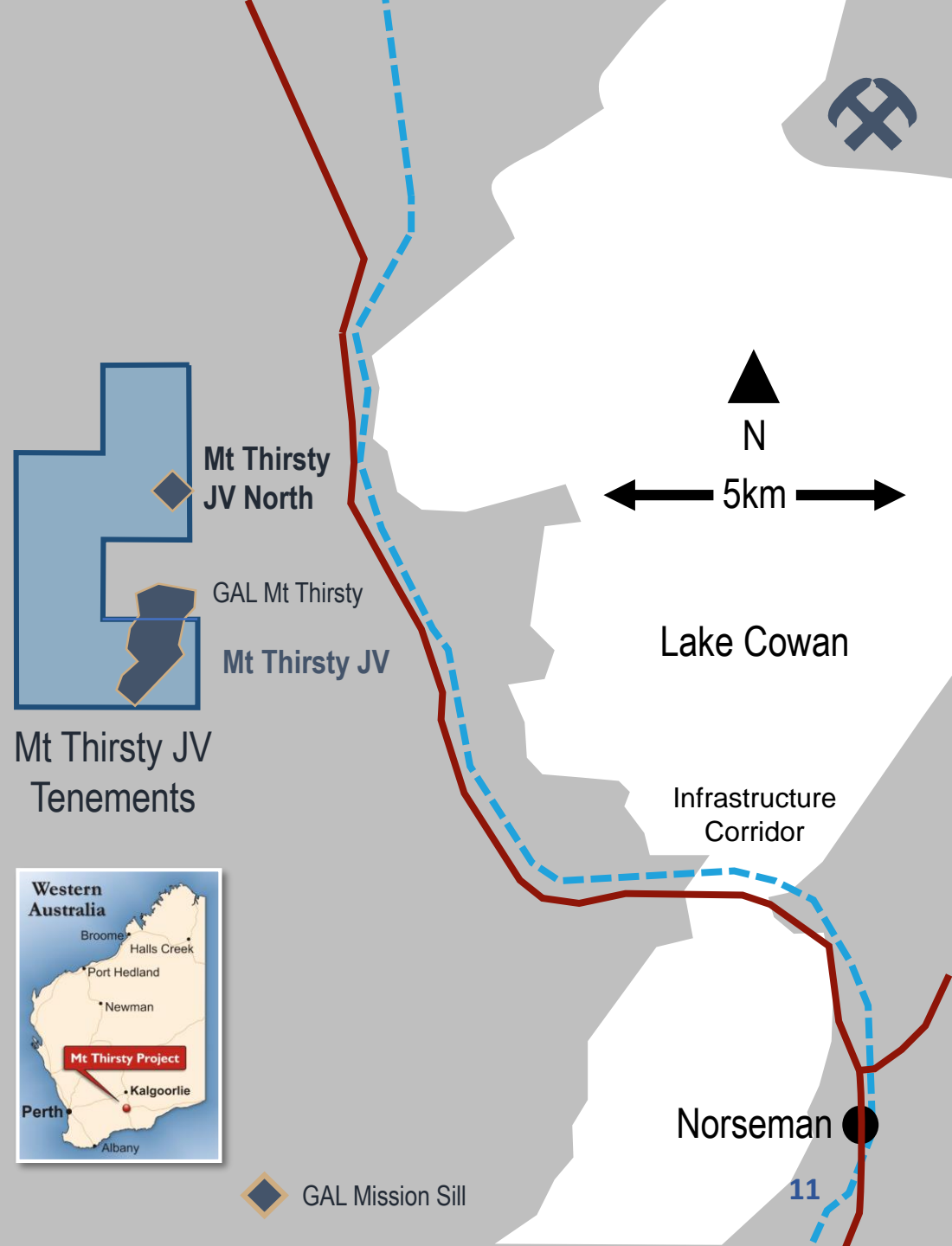
Recent Cobalt Price



COBALT VALLEY

REGIONAL DEVELOPMENT PLAY

- Project is only 16km NW from Norseman town
- Infrastructure all available locally
 - Road
 - Rail
 - Gas
 - Water
 - Town
 - Workforce
 - Fibre Optics
- Mt Thirsty JV Scoping Study identifies 21 year mine life
- 50/50 JV with Conico Ltd
- Galileo Ltd listed highlights additional regional potential



GAL Mission Sill

MT THIRSTY SCOPING STUDY

- Many iterations of design over many years
- Appropriately conservative assumptions¹
- Robust result: breakeven life of mine cobalt price:
 - US\$44,000/t including capital
 - US\$34,000/t after capital sunk²
- A very solid base case to optimise during the PFS

- Opportunities to significantly increase Co and Ni recoveries with simple additions to flowsheet

Parameter	Value
NPV ₈	A\$ 290 M
Co Price	US\$ 72,000 /t
Ni Price	US\$ 15,500 /t
USD:AUD FX	0.74
Co Recovery	73 %
Ni Recovery	21.5 %
Capital Cost	A\$ 212 M incl A\$ 34 M contingency
Operating Cost	A\$ 43 /t
Feed Rate	1.5 Mtpa
MSP Product	6,000 tpa
Life of Mine	21 Years



¹ Refer to ASX Announcement 6/10/17 for full details of the Scoping Study

² Breakeven analysis includes Ni credits. See disclaimer on final slide.

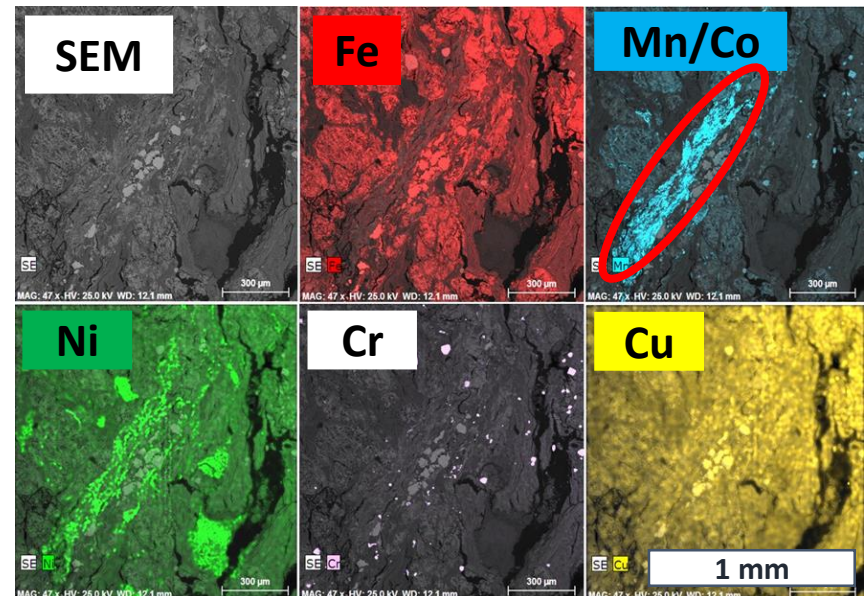
MT THIRSTY CO-NI MINERALOGY



- Indicated and Inferred JORC 2004 Mineral Resource¹ 32 Mt @ 0.13% Co 0.55% Ni
- Cobalt grade is double that of most nickel laterites
- Deep weathering has cobalt in asbolane mineral easily liberated by agitated atmospheric leaching
- Flat lying and low strip ratio (1.5:1)
- Soft and friable - minimal blasting and crushing

¹ Refer to appendix for full details of the Mineral Resource

Cobalt in Mn Oxide - Asbolane



PRE-FEASIBILITY STUDY IN FULL SWING



- Base case confirmed as SO₂ agitated atmospheric leaching
- Beneficiation expected to increase IRR
 - Asbolane concentrate to increase leach yields
 - Reject clays to pump higher % solids
 - Reduce capex of hydromet circuit
- Sulphuric acid addition
 - yield vs cost trade off
- Permitting progression
 - Mining Lease application in place
 - Native Title negotiations initiated
 - Spring biological surveys planned

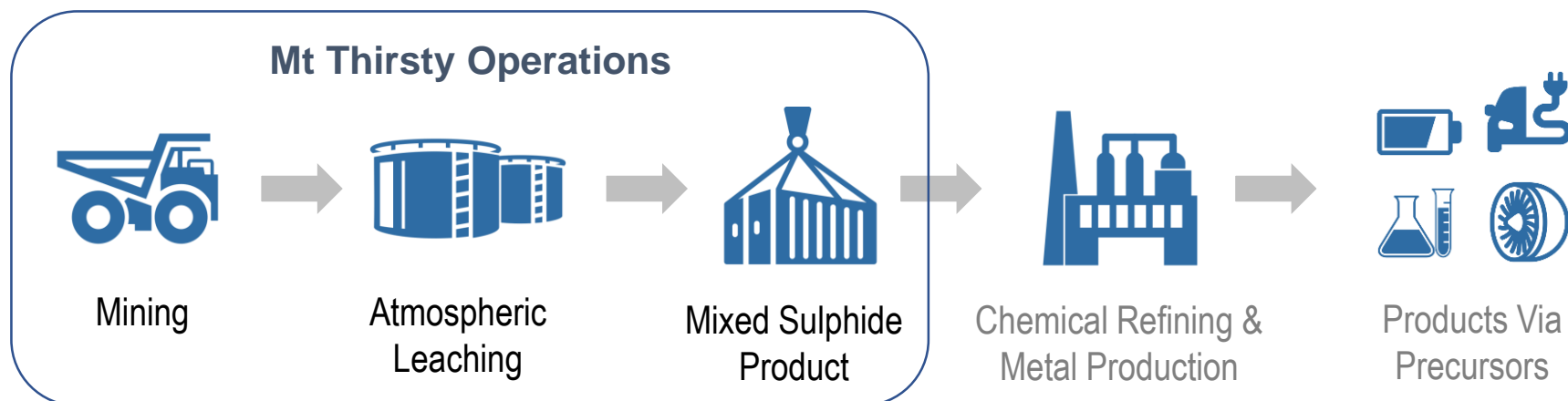


PRODUCT VALUE CHAIN

- Mixed Sulphide Product (MSP) selected
- 6,000 tpa = 1 shipping container per day
- Expected payables > 80% of LME metal price
- Suitable for metal, chemical and battery markets
- MSP a preferred intermediary step in all cases
- Does not preclude value-add investment within WA
- Product of strategic interest to many multinationals



MSP	CoS	NiS
Volume	50%	50%
Value	79%	21%



BARRA'S VALUE PROPOSITION



- Barra has the **lowest capex**
- Barra has the **highest cobalt grade**
- Barra has a **very high proportion of revenue from cobalt**
- Barra is **significantly undervalued** compared to other cobalt developers

	Galileo	Mt Thirsty JV	Ardea 1.0Mtpa	Ardea 2.25Mtpa	Cobalt Blue	Australian Mines	Cleanteq
Study Completed	Exploration	Scoping	PFS	Scoping	PFS	PFS	DFS
Study Underway	Scoping	PFS	DFS		BFS	BFS	Financing
Capex	-	A\$ 212 M	A\$ 599 M	A\$1,165 M	A\$550 M	Not disclosed	A\$1,988M
Mine Life	-	> 20 Years	> 20 Years	>20 Years	> 20 Years	> 20 Years	> 20 Years
Resource	20 Mt	32 Mt	108 Mt		72 Mt	101 Mt	89 Mt
Co Grade	0.11%	0.13%	0.10%		0.09%	0.11%	0.13%
Ni Grade	0.53%	0.55%	0.81%		-	0.81%	0.59%
Proportion of Co Revenue*	77%	79%	37%		86%^	32%	51%
Market Cap 17/9/18	A\$ 30 M	BAR A\$ 23M <u>CNJ A\$ 9M</u>	A\$ 60 M		A\$ 54 M	A\$ 125 M	A\$ 354 M

*Co Grade x Co Recovery X Co Price US\$72,000/t / (Co Grade x Co Recovery X Co Price US\$72,000/t + Ni Grade x Ni Recovery x Ni Price US\$15,500/t) ^COB revenue proportion from ASX:COB PFS 4/7/2018



THANK YOU

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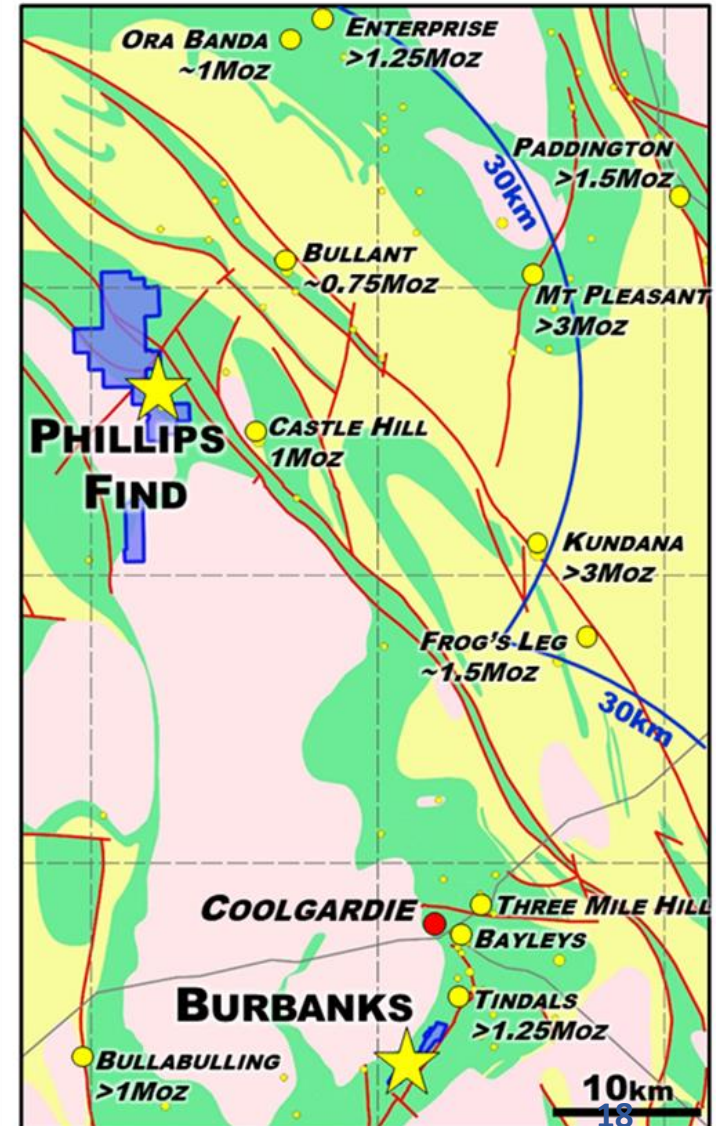
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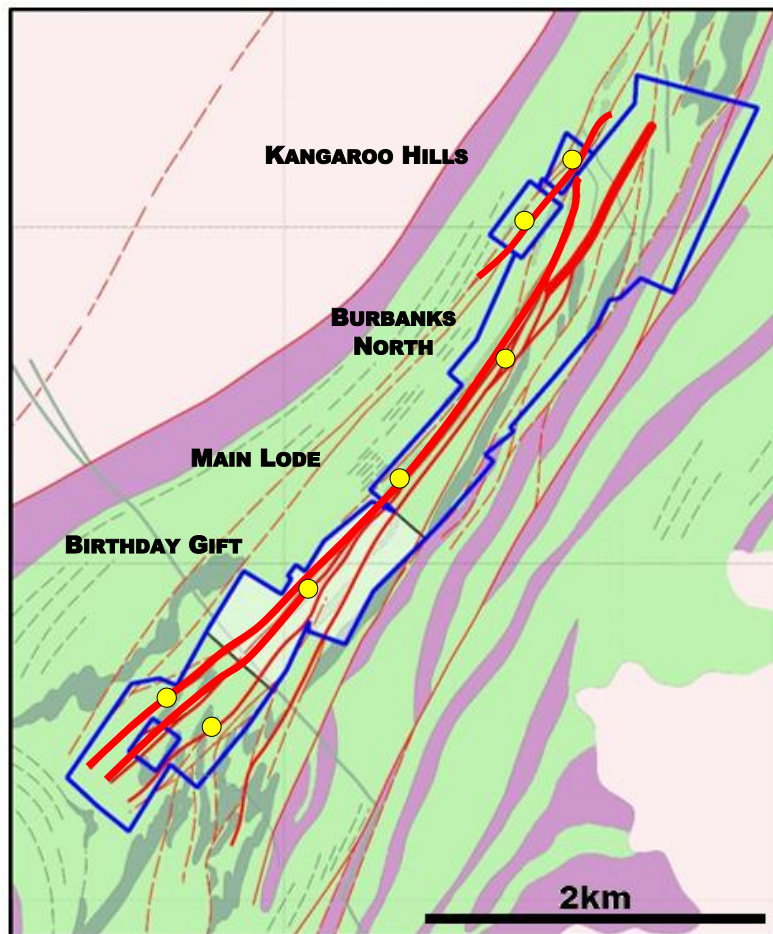
COOLGARDIE GOLD PROJECTS



- Burbanks – brownfields
 - Resource modelling at Main Lode
- Phillips Find – greenfields
 - Aircore drilling at Truth next step
- Multi-million ounce gold camps within 30km
- Aim to define critical mass of 500,000oz Au ahead of mining



BURBANKS – HIGH GRADE GOLD ENDOWMENT



LEGEND



BARRA TENEMENTS



MINE / PROSPECT

MAFIC

MAGNETIC MAFIC

ULTRAMAFIC

GRANITOID



DYKE



KEY FAULT



FAULT



FAULT, INFERRED

420koz

Historical Production (Au)

95koz

Indicated and Inferred Mineral Resource (Au)

223–564koz

Exploration Target (Au)

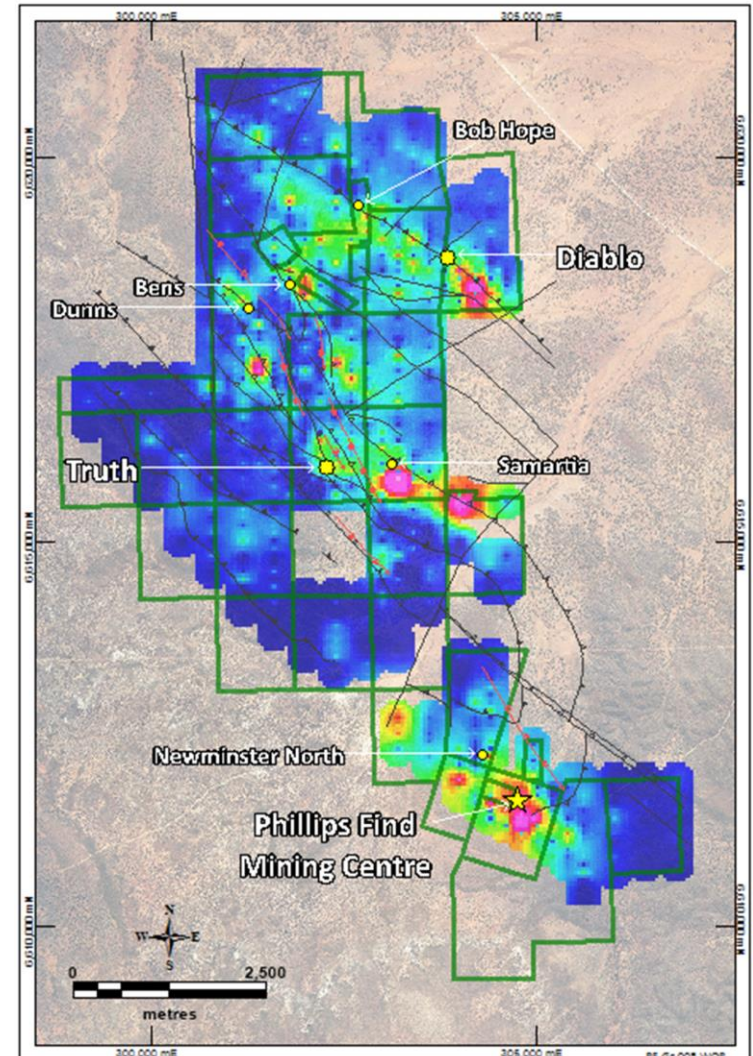
The potential quantity and grade of the Exploration Target is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource beyond Birthday Gift. It is uncertain if further exploration will result in an estimation of a Mineral Resource.

Refer to appendix for further details on Mineral Resource and Exploration Target.

PHILLIPS FIND – GREENFIELDS POTENTIAL



- Tenement package at an early stage of exploration away from Phillips Find Mining Centre (PFMC)
- Successful mining campaigns in 3 open pits from 1995-2015 at PFMC
- Underground potential poorly tested
- Co-located structural and geochemical targets at Truth and Diablo
- Next step 10,000m air core drilling at Truth



APPENDIX: JORC TABLES

Mt Thirsty Mineral Resource				
Category	Tonnes	Co %	Ni %	Mn %
Indicated	16.6 Mt	0.14	0.60	0.98
Inferred	15.3 Mt	0.11	0.51	0.73
Total	31.9 Mt	0.13	0.55	0.86

This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. Refer to ASX announcement 8/3/2011.

Exploration Target for the Burbanks Gold Project						
Area	Low Range			High Range		
	Tonnes	Au g/t	Au Oz	Tonnes	Au g/t	Au Oz
Main Lode to Burbanks North Exploration Target	185,000	8.0	47,600	2,170,000	5.0	348,800
Birthday Gift Exploration Target	625,000	4.0	80,000	650,000	6.0	120,000
Birthday Gift Mineral Resource	514,700	5.8	95,400	514,700	5.8	95,400
Total			223,000			564,000

The potential quantity and grade of the Exploration Target is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource beyond Birthday Gift. It is uncertain if further exploration will result in an estimation of a Mineral Resource. Refer to ASX:BAR Announcement 21/3/18.

In Situ Mineral Resource for the Burbanks Gold Project							
Area	Cut-Off	Indicated			Inferred		
		Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
Christmas Open Pit	1.0	5,700	6.2	1,100	4,000	7.8	1,050
Birthday Gift Underground Mine	2.5	180,000	6.0	34,750	325,000	5.6	58,500
Total Mineral Resource	1.0/2.5	185,700	6.0	35,850	329,000	5.6	59,550

For full details of the Birthday Gift Mineral Resource refer to Kidman Resources Limited's ASX announcement 25/11/15 and then updated for mining depletion in Kidman's 2016 Annual Report. The information has not materially changed since then.

DISCLAIMER & CP STATEMENTS

Competent Persons Statement

The information in this report which relates to Exploration Targets, Exploration Results and Mineral Resources for the Phillips Find and Burbanks Projects is based on and fairly represents information compiled by Mr Gary Harvey who is a Member of the Australian Institute of Geoscientists and a full-time employee of Barra Resources Ltd. Mr Harvey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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 Resources and Ore Reserves" (the JORC Code). Mr Harvey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report which relates to Exploration Targets is based on information compiled by Mr. Allan Kneeshaw who is an independent consultant and is a Fellow of the Australian Institute of Geoscientists (FAIG) and a Fellow of the Australian Institute of Mining and Metallurgy. Mr. Kneeshaw has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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 Resources and Ore Reserves". Mr. Kneeshaw consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report which relates to the Mt Thirsty Oxide Deposit Mineral Resource is based on information compiled by Mr Alan Miller, a Competent Person and former full time employee of Golder Associates Pty Ltd, who is a member of the Australasian Institute of Mining and Metallurgy. Mr Miller has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Mr Miller consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Birthday Gift Exploration Targets

The information in this diagram that relates to the Birthday Gift Exploration Target has been extracted from Kidman Resources Limited's KDR:ASX Release dated 25/08/2015 "Initial 99,000oz Resource for Burbanks gold mine in WA", available to view at www.kidmanresources.com.au. The Company is not aware of any new information or data that materially affects the information included in the previous reports and that all the previous assumptions and technical parameters underpinning the estimates in Kidman's ASX Release dated 25/08/2015, have not materially changed. For full details of the Birthday Gift Mineral Resource, refer to Kidman's 2016 Annual Report.

Cobalt Sensitivity and Breakeven Disclaimer

Refer ASX Announcement 5/10/2017 for details of the Scoping Study including cautionary statements. The Scoping Study referred to in this report is based on low-level technical and economic assessments and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised. Cobalt price is one of many key sensitivities to the project. Other sensitivities including but not limited to nickel price, foreign exchange, land access, capital cost, availability of funding, operating cost, metal recoveries and resource inventory also present risks and opportunities to the economics of the project. The Scoping Study is based on an Inferred and Indicated JORC 2004 Mineral Resource. Further work is required during the Pre-Feasibility Study to move this through higher Mineral Resource and Ore Reserve categories under JORC 2012. Investors should form their own view on long-term cobalt prices. Given the uncertainties involved, investors should not make any investment decisions based solely around the outcomes of the Scoping Study or this sensitivity analysis.

Forward Looking Statements Disclaimer

This report contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis.

These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this report. No obligation is assumed to update forward-looking statements if these beliefs, opinions and estimates should change or to reflect other future developments