



**BLACKHAM**  
Resources Limited

# MATILDA GOLD PRODUCTION RAPIDLY APPROACHING Sydney Mining Club

Feb 2016

ASX : BLK





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Resources Limited

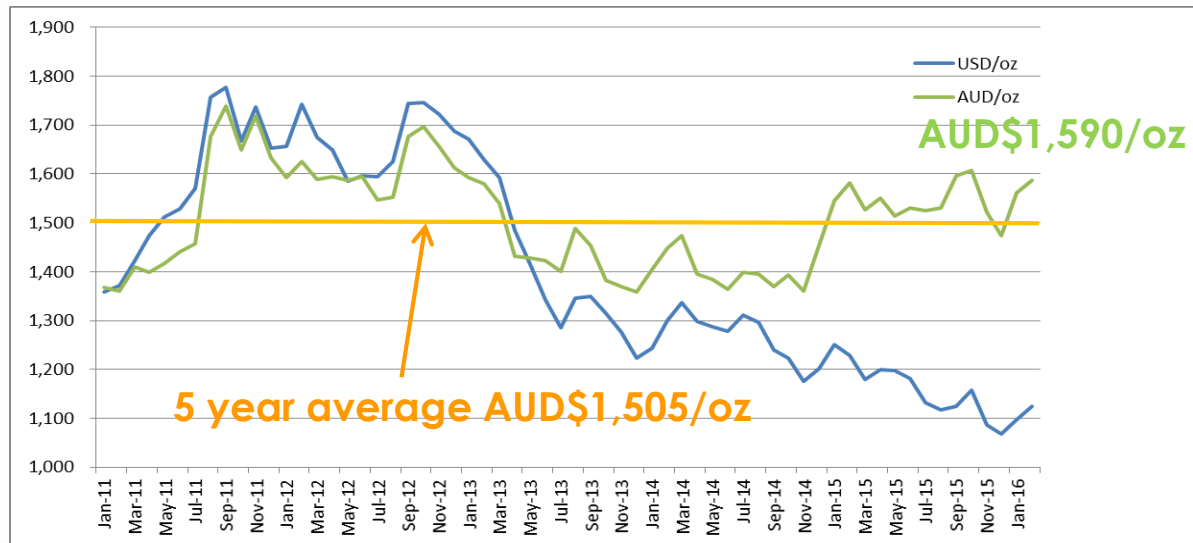
## NEAR TERM GOLD PRODUCER FOCUSED ON SHAREHOLDER VALUE

- 4.7Moz Au resource & 780km<sup>2</sup> landholding in Australia's biggest gold belt
- 1.3Mtpa plant & infrastructure unlocks value in Matilda Gold Project allowing production over 100,000ozpa
- PFS confirms Robust Economics with low risk start up strategy
- Working towards a 10 year mine life across 4 large geological systems
- Market cap ~ A\$72M = A\$16/resource oz & strong liquidity
- Blackham is Western Australia's next +100,000ozpa producer with production targeted mid 2016

# Australian Gold Opportunity



## USD & AUD Monthly Gold Price Comparison



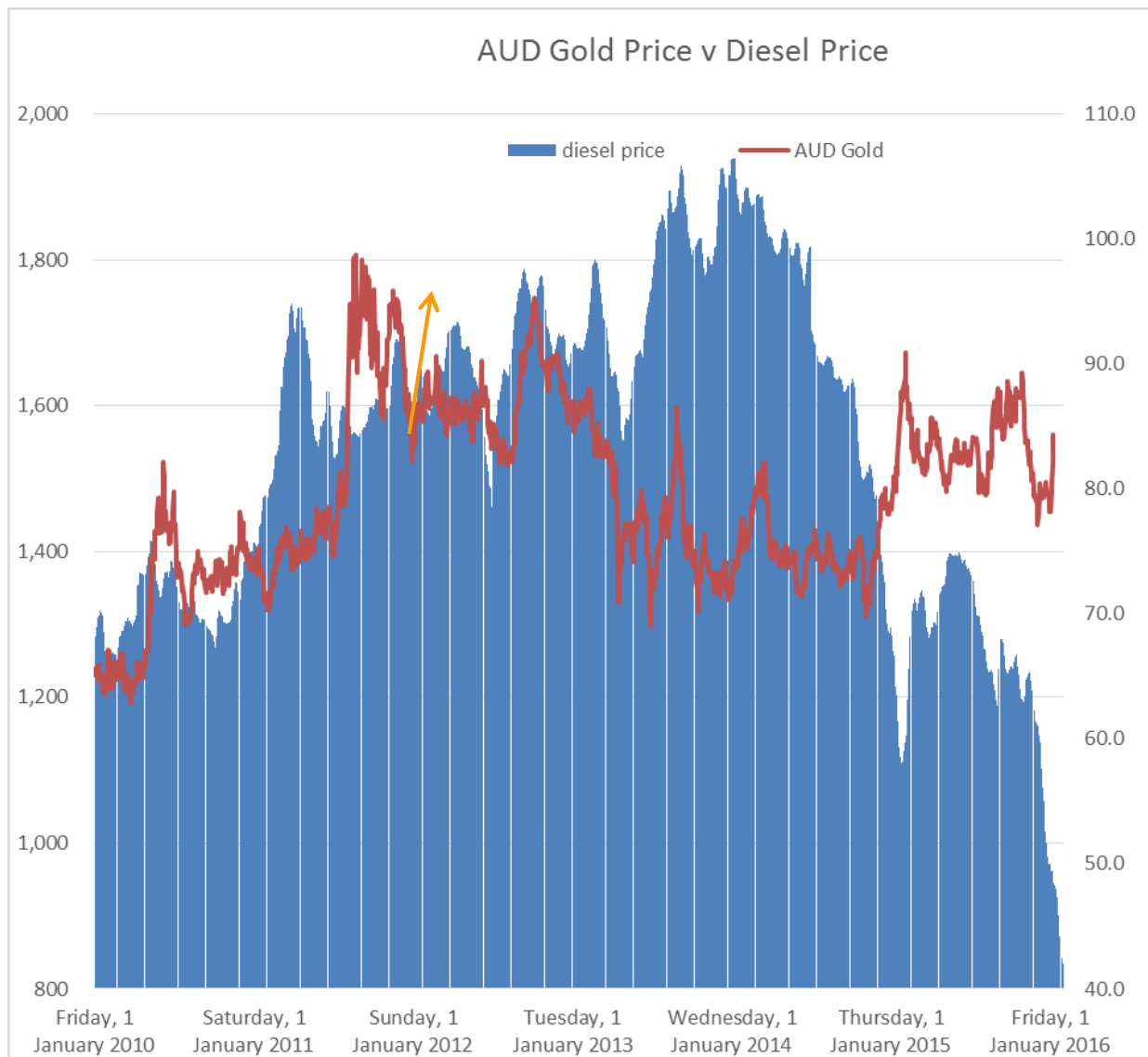
- AUD gold price less volatile
- AUD exchange rate mitigates risk
- AUD gold producers making very good margins
- Cheap AUD equity values



# Australian Gold Miner Margins



AUD Gold Price v Diesel Price



diesel price is less GST and excise

- AUD gold 5 year average A\$1,505/oz
- AUD diesel 5 year average 84c/l
- Gold has averaged 18 times the diesel price over the last 5 years
- Gold is currently 38 times the diesel price
- Aussie open pit gold miners making very good margins

# 2nd best performing Aussie gold stock in 2015



## CAPITAL STRUCTURE

Market cap. @ A\$0.355	A\$71M
Shares on issue	202M
Options @ avg \$0.23/share	35.6M
Cash & investments @ 31 Dec 2015	A\$9.5M
Debt @ 31 Dec 2015	A\$13.3M
Undrawn debt facility*	A\$23M

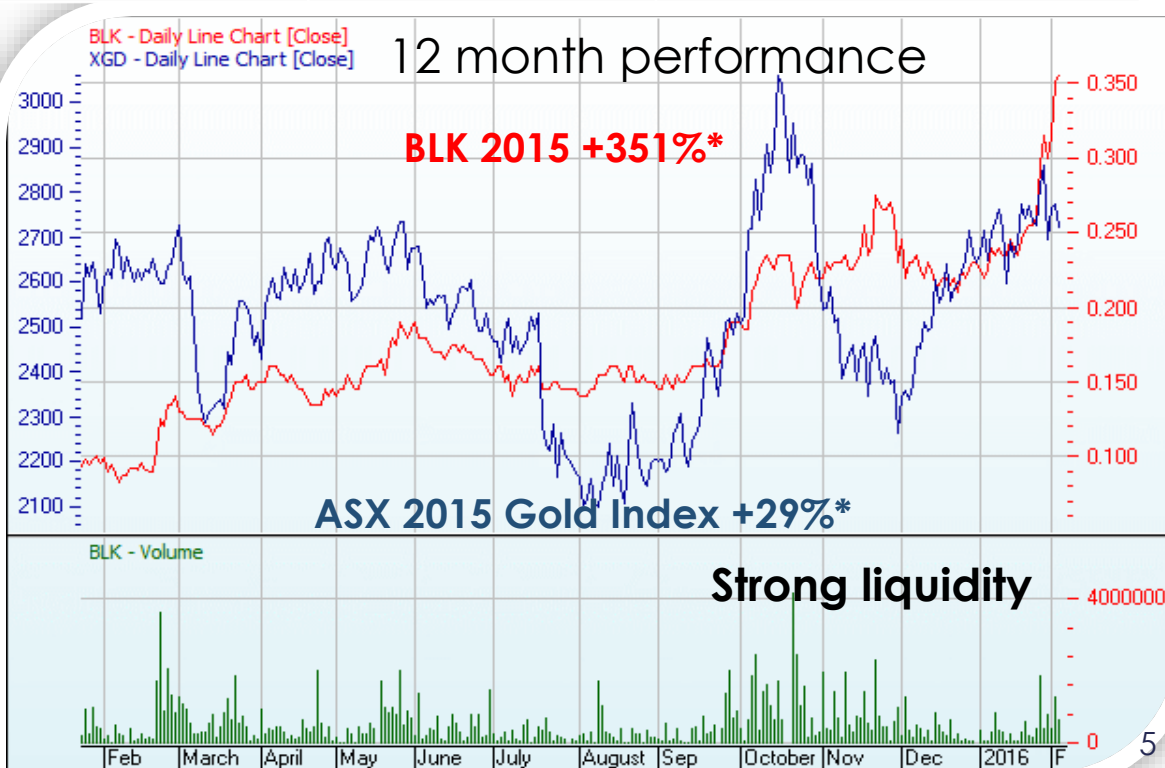
\* see Funding announcement 31 Dec 2015

## SHAREHOLDER ANALYSIS

<b>Top 20</b>	<b>60%</b>
Citicorp Nominees	13.2%
Orion Mine Finance	12.5%
Polo Resources Limited	10.4%
HSBC Nominees	4.2%
UBS Nominees	3.0%

## BOARD OF DIRECTORS

Bryan Dixon	Managing Director	Mining Develop't & Corporate
Alan Thom	Director – COO	Mining Develop't & Operation
Milan Jerkovic	Non-Exec Chairman	Mining Develop't & Operation
Paul Murphy	Non-Ex Dep Chairman	Finance & Corporate
Greg Miles	Non-Executive Director	Geology & Feasibility
Peter Rozenauers	Non-Executive Director	Finance & Banking



# Blackham & Matilda Strategy



## Blackham Strategy

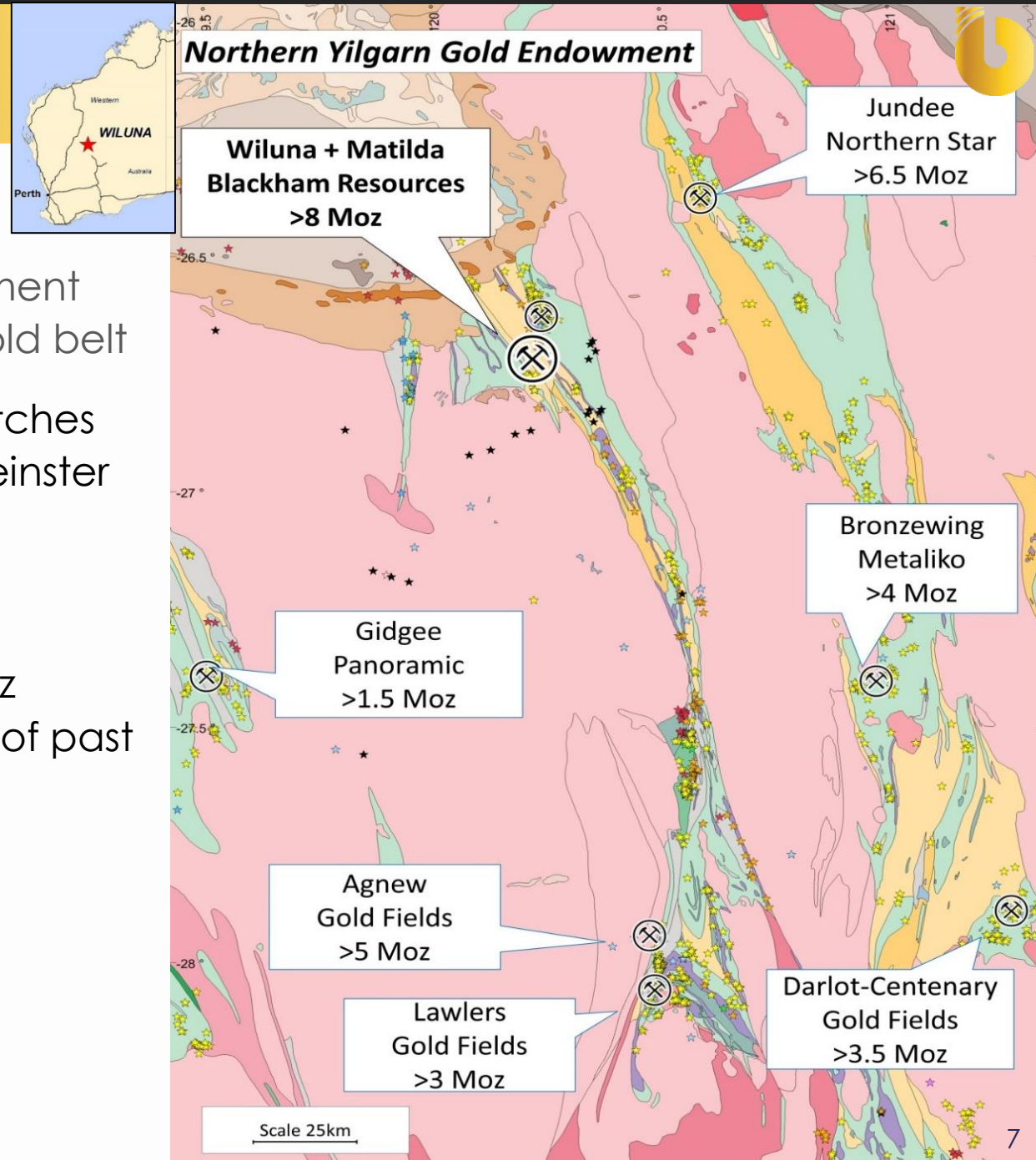
- Western Australia's next +100,000ozpa producer
- AISC A\$1,100/oz. and normalised EBITDA \$45Mpa
- Strengthen and lengthen reserves profile
- Growing the under head frame resources
- Game changing discoveries
- Opportunistic bolt on acquisitions

## Matilda Strategy

- Mid 2016 will commence gold production on oxides & high grade free milling reefs
- Low risk start up with soft free milling ore will be used to repay debt
- Exploration continues to focus on high grade reefs & base load ore out of Matilda and Williamson open pits
- Huge optionality of the Wiluna sulphides - 3.3Moz @ 4.6g/t
  - PFS demonstrated East West sulphides are economic AISC <A\$1,100/oz
  - Mining studies a for Bulletin and Creek Shear to be included in DFS
- Working to a sustainable mine plan targeting 5 year reserves & 10 year mine inventory

# Regional Endowment

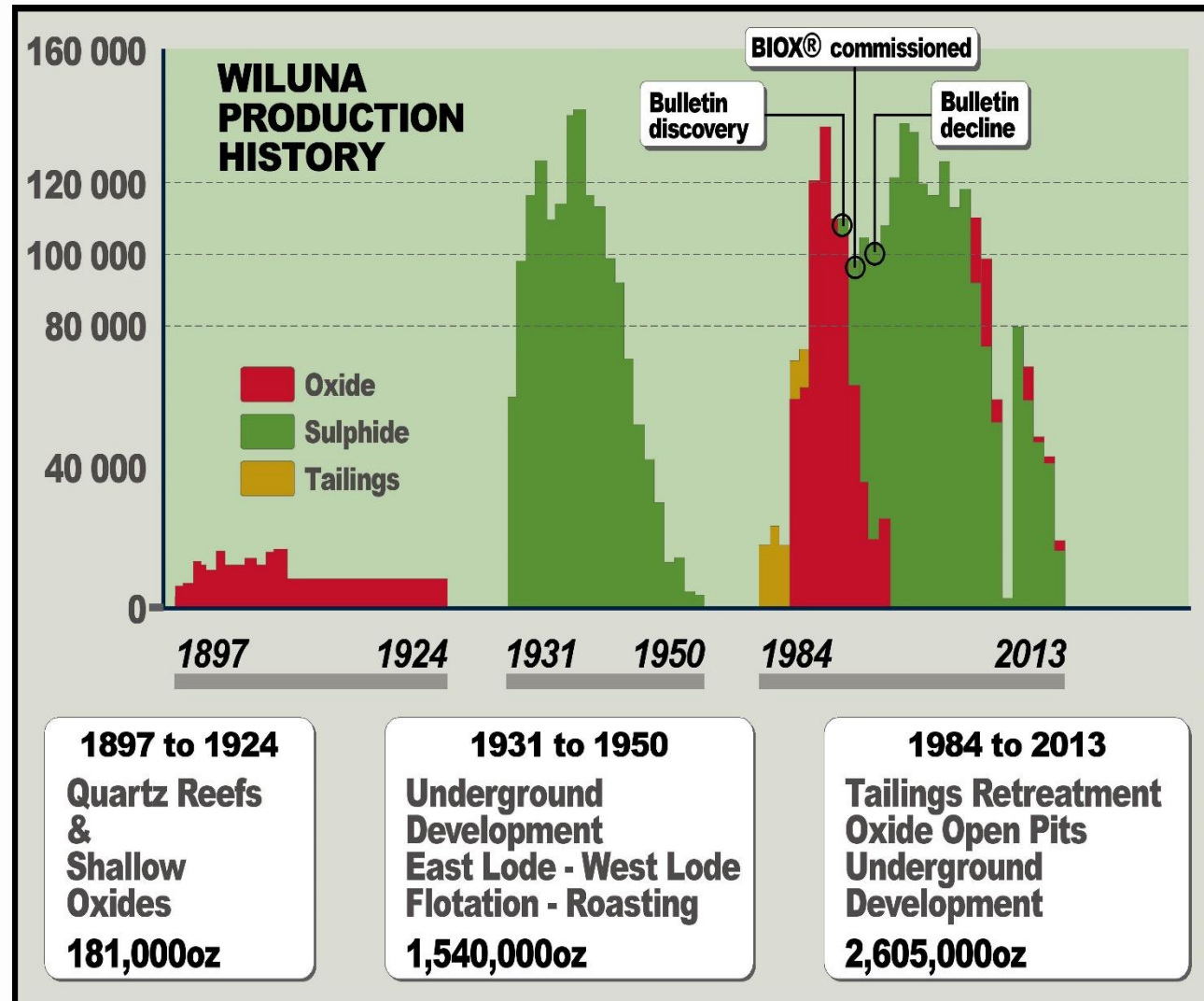
- Large, highly prospective tenement holding in Australia's biggest gold belt
- Australia's largest gold belt stretches from Norseman – Kalgoorlie – Leinster to Wiluna
- Regional endowment > 40Moz
- Matilda project has global 9Moz endowment including >4.3Moz of past production
- Positioned for new discoveries and economic development of existing resources



# HISTORY OF WILUNA GOLDFIELD



- ▶ Long History of Production +4.3Moz
- ▶ Historical Oxide, Quartz, Tailings ~1Moz  
1897 – 1924 Oxide & Quartz 186,000oz  
1984 – 1993 Oxide & Tailings 770,000oz
- ▶ BIOX Fitted to Existing Oxide Plant (Com May 1993)
- ▶ 2007: Project broken up - Wiluna mine assets sold to Apex for \$29.5M
- ▶ Apex spends \$71M on exploration expenditure
- ▶ Nov 2011 Blackham acquires Matilda Gold Project for \$1.4M
- ▶ Mar 2014 Blackham acquires Wiluna plant and mine for \$2.1M upfront and \$2.6M in deferred consideration
- ▶ Blackham targeting production >100,000ozpa

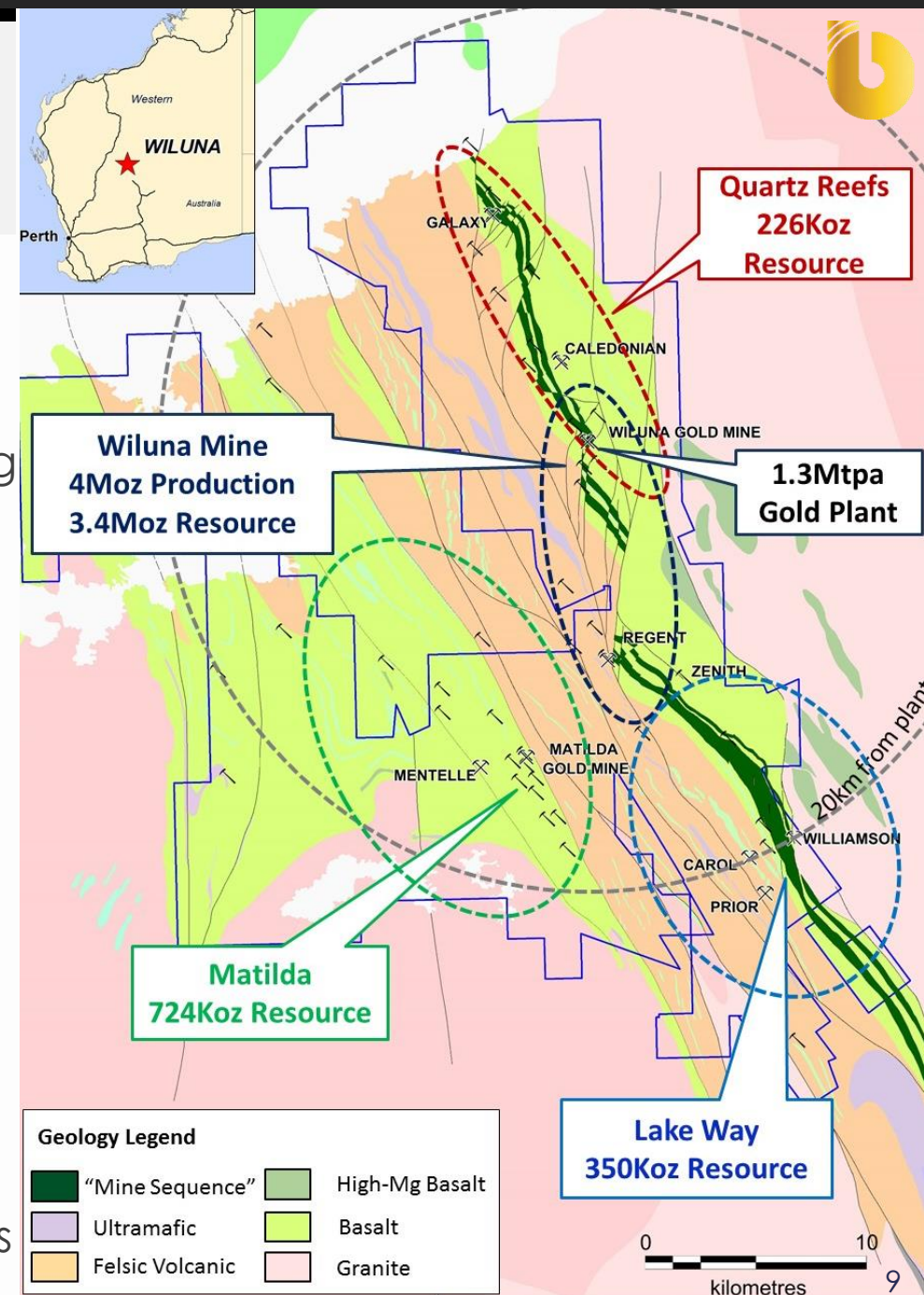


# Matilda Gold Project an embarrassment of riches

- Resource **45Mt @ 3.3 g/t for 4.7Moz Au**  
– 49% indicated resource level
- Re-consolidated Wiluna goldfield
- All deposits within 20km of plant with existing haul roads in place
- Mix of open pit & high grade UG ore
- +780 km<sup>2</sup> of tenure & 55km of mine sequence strike
- 4 large geological systems

	Past Production	Resources koz	Drilling km's	Strike km's
Matilda	<200koz	724	246	7
Quartz reefs	<300koz	225	73	15
Lake Way	42koz	350	92	9
Wiluna	>4Moz	3,352	1,350	7

- 3 large geological systems have been significantly under explored in modern times





## Matilda Progress to date

- Dec 2014, published scoping study
- June 2015, BLK completed \$38.5M deal with Orion Mine Finance in June 2014
- Oct 2015, released PFS growing the Mineral Inventory to **6.0Mt @ 2.8g/t for 540,000oz Au**
- Significant drilling success over the last 5 months

## Matilda Development & Operating Plan

- Feb 2016, will publish DFS with increase mine life
- Mid 2016 commencing safe efficient operations, subject to approvals
- Continue to improve and optimise operations
- Improve the quality of the mine plan
- Increase reserves and mine inventory from vast and diversified resource base

# Matilda's extensive infrastructure minimizes capex



- Free milling Plant 1.3Mtpa capable of 100kozpa<sup>1</sup>
- Gas power station & diesel backup
- Permitted borefields and infrastructure
- 350 person village
- Sealed airstrip and roads
- Biox circuit capable of treating 850tpa refractory ores
- UG infrastructure already in place
- Most operating approvals and licenses in place
- **Existing infrastructure minimizes capex and risk**



<sup>1</sup> see PFS announcement 21 October 2015

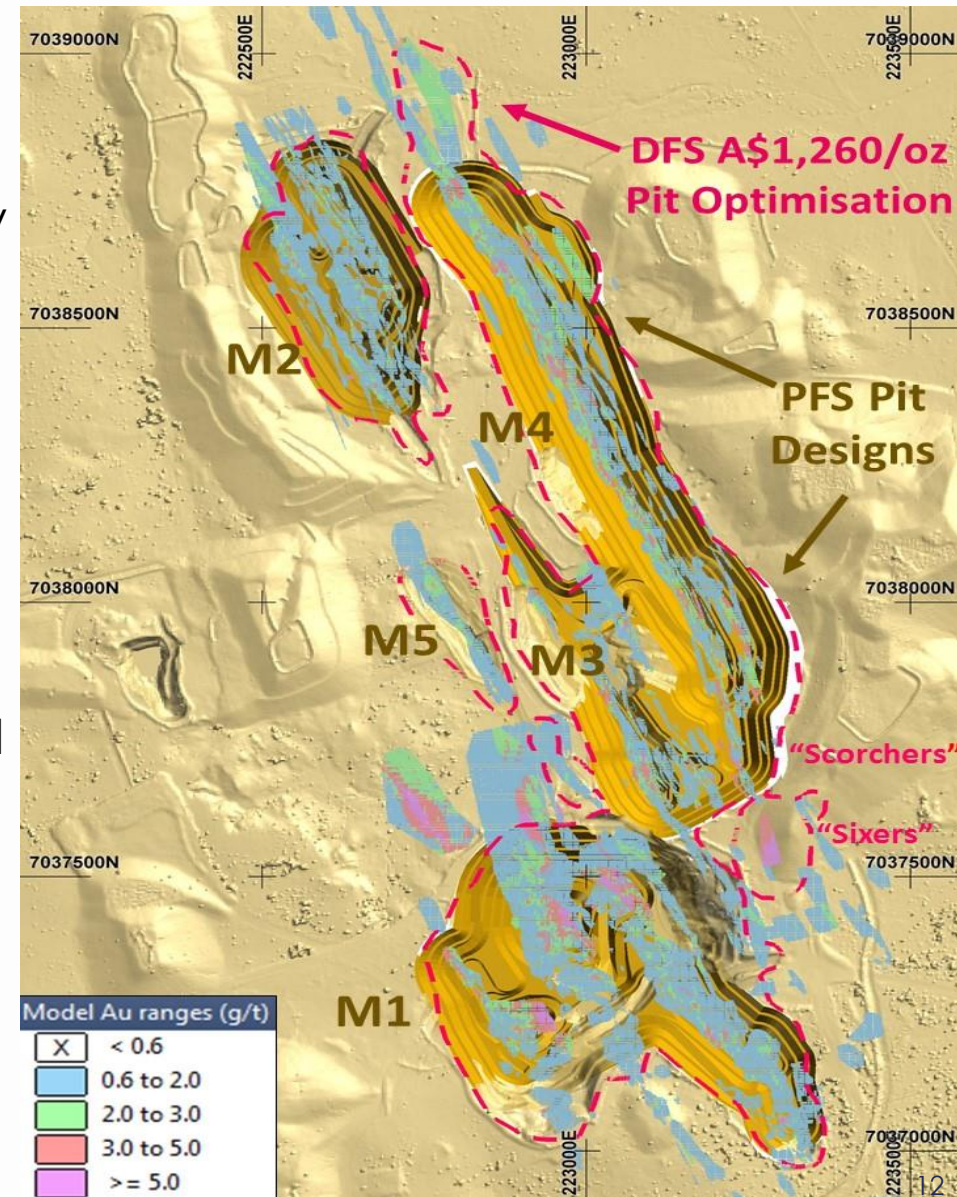
# Matilda Mine – base load ore and growing



- 7kms stacked, repeating gold lodes
- Soft, deeply weathered oxide ore
- Ineffective historical RAB requiring RC follow up along strike and at depth
- Production (1987-1993):
  - 2.2 Mt@ 2.6g/t = 181,000oz au
- Mineral Inventory - 90% indicated resource
- 1.8g/t diluted head grade
- Gravity & leach recoveries 93%
- Mining proposals lodged awaiting approval

**Important source of large tonnage base load ore capable of 80,000ozpa**

RESOURCES	Mt	g/t Au	Oz Au
Measured	0.2	2.1	14,000
Indicated	7.4	1.8	425,000
Inferred	5.3	1.7	285,000
<b>TOTAL</b>	<b>12.9</b>	<b>1.8</b>	<b>724,000</b>

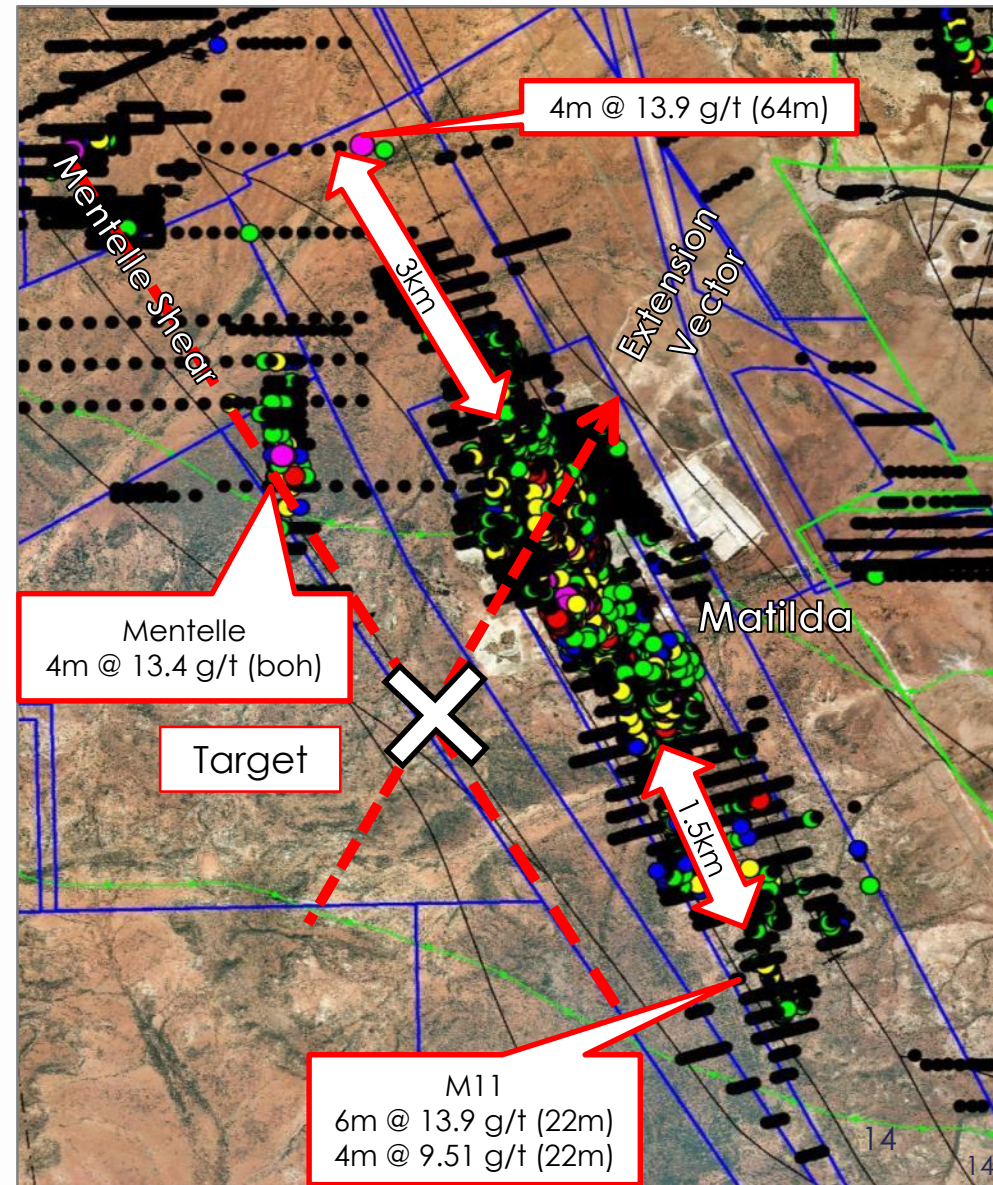




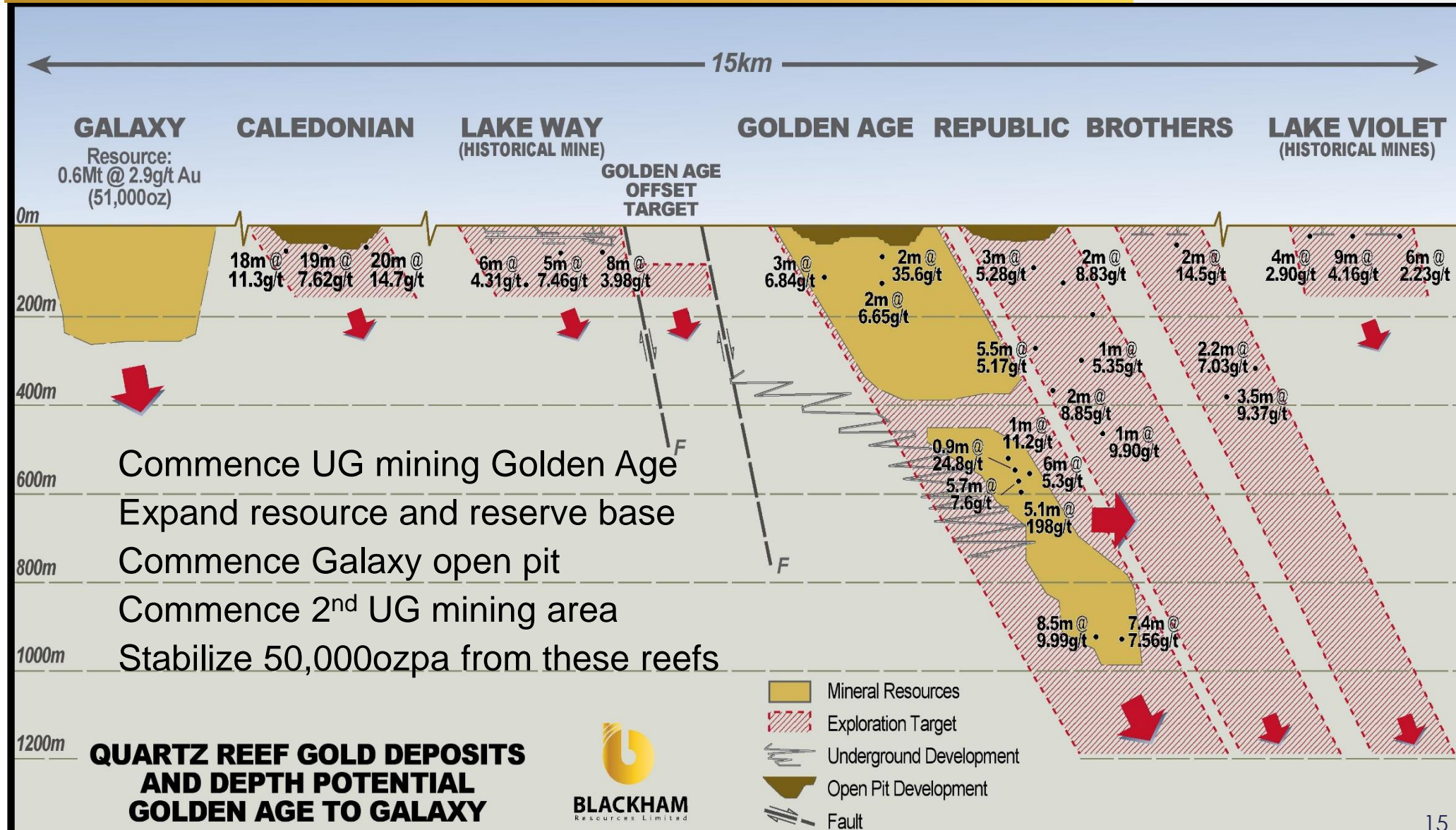
# Matilda regional stacking & repeating lodes



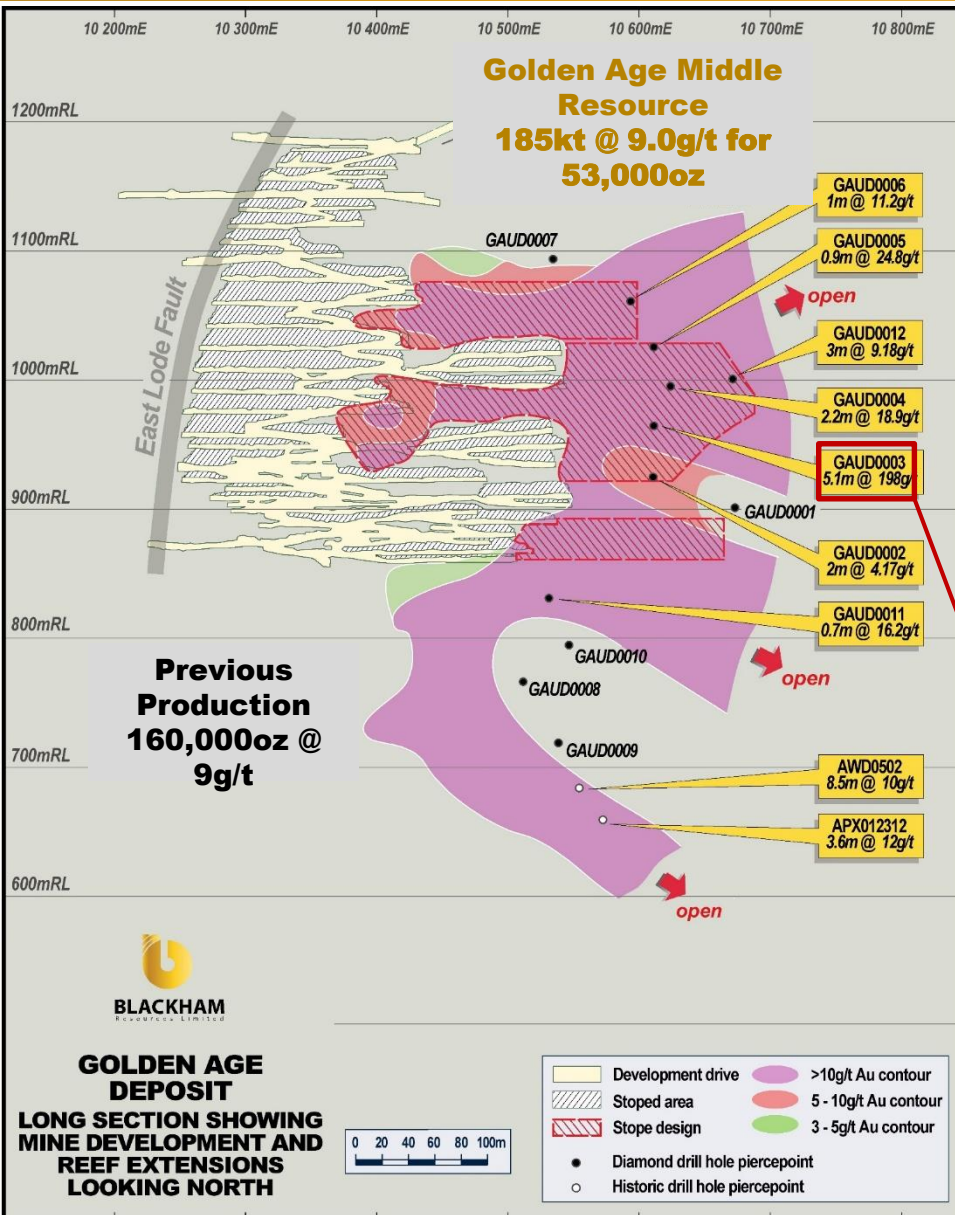
- Historical drilling identified mineralisation up to 3km from the mine area
- Strike extensions partly covered by drainage – impediment to historical exploration = opportunity
- Mentelle trend... parallel structure?
- Mentelle prospect potential resource with Matilda characteristics
- Needs large RAB program to test structure



# High grade quartz reefs strategy

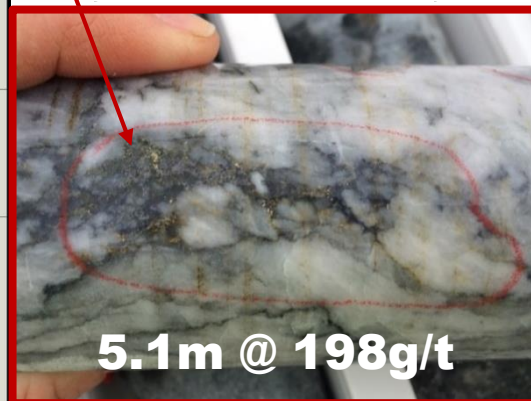


# Golden Age – High grade quartz reef



- Produced 160,000oz Au @ 9.0g/t
- Middle Resource **183kt @ 9.0g/t for 53,000oz**
- Drill composites in middle average 14.0g/t**
- DFS gravity leach recovery 93%
- 2,700m extensional drilling programme ongoing

RESOURCES	Kt	g/t	Koz
		Au	Au
Indicated	361	5.3	62
Inferred	703	3.9	88
<b>TOTAL</b>	<b>1,064</b>	<b>4.4</b>	<b>150</b>



# Lake Way - large mineralized system

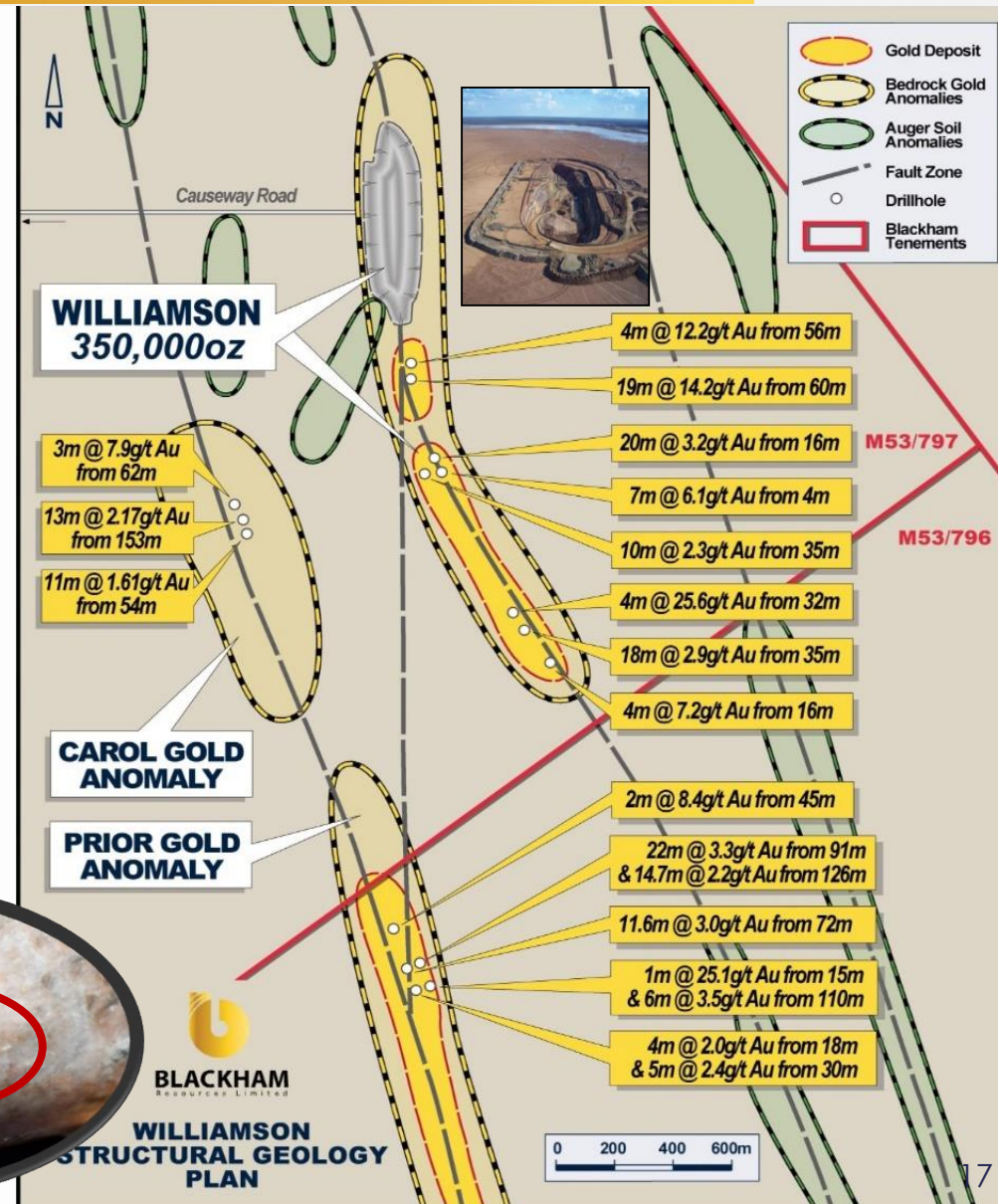


- 19km south along strike from Wiluna
- large tonnage potential structural setting similar to Wiluna with potential for a cluster of deposits
- Williamson historically produced 660kt @ 2.0g/t for 42,000Au

## Resources

RESOURCES	Mt	g/t Au	Oz Au
Indicated	2.7	1.7	148,000
Inferred	3.6	1.8	202,000
<b>TOTAL</b>	<b>6.3</b>	<b>1.7</b>	<b>350,000</b>

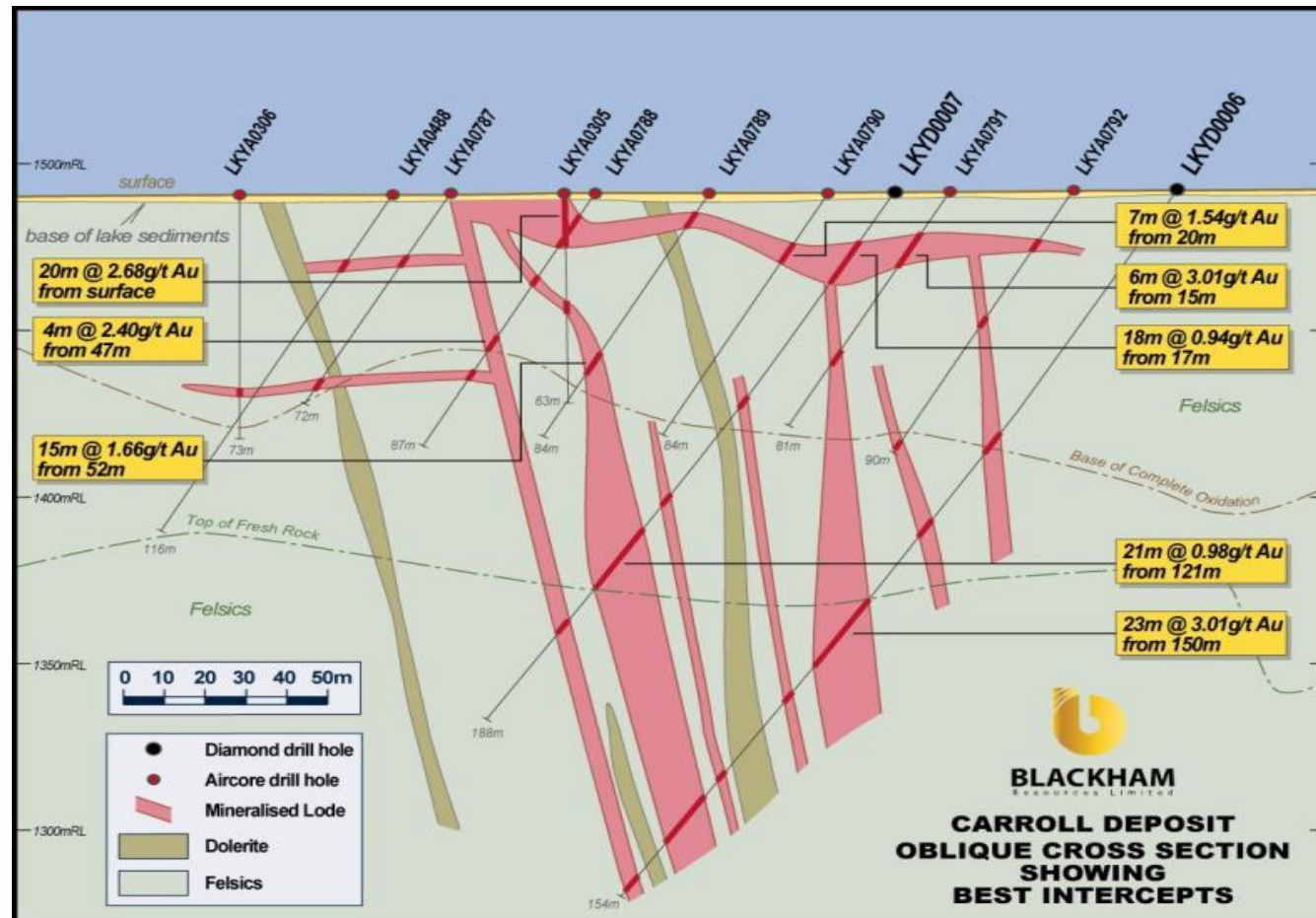
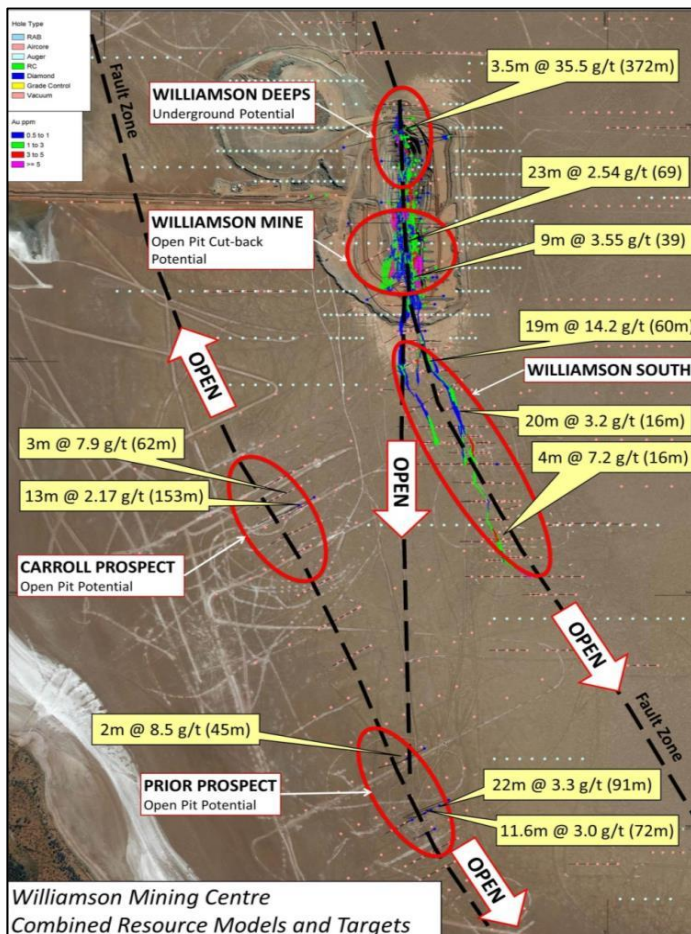
- Free milling 95% DFS recoveries
- Williamson high grade UG mineralisation
  - 3m@40.1g/t from 117m
  - 4.3m@17.0g/t from 136m
  - **3.5m@35.5g/t from 372m**
  - **2m @ 95.1g/t from 33m**



# Carroll Prior Trend – large tonnage potential



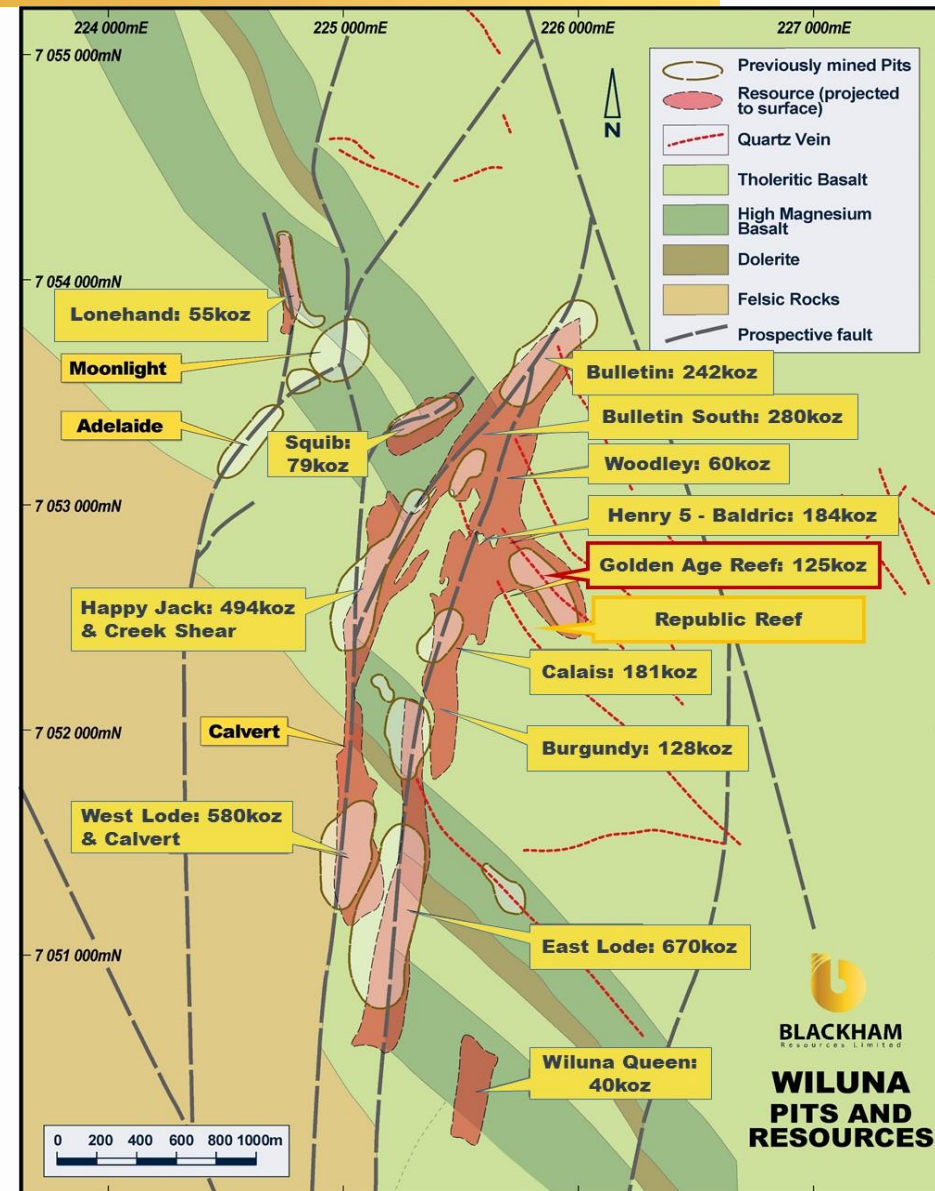
- 2.5kms of strike with continuous mineralisation
- Potential large tonnage, near surface, infill drilling required
- SAM's surveys defined structure. Existing auger & air core. Gravity surveys to be completed shortly.
- Very limited drilling into primary mineralisation



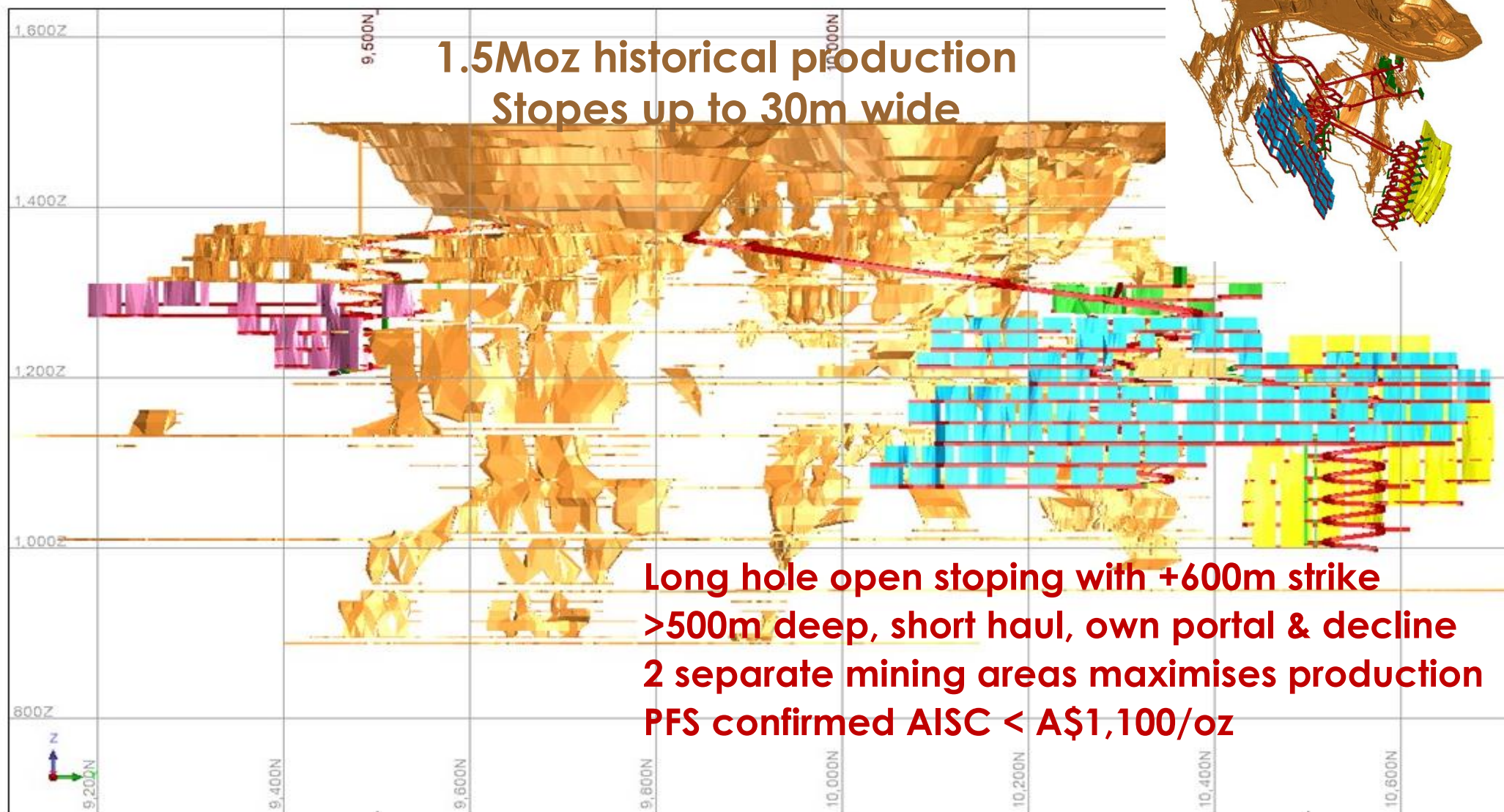
# Stage 2 - High grade Wiluna sulphide ores a big prize



- Underground and open pit sulphide ore will extend mine life
- Sulphide resources - 22Mt@ 4.6g/t for 3.3Moz
  - 2g/t bottom cut
  - Underground 11Mt @ 6.3g/t for 2.3Moz
    - 4g/t bottom cut
- Limited drilling required with 49% of resources indicated
- Substantial mine development in place
- 83% average recoveries over last 20 years
  - Opportunities to improve floatation recoveries
- Operating history gives good understanding of costs
- PFS confirms we can process sulphides for
  - A\$44/t ore or A\$310/oz gold produced
- A suitable mine planning solution will offer enormous value



# East West UG Mine Design



East West long section looking west showing old stopes and PFS UG design

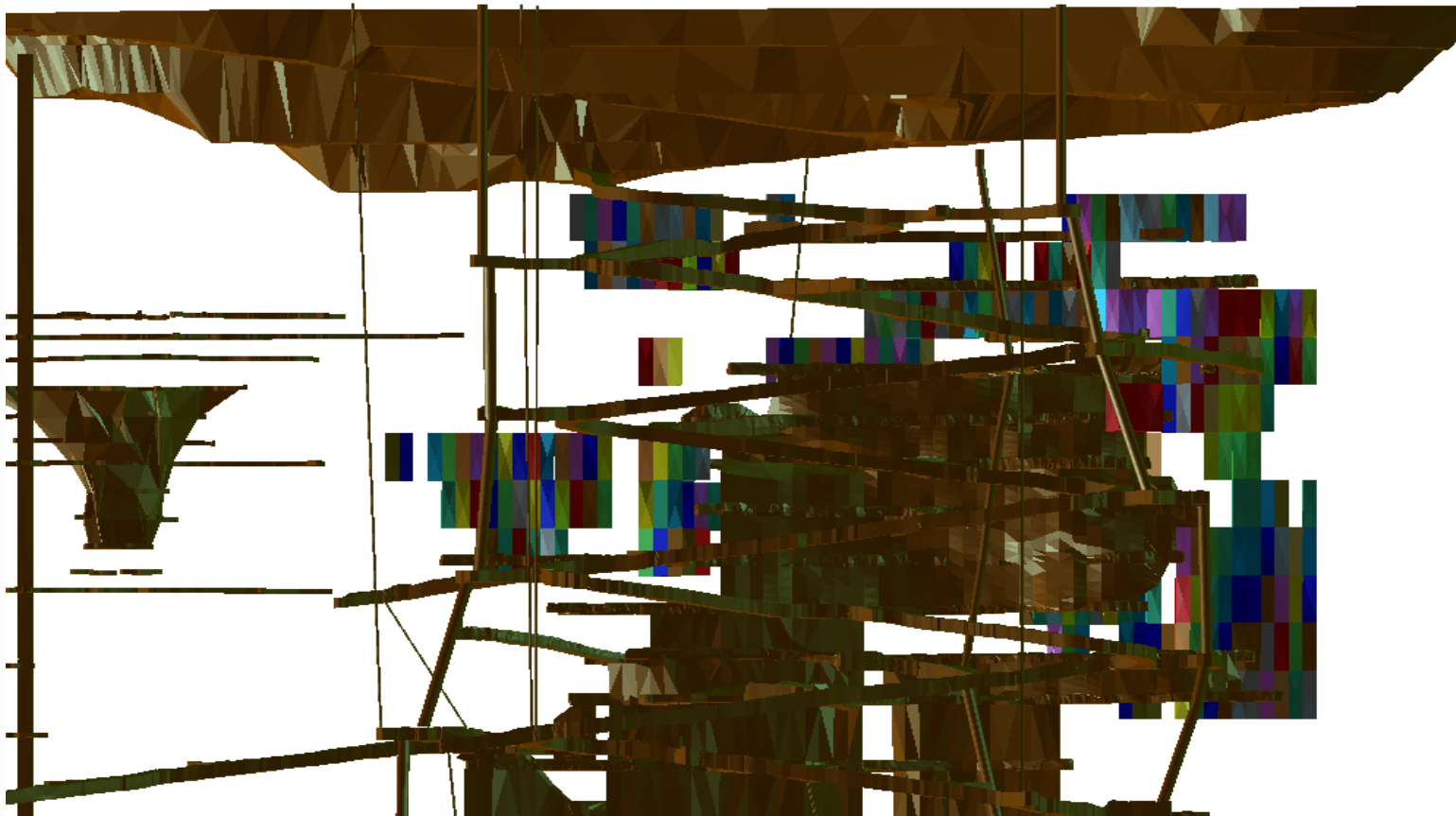
# Bulletin DFS UG study nearing completion



>600m deep, short haul, own portal & decline

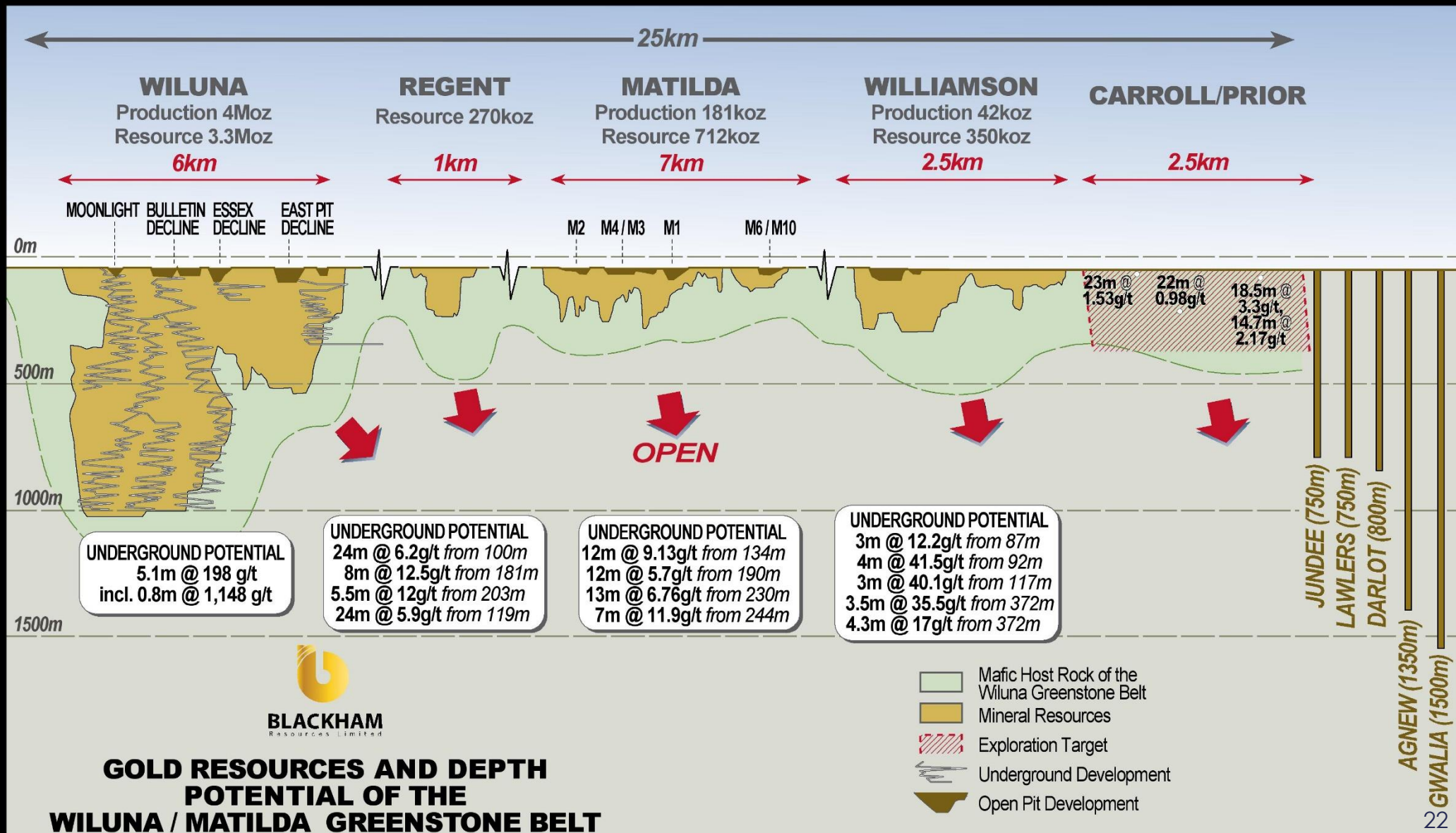
Bottom up long hole open stoping

**Existing development = 4 month payback**



Long section looking west - Bulletin UG showing old stopes and DFS planned stopes

# Just scratching the surface



# Australian Gold Producer Peers

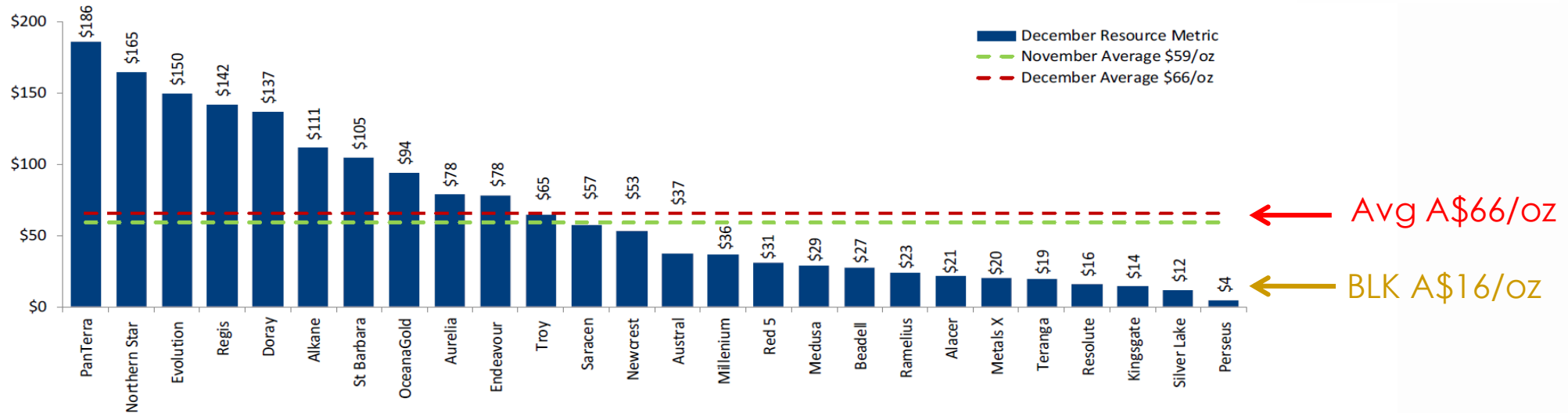


## Producers - EV / Resource (A\$/oz AuEq)

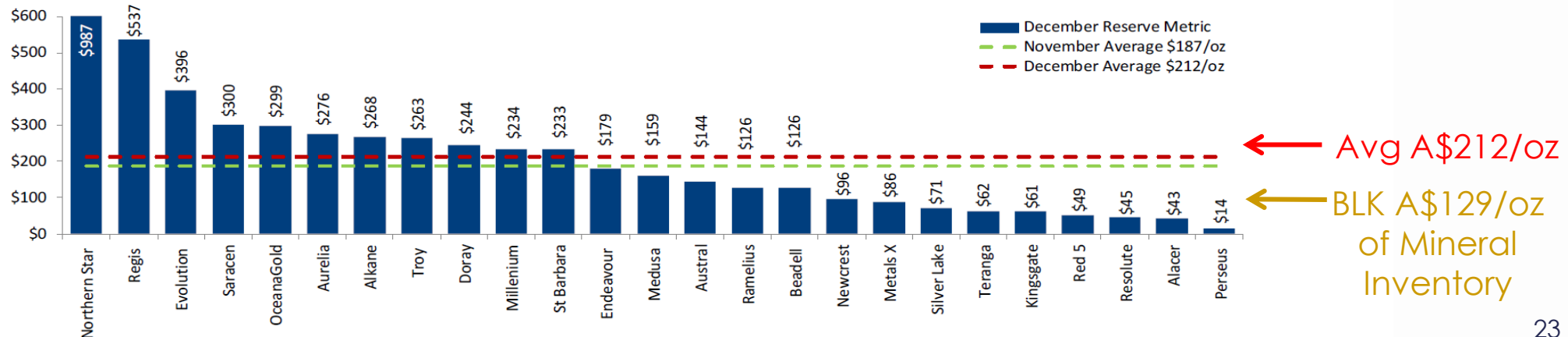
Source:



Capital Group



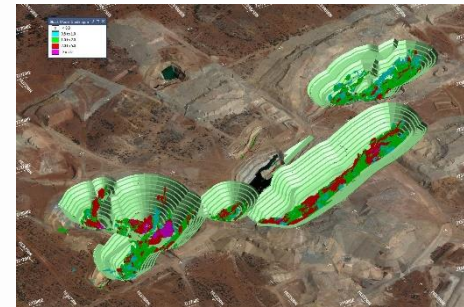
## Producers - EV / Reserve (A\$/oz AuEq)



# Blackham's Matilda Vision



- Blackham is focused on its 100% owned Matilda Gold Project in Western Australian with 4.7Moz resources
- Plan for 100,000ozpa<sup>1</sup> gold production with low risk start up
- Working towards a 10 year mine life focusing on the free milling ores at the front end
- Very low capital – A\$28M and short development period
- Targeting normalised EBITDA \$45Mpa
- High return opportunity for shareholders
- Well funded for **target production by mid 2016**, subject to approvals
- The Board's policy is to pay a dividend at the earliest responsible time it is in a position



1. Refer to Announcement of 21 October 2015.

# Disclaimers & Important Information



This presentation includes certain statements that may be deemed 'forward-looking statements'. All statements that refer to any future production, resources or reserves, exploration results and events or production that Blackham Resources Ltd ('Blackham' or 'the Company') expects to occur are forward-looking statements. Although the Company believes that the expectations in those forward-looking statements are based upon reasonable assumptions, such statements are not a guarantee of future performance and actual results or developments may differ materially from the outcomes. This may be due to several factors, including market prices, exploration and exploitation success, and the continued availability of capital and financing, plus general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance, and actual results or performance may differ materially from those projected in the forward-looking statements. The Company does not assume any obligation to update or revise its forward-looking statements, whether as a result of new information, future events or otherwise.

*The information contained in the report that relates to Exploration Targets and Exploration Results at the Matilda Gold Project is based on information compiled or reviewed by Mr Cain Fogarty, who is a full-time employee of the Company. Mr Fogarty 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 which is being undertaken 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 Fogarty has given consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.*

*The information contained in the report that relates to Mineral Resources is based on information compiled or reviewed by Mr Marcus Osiejak, who is a full-time employee of the Company. Mr Osiejak, is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken 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 Osiejak has given consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.*

*With regard to the Matilda Gold Project Mineral Resources, the Company is not aware of any new information or data that materially affects the information included in this report and that all material assumptions and parameters underpinning Mineral Resource Estimates as reported in the market announcements dated 29<sup>th</sup> January 2016 continue to apply and have not materially changed.*

*The information contained in the report that relates to ore reserves at the Matilda Gold Project is based on information compiled or reviewed by Matthew Keenan. Matthew Keenan confirmed that he has read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 JORC Edition). He is a Competent Person as defined by the JORC Code 2012 Edition, having five years' experience which is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which he is accepting responsibility. He is a Member of The Australasian Institute of Mining and Metallurgy, has reviewed the Report to which this consent statement applies and is an employee working for Entech Pty Ltd having been engaged by Blackham Resources Ltd to prepare the documentation for the Matilda Gold Project on which the Report is based, for the period ended 19 October 2015. He disclosed to the reporting company the full nature of the relationship between himself and the company, including any issue that could be perceived by investors as a conflict of interest. He verifies that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in his supporting documentation relating to Ore Reserves.*

# Contact Details



**BRYAN DIXON**  
MANAGING DIRECTOR



**Office** Level 2, 38 Richardson Street  
West Perth WA 6005

**Post** PO Box 1412,  
West Perth WA 6872

**Email** [admin@blackhamresources.com.au](mailto:admin@blackhamresources.com.au)

**Tel** (+61 8) 9322 6418 | **Fax** (+61 8) 9322 6398

**Website** [www.blackhamresources.com.au](http://www.blackhamresources.com.au)

ASX Code: **BLK**

**Project partners:**



# Directors & Management



## **Mr Milan Jerkovic** Non-Executive Chairman

Mr Jerkovic has over 30 years of experience in the mining industry with frontline experience building, running, financing and managing mining assets through the commodity cycle. His skill set will contribute geological appraisal, mine development and financial markets experience. Mr Jerkovic was CEO of Straits Resources Limited and has held positions with WMC, BHP, Nord Pacific, Hargraves and Tritton. Mr Jerkovic was the Chairman of Straits Asia Resources and saw the company through its substantial growth phase until its successful takeover in 2011. Milan's gold operations experience includes Kurrara Gold Mines, Hillgrove Gold, Browns Creek and Mt Muro.

## **Bryan Dixon** Managing Director

Bryan's skills and experience include project acquisition, mine development and financing. Has been involved in development and financing of 3 gold mines. Having previously worked with KPMG, Resolute Limited and Archipelago Resources Plc, he has substantial experience in the mining sector and the management of listed public companies.

## **Alan Thom Executive Director** Mining Engineer

Alan, a mining engineer, has extensive mining experience. He holds a Western Australian First Class Mine Managers Certificate and has held statutory mine and management positions for Newmont in both underground and open-pit operations at Jundee and Bronzewing. Alan has managed a number of definitive and bankable feasibility studies for significant resource projects.

## **Paul Murphy** Independent Non-Executive Deputy Chairman

Mr Murphy is a former banker with extensive experience in finance, strong relationships within the banking, finance and broking community as well as an impeccable reputation in the industry

## **Greg Miles Non Executive Director** Non-Executive Director

Greg graduated as a geologist and has since worked in a number of different commodities and mineral provinces across a broad portfolio of grass-roots to development projects. Professional highlights include involvement in the discovery of the 2.3Moz Centenary Deposit at the Darlot Gold Mine in WA.

## **Peter Rozenauers** Non-Executive Director

Mr. Rozenauers has extensive experience in commodities, equities and FX. Peter earned a BEng (Honours 1) in Mining from the University of NSW and a Masters in Applied Finance from the University of Technology Sydney.

## **Mr Richard Boffey Matilda General Manager** Mining Engineer

Mr Boffey is an internationally experienced mining executive with over 26 years' experience specialising in mining project start-ups, mine management, feasibilities and continuous improvement. He has a successful track record of delivering mining projects through the various phases of planning, permitting, construction and full operations including Efemcukuru Gold Mine in Turkey (Eldorado) and the Wallaby UG project for Granny Smith Mines. Richard has a First Class Mine Manager's Certificate & a Bachelor of Mining Engineering (Hons).

## **Mr Jeff Dawkins, CFO**

Mr Dawkins is a Chartered Accountant with 25 years' experience predominantly in the mining sector. Prior to joining Blackham, Jeff was CFO of Hanking Gold Mining, during which time, Hanking took the Marvel Loch Gold Project from care and maintenance into production. He was CFO of Archipelago Resources as it successfully developed and transitioned into production the Toka Tindung Gold Project in Indonesia.

## **Mike Robbins** Company Secretary

Mr Robbins has well over 20 years resource industry experience gathered at both operational and corporate levels within Australia and overseas.

## **Stewart McCallion, Study Manager**

Stewart has worked on gold mining projects in Burkina Faso, Ghana, Laos, Sweden and Western Australia (Paddington, Kanowna Belle & Thunderbox). Stewart has held senior engineering & management roles through from feasibility to detailed engineering and construction, commissioning, operations & closure.

## **Craig Bartle** Plant & Metallurgical Manager

Craig Bartle is a metallurgist with extensive experience in the resources industry. He was a senior metallurgist at Wiluna for Apex, Oxiana, and Agincourt Resources and previously worked at Beaconsfield gold mine.

## **Cain Fogarty** Exploration Manager

Mr Fogarty has broad experience in greenfields and near-mine exploration, in Australia and internationally. Previously, Mr Fogarty has worked with Barrick Gold Corp, Equinox Minerals and CSA Global.

## **Marcus Osiejack** Senior Resource Geologist

Marcus has expertise in a variety of underground and open pit gold operating roles with technical skills including resource modelling, estimation and grade control. Having previously worked at Lawlers, Darlot and numerous gold projects within Western Australia.

# Appendix A: Gold Resources



Mining Centre	Matilda Gold Project Resource Summary											
	Measured			Indicated			Inferred			Total 100%		
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Matilda Mine	0.2	2.1	13	7.4	1.8	426	5.3	1.7	285	12.9	1.8	<b>724</b>
Williamson Mine				2.7	1.7	150	3.6	1.7	200	6.3	1.7	<b>350</b>
Regent				0.7	2.7	61	3.1	2.1	210	3.9	2.2	<b>270</b>
Galaxy				0.4	3.0	38	0.4	2.2	28	0.8	2.6	<b>66</b>
Golden Age				0.4	4.5	62	0.7	3.5	88	1.1	4.4	<b>150</b>
Bulletin South OP				0.8	3.1	80	1.6	3.5	180	2.4	3.3	<b>260</b>
East Lode				1.0	5.2	170	2.3	4.7	340	3.3	4.8	<b>510</b>
West Lode				1.4	5.5	240	2.8	5.2	460	4.2	5.3	<b>700</b>
Henry 5 - Woodley - Bulletin Deeps				2.1	5.9	400	0.8	4.6	120	2.9	5.6	<b>520</b>
Burgundy - Calais				1.3	6.0	250	0.3	5.7	60	1.6	6.0	<b>310</b>
Happy Jack - Creek Shear				1.5	5.9	290	1.3	4.8	200	2.9	5.4	<b>490</b>
Other Wiluna Deposits				0.8	4.3	106	1.5	4.0	195	2.3	4.1	<b>301</b>
<b>Total</b>	<b>0.2</b>	<b>2.1</b>	<b>13</b>	<b>20</b>	<b>3.5</b>	<b>2,273</b>	<b>24</b>	<b>3.1</b>	<b>2,366</b>	<b>45</b>	<b>3.3</b>	<b>4,651</b>

Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location shape and continuity of the occurrence and on the available sampling results. The figures in the Table above are rounded to two significant figures to reflect the relative uncertainty of the estimate. See 29<sup>th</sup> January 2016 ASX announcement.

# Appendix B: Gold Reserves



Mine	Classification	Tonnes (t)	Grade (g/t)	Metal (oz. Au)
<b>OPEN PIT</b>				
Matilda Pits	Proved	175,000	1.9	10,900
Matilda Pits	Probable	2,296,000	1.8	131,700
<b>Total Matilda Pits</b>	<b>Total</b>	<b>2,471,000</b>	<b>1.8</b>	<b>142,600</b>
Galaxy	Probable	184,000	3.0	18,100
<b>Total Open Pits</b>	<b>Total</b>	<b>2,655,000</b>	<b>1.9</b>	<b>160,700</b>
<b>UNDERGROUND</b>				
East West	Probable	504,000	5.5	88,900
Golden Age	Probable	81,000	5.4	14,000
<b>Total UG</b>	<b>Probable</b>	<b>585,000</b>	<b>5.5</b>	<b>102,900</b>
<b>STOCKPILES</b>				
<b>Total Stockpiles</b>	<b>Probable</b>	<b>124,000</b>	<b>1.7</b>	<b>6,900</b>
<b>OPERATION TOTALS</b>				
<b>Operation Total</b>	<b>Proved</b>	<b>175,000</b>	<b>1.9</b>	<b>10,900</b>
<b>Operation Total</b>	<b>Probable</b>	<b>3,189,000</b>	<b>2.5</b>	<b>259,400</b>
<b>Operation Total</b>	<b>Total</b>	<b>3,364,000</b>	<b>2.5</b>	<b>270,300</b>

**Very strong conversion of mining inventory to reserves to date**

Mineral Reserve estimates are not precise calculations. The figures in the Table above are rounded to two significant figures to reflect the relative uncertainty of the estimate. See 21<sup>th</sup> October 2015 ASX announcement.