



**BLACKHAM**  
Resources Limited

# Matilda gold production next quarter AMEC Conference

June 2016

ASX : BLK





**BLACKHAM**  
Resources Limited

## NEAR TERM GOLD PRODUCER WITHIN MONTHS



- **+100,000ozpa Matilda Gold Project targeting production by Sept 2016 quarter**
- Feasibility confirms robust economics with low risk start up strategy  
NPV<sub>7%</sub> 195M, IRR 155%, Payback 11mths, EBITDA +\$63Mpa
- 8 year mine life, aiming for 10 years across 4 large geological systems
- Refurbishment of gold plant well advanced
- 4.8Moz Au resource & 780km<sup>2</sup> landholding in Australia's biggest gold belt
- Market cap ~ A\$119M with strong liquidity = A\$22/resource oz
- **Gold production forecast at 25,000oz in Dec 2016 Quarter**

# Corporate Information



## CAPITAL STRUCTURE

Market cap. @ A\$0.47	A\$119M
Shares on issue	253M
Options @ avg \$0.25/share	34M
Cash & investments @ 31 Mar 2016	A\$26M
Debt @ 31 Mar 2016	A\$13.9M
Undrawn debt facility	A\$23M

## SHAREHOLDER ANALYSIS

<b>Top 20</b>	<b>62%</b>
Citicorp Nominees	10.9%
HSBC Nominees	10.5%
Orion Mine Finance	9.8%
National Nominees	4.7%
UBS Nominees	4.5%
Directors & management (fully diluted)	<b>11.0%</b>

## 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
Greg Miles	Non-Executive Director	Geology & Feasibility
Peter Rozenauers	Non-Executive Director	Mining Finance & Corporate





## Blackham Strategy

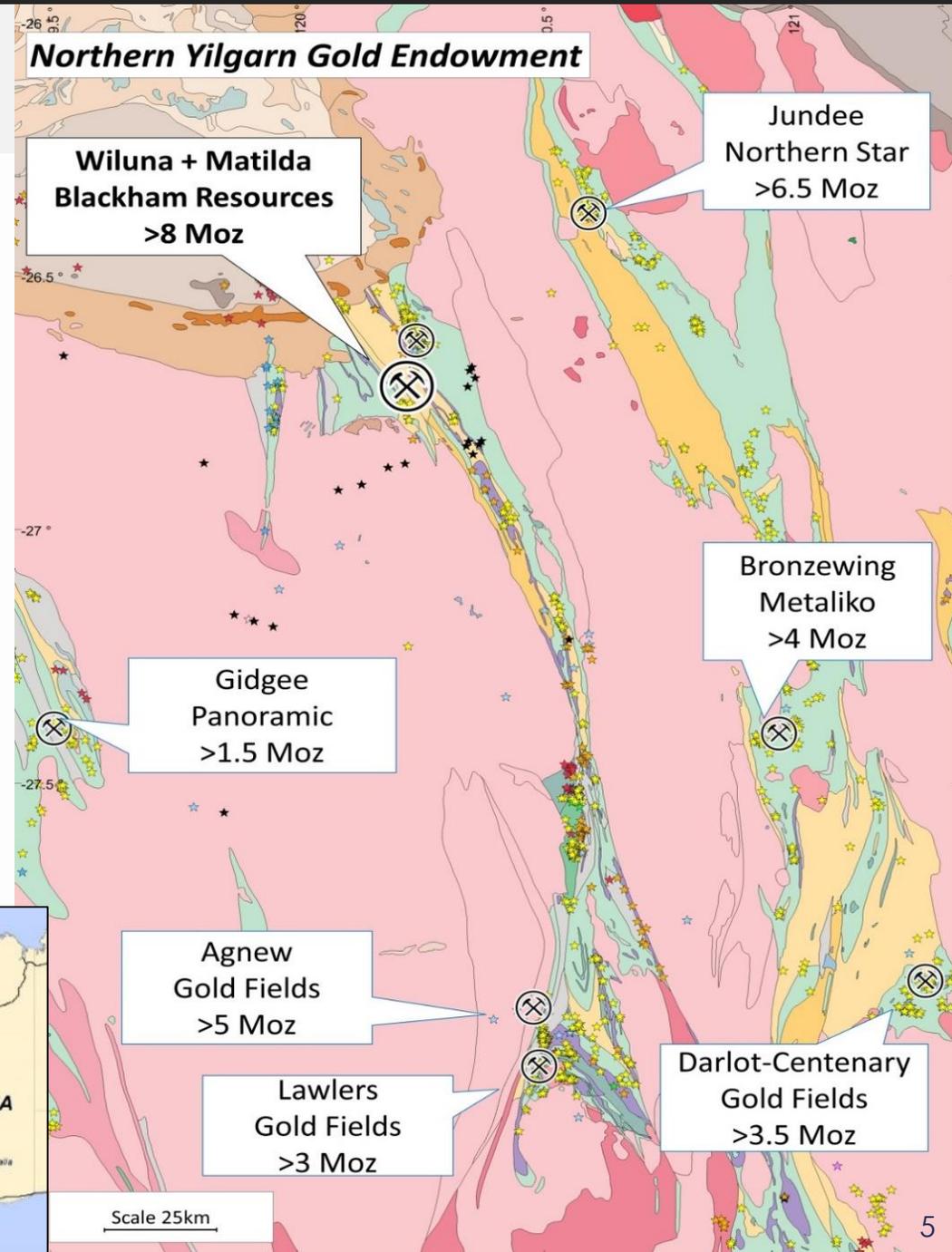
- Australia's next +100,000ozpa gold producer with EBITDA \$63Mpa
- Strengthen and lengthen reserves profile
- Game changing discoveries and opportunistic bolt on acquisitions

## Matilda Strategy

- **Gold production next quarter from oxides & high grade free milling reefs**
- Low risk start up with soft free milling ore will be used to repay debt
- Exploration focused on high grade reefs & base load ore out of Matilda and Lake Way open pits
- Huge optionality of the Wiluna sulphides - 3.3Moz @ 4.6g/t
- Working towards a sustainable long term mine plan
  - 5 year reserves & 8 years including mining inventory
  - **Targeting 10 year mining inventory & long term sustainable operation**
- **Working on options to increase production significantly > 100,000ozpa**

# Regional Endowment

- Large, highly prospective tenement holding
- Within Australia's largest gold belt stretches from Norseman through Kalgoorlie 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

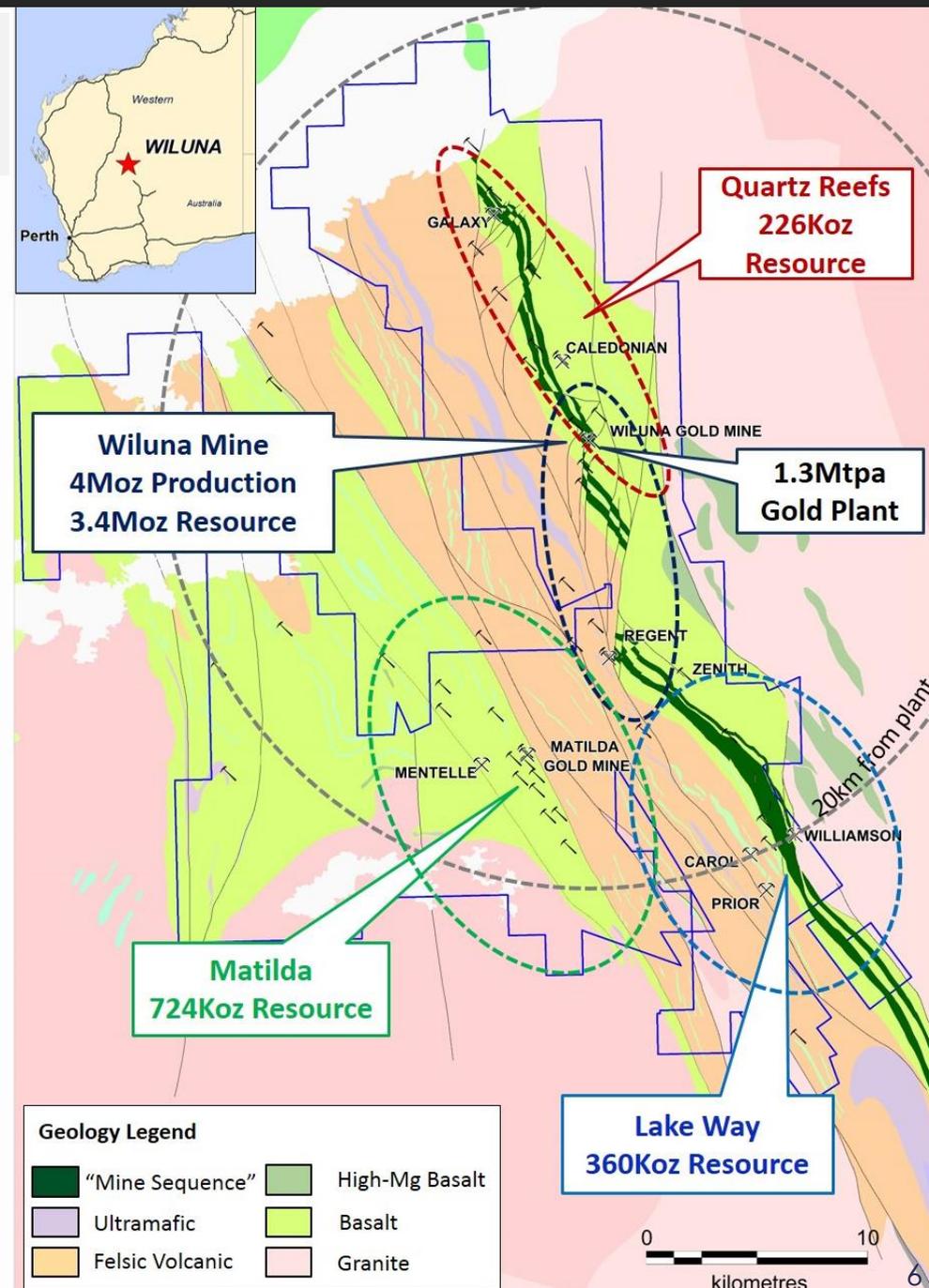


# Matilda Gold Project an embarrassment of riches

- Resource **45Mt @ 3.3 g/t for 4.8Moz Au**  
– 50% indicated resource level
- Reserves **6.4Mt @ 2.5 g/t for 517,000oz Au**
- Consolidated Wiluna goldfield with all deposits within 20km of plant
- Mix of open pit & high grade UG ore
- +780km<sup>2</sup> of tenure & 55km of strike
- 4 large geological systems – 3 are under explored

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

- Averaged gold production of 101,000ozpa over the last 27 years of operations



# Matilda confirms Robust Economics



**+100,000ozpa production in months**

## Economics

Mine plan	<b>8.5Mt @ 3.0g/t for 833,000oz Au</b>
<b>Reserves</b>	<b>6.4Mt @ 2.5g/t for 517,000oz Au</b>
Gold price	<b>A\$1,600/oz - USD\$1,200/oz &amp; 75c</b>
Payback	<b>11Mths</b>
C1 Cash Costs	<b>A\$850/oz or US\$640/oz</b>
All in Sustaining Costs	<b>A\$1,140/oz or US\$870/oz</b>
Capex	<b>A\$32M</b>
Project cash flow	<b>A\$271M over initial 8 years</b>
NPV <sub>7%</sub> before corp and tax	<b>A\$195M or \$0.78/share</b>
IRR <sub>before corp and tax</sub>	<b>155%</b>
<b>EBITDA</b>	<b>A\$63M per annum</b>



**Production planned next quarter**

\* Refer to Announcement of 29 April 2016

# Wiluna plant refurbishment is well advanced



- Free milling Plant up to 1.7Mtpa capable of +100kozpa
- Cheap gas power & diesel backup
- Permitted borefields and water solution in place
- 350 room village – 100 rooms available & 180 under refurbished
- Sealed airstrip and roads
- Biox circuit capable of treating 800tpa refractory ores
- UG infrastructure already in place
- Mining approvals in place
- **Existing infrastructure minimizes capex, risk and development**
- **Refurbishing the gold plant well advanced**



# Wiluna plant refurbishment photos



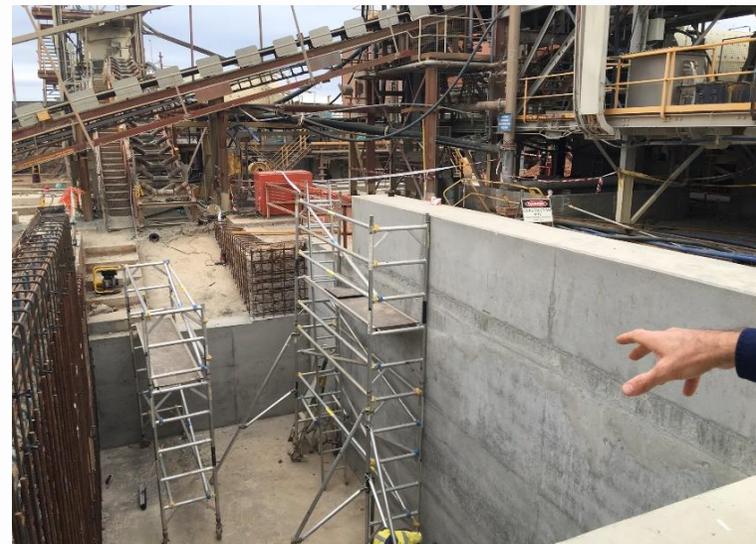
**Photo 1: Wiluna Gold Plant**



**Photo2: Repaired Crusher Footings**



**Photo3: Fixing Crusher hopper lining**



**Photo4: Mill1 Feed Vault Repair**



**Photo5: Mill 1 Feed Hopper and Feeder**



**Photo6: Running cable to Mill2**

# Wiluna plant & Infrastructure refurbishment photos



**Photo7: Concrete pour for new leach bunds**



**Photo8: Final Leach Draught  
Tube Removed**



**Photo9: New leach tank floor**



**Photo10: Diesel generators installed**



**Photo11: TSF Contractor's fleet mobilised**

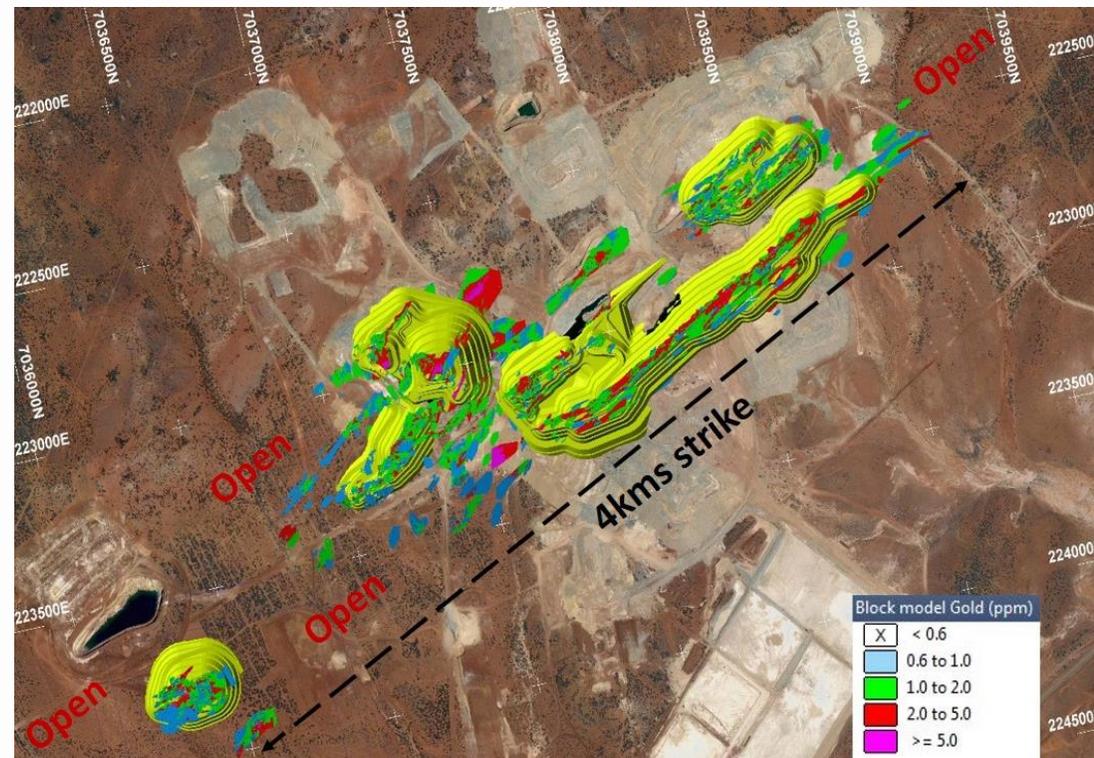
# Matilda Mine – base load ore and growing



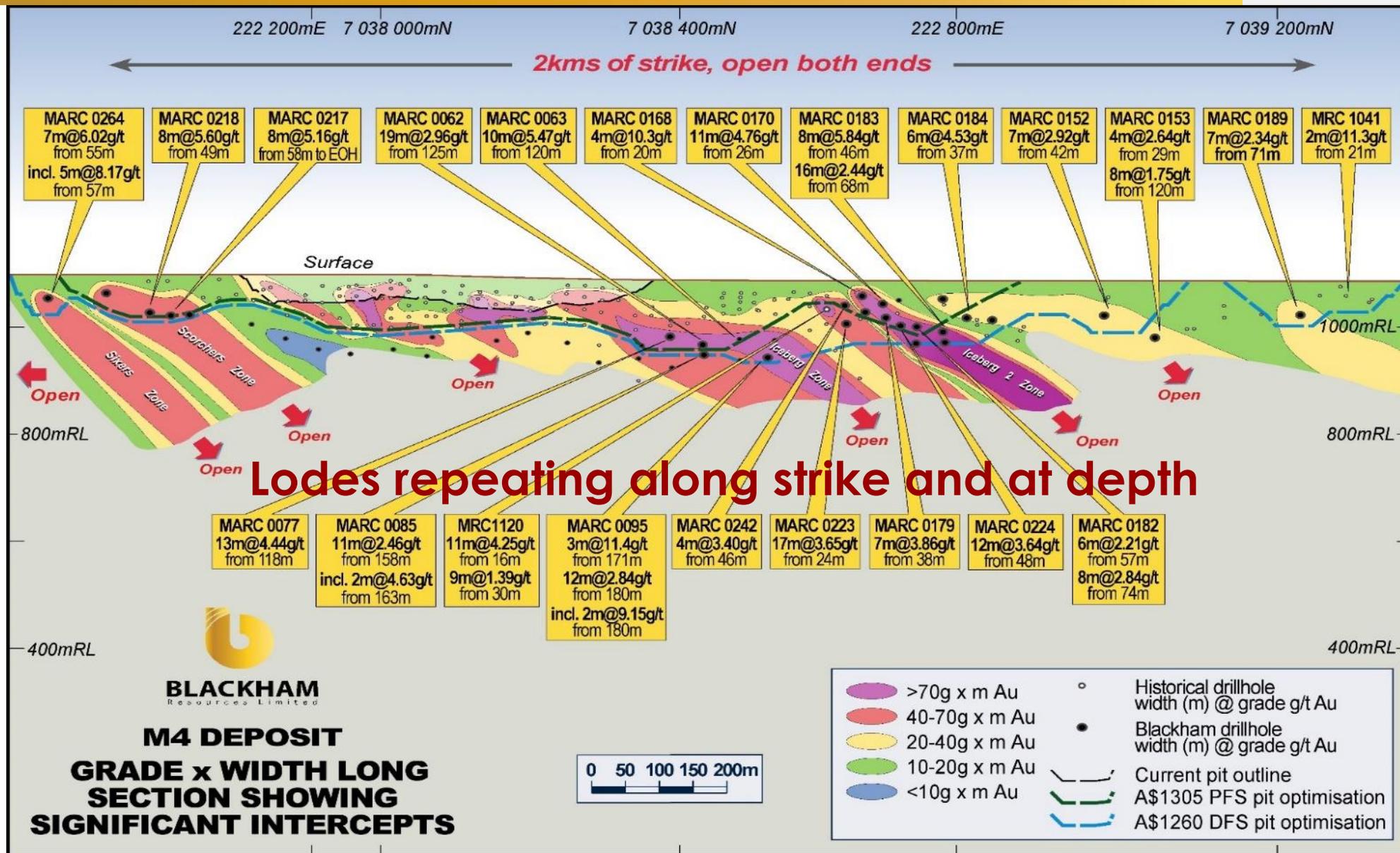
- 10kms stacked, repeating gold lodes
- Soft, deeply weathered oxide ore
- Ineffective historical RAB requiring RC follow up along strike and at depth
- Production (1987-1993):
  - 2.2 Mt@ 2.6g/t = 181,000oz au
- Mineral Inventory continues to grow
  - 3.0Mt @ 1.8g/t for 190,000oz Au
  - 93% indicated resource
  - Gravity & leach recoveries 93%
  - Soft rock and ore with significant free digging

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

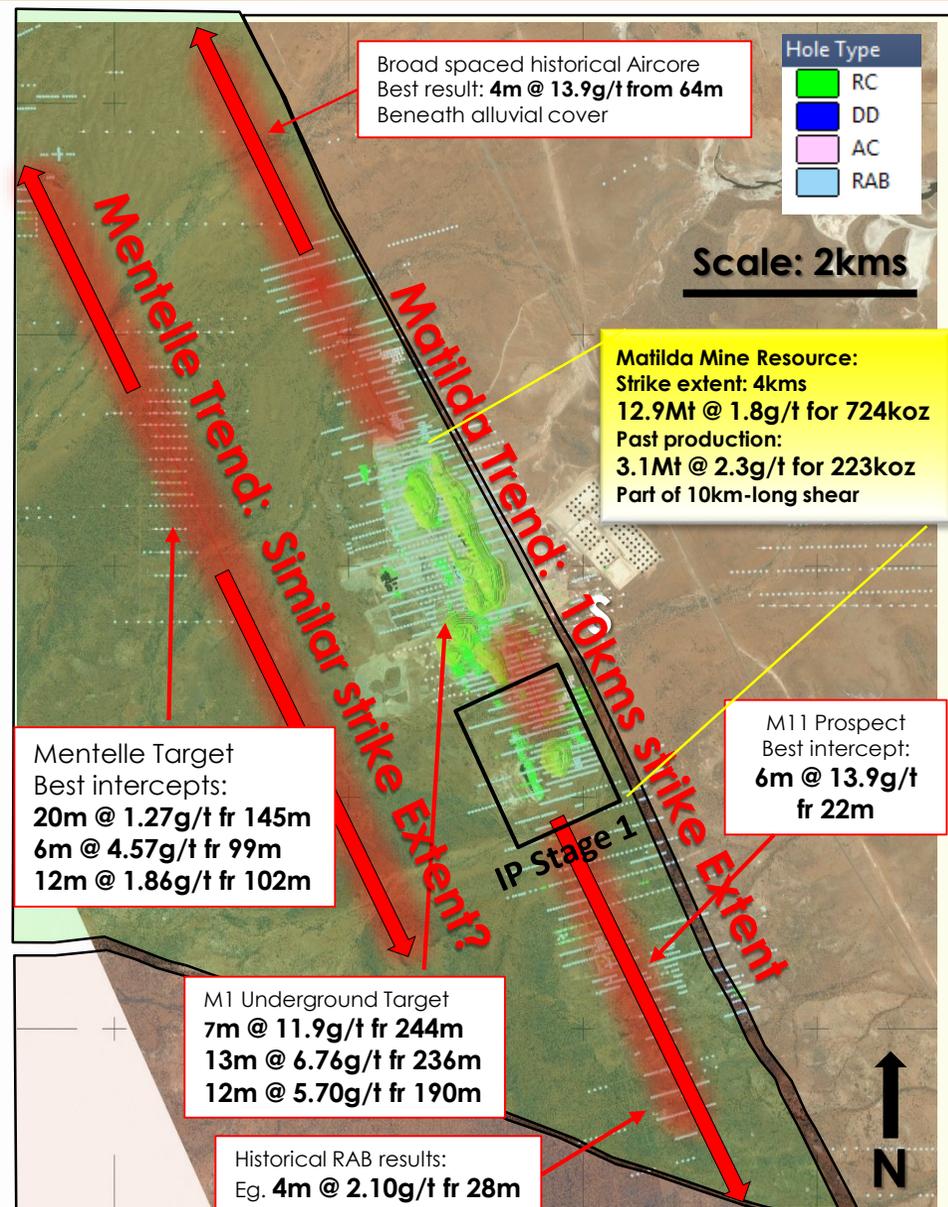
RESOURCES	Mt	g/t Au	Oz Au
Measured	0.2	2.1	14,000
Indicated	7.4	1.8	425,000
Inferred	5.3	1.7	285,000
<b>TOTAL</b>	<b>12.9</b>	<b>1.8</b>	<b>724,000</b>



# Matilda - high grade shallow repeating lodes

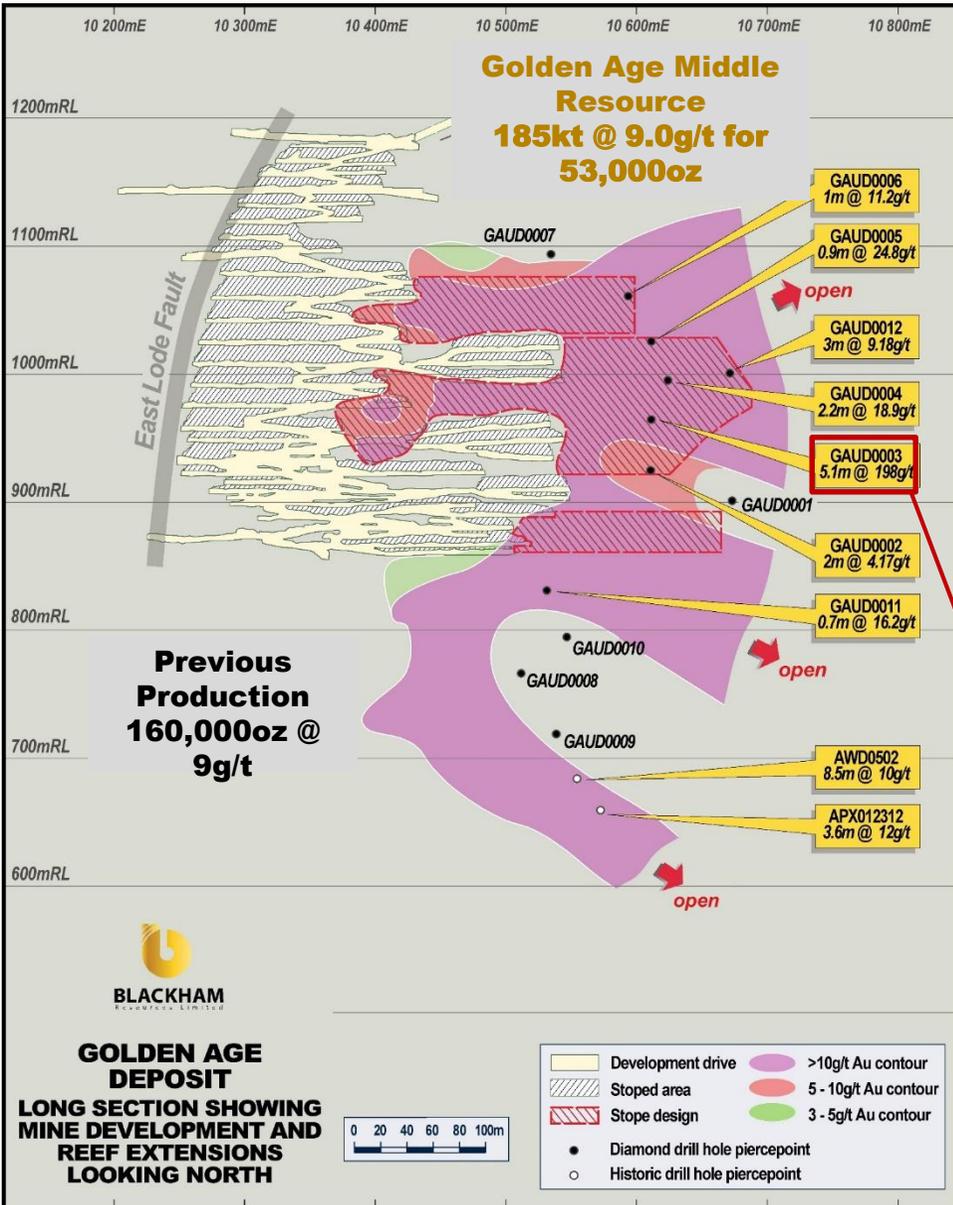


# Matilda regional stacking & repeating lodes



- **>10kms of prospective shear zone**
- Historical drilling identified mineralisation up to 3km from the mine area
- **Alluvial cover to north & south an impediment to previous exploration**
- Mentelle Trend - prospective Matilda look-a-like shear?
- **Utilise gradient-array IP (GAIP) geophysical survey to detect Au + sulphides: characteristic of M1-M6-M10**
- **Large RAB program to test basement**
- **Targeting new Matilda-sized mine ~ 1Moz**

# Golden Age – high grade quartz reef

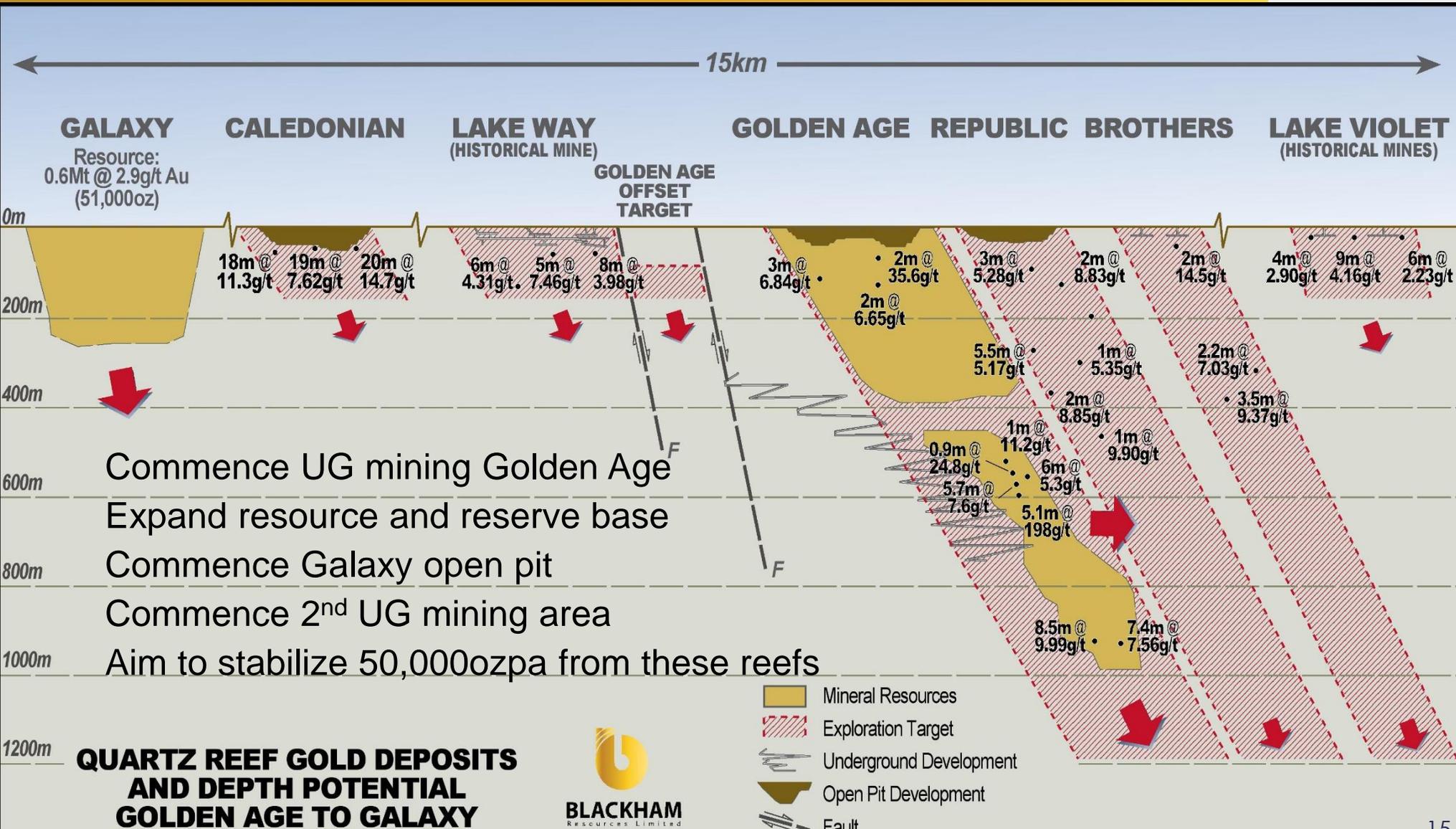


- Produced 160,000oz Au @ 9.0g/t
- Middle Resource 183kt @ 9.0g/t for 53,000oz
- Drill composites in middle average 14.0g/t**
- DFS gravity leach recovery 93%
- Approvals in place
- UG Mining to commence in July

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>



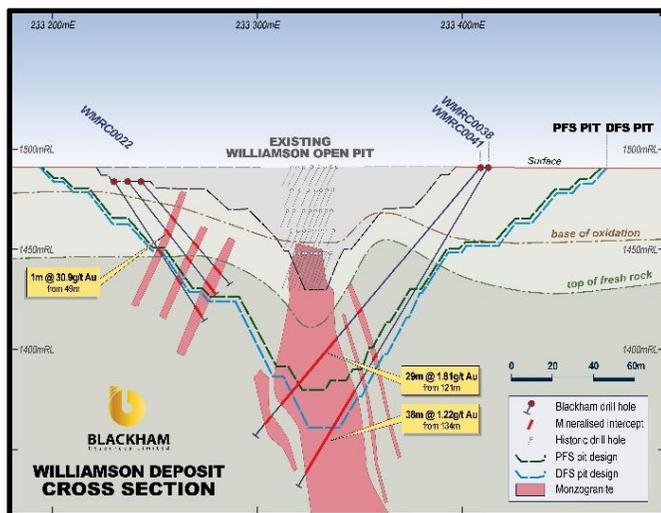
# High grade quartz reefs strategy



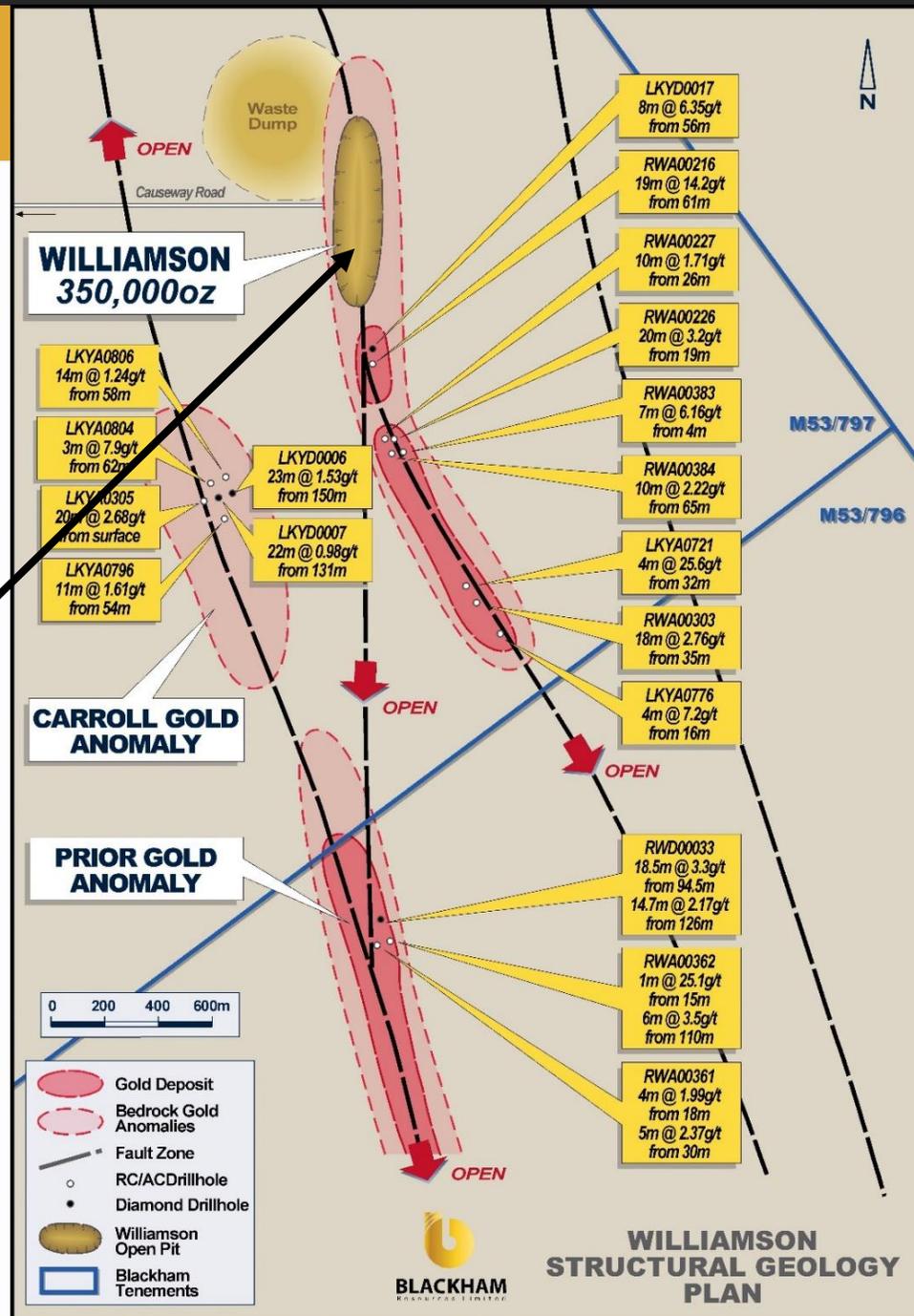
# Lake Way - large mineralized system

- 19km south along strike from Wiluna
- large tonnage potential** Williamson
- historically produced 663kt@2.0g/t for 42,000Au
- Free milling **95%** DFS recoveries
- Main lode up to **40m wide**
- High grade underground gold

**3m@40.1g/t**  
**4.3m@17.0g/t**  
**3.5m@35.5g/t**  
**2m @ 95.1g/t**

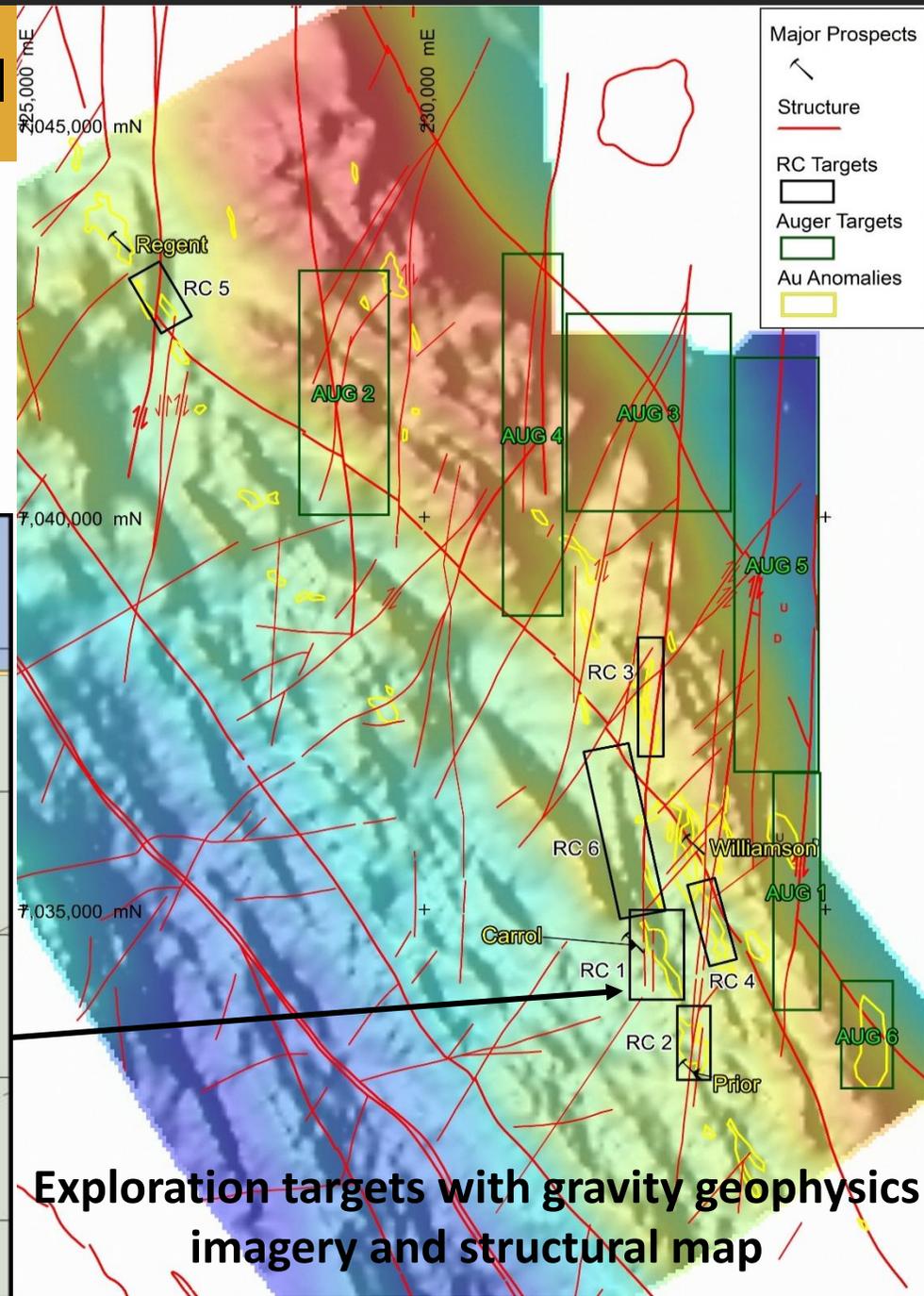
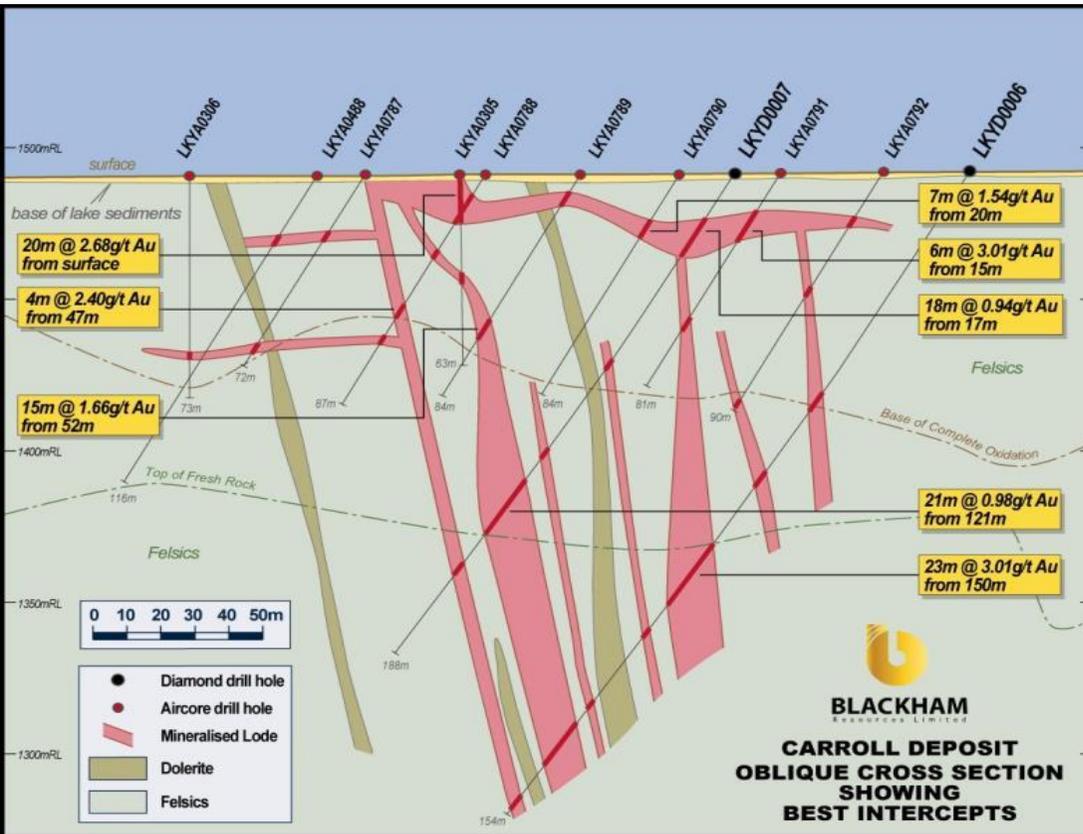


RESOURCES	Mt	g/t Au	Oz Au
Indicated	3.3	1.6	170,000
Inferred	3.8	1.6	190,000
<b>TOTAL</b>	<b>7.0</b>	<b>1.6</b>	<b>360,000</b>



# Lake Way large tonnage potential

- 2.5kms of strike with continuous mineralisation
- Potential large tonnage, near surface
- SAM's surveys defined structure. Existing auger & air core. Gravity and seismic surveys competed
- Very limited drilling into primary mineralisation

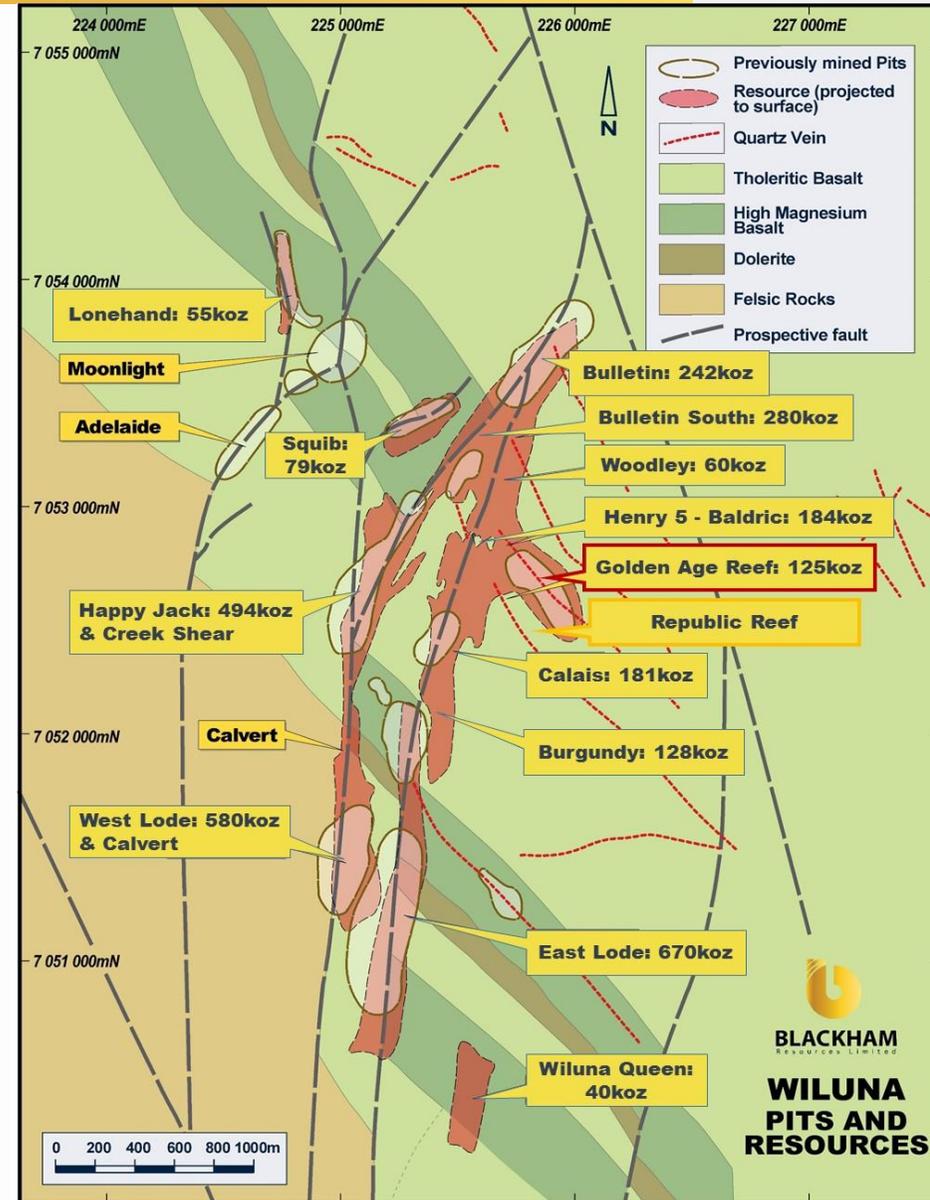


Exploration targets with gravity geophysics imagery and structural map

# High grade Wiluna sulphide ores a big prize



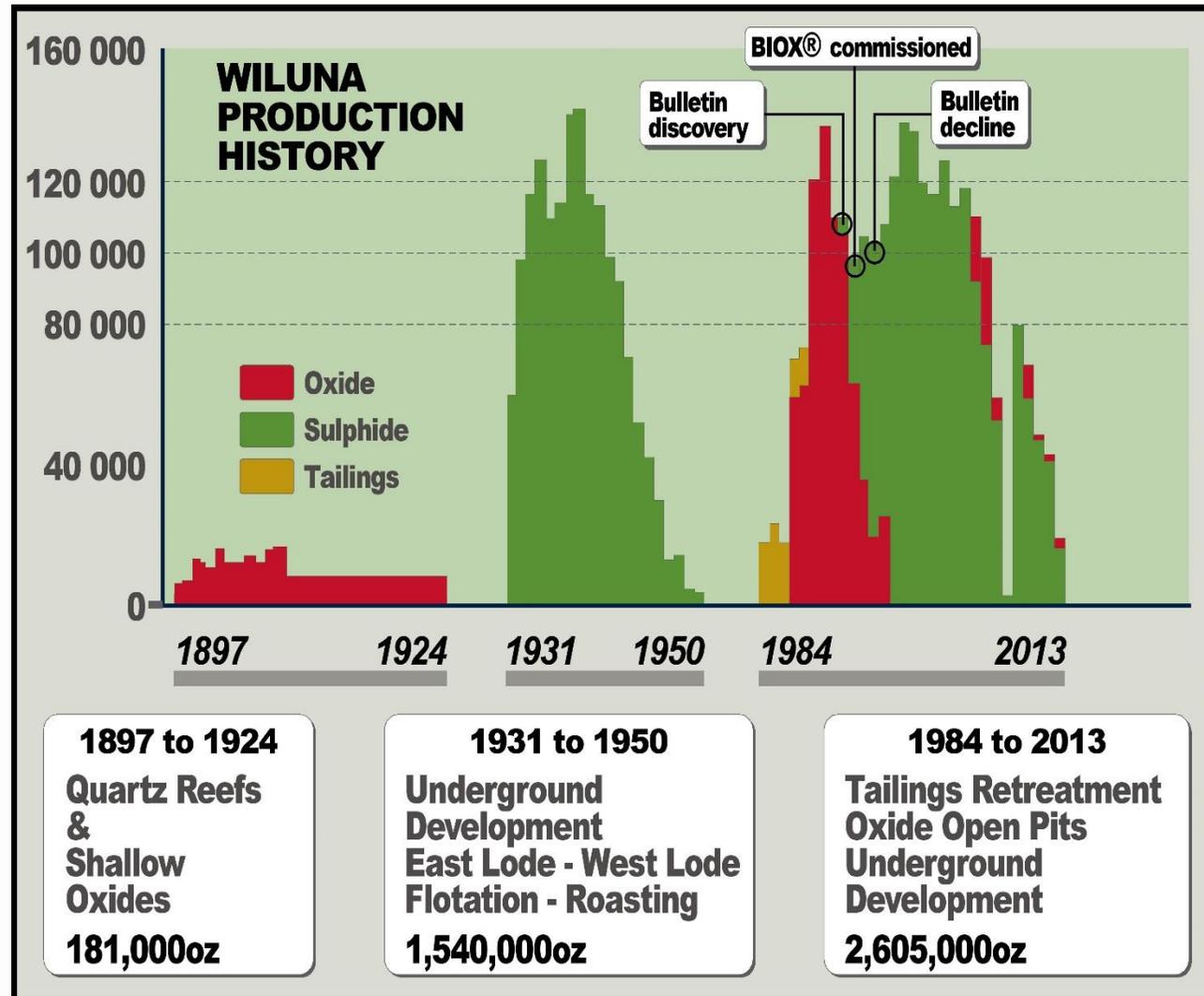
- Sulphide resources - 22Mt @ 4.6g/t for 3.3Moz
  - 2g/t bottom cut
- Underground 11Mt @ 6.3g/t for 2.3Moz
  - 4g/t bottom cut
- Limited drilling required with 50% of resources indicated
- Substantial mine development in place
- 83% average recoveries over last 20 years
  - Opportunities to improve floatation recoveries – test work ongoing
- Operating history gives good understanding of costs
- **DFS confirms sulphides are economic**
  - **AISC A\$1,150/oz**



# History of the Wiluna Mine and Plant



- ▶ 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



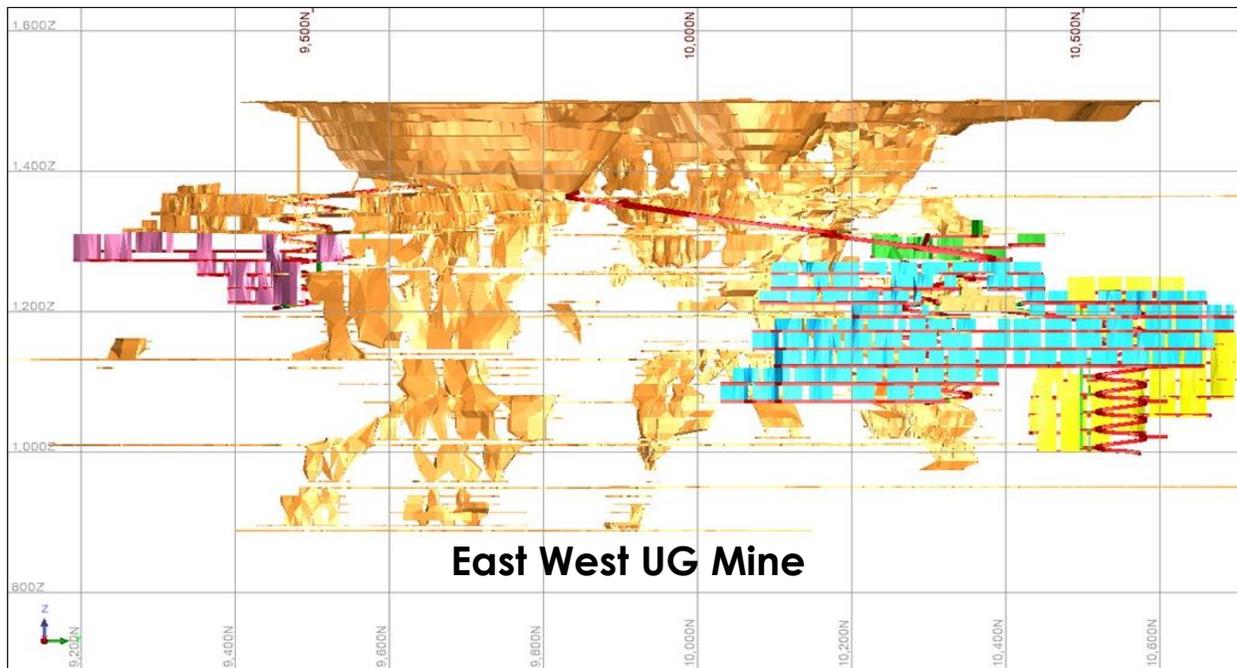
# Bulletin UG and East West mining solutions



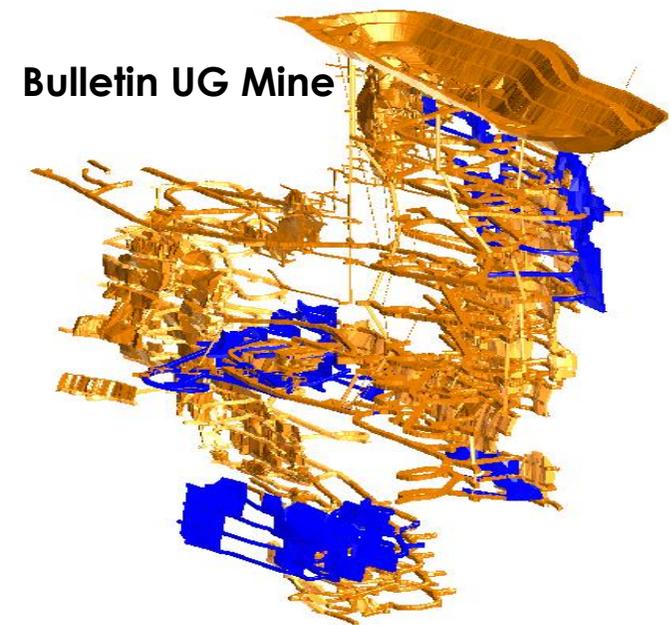
2 declines <600m deep with short haul to surface  
Long hole open stoping with 5.0g/t diluted ore grade  
Leveraging off development chasing the ore laterally

**DFS confirms economics 4 month payback**

Limited drilling and mining studies ongoing to grow the reserves

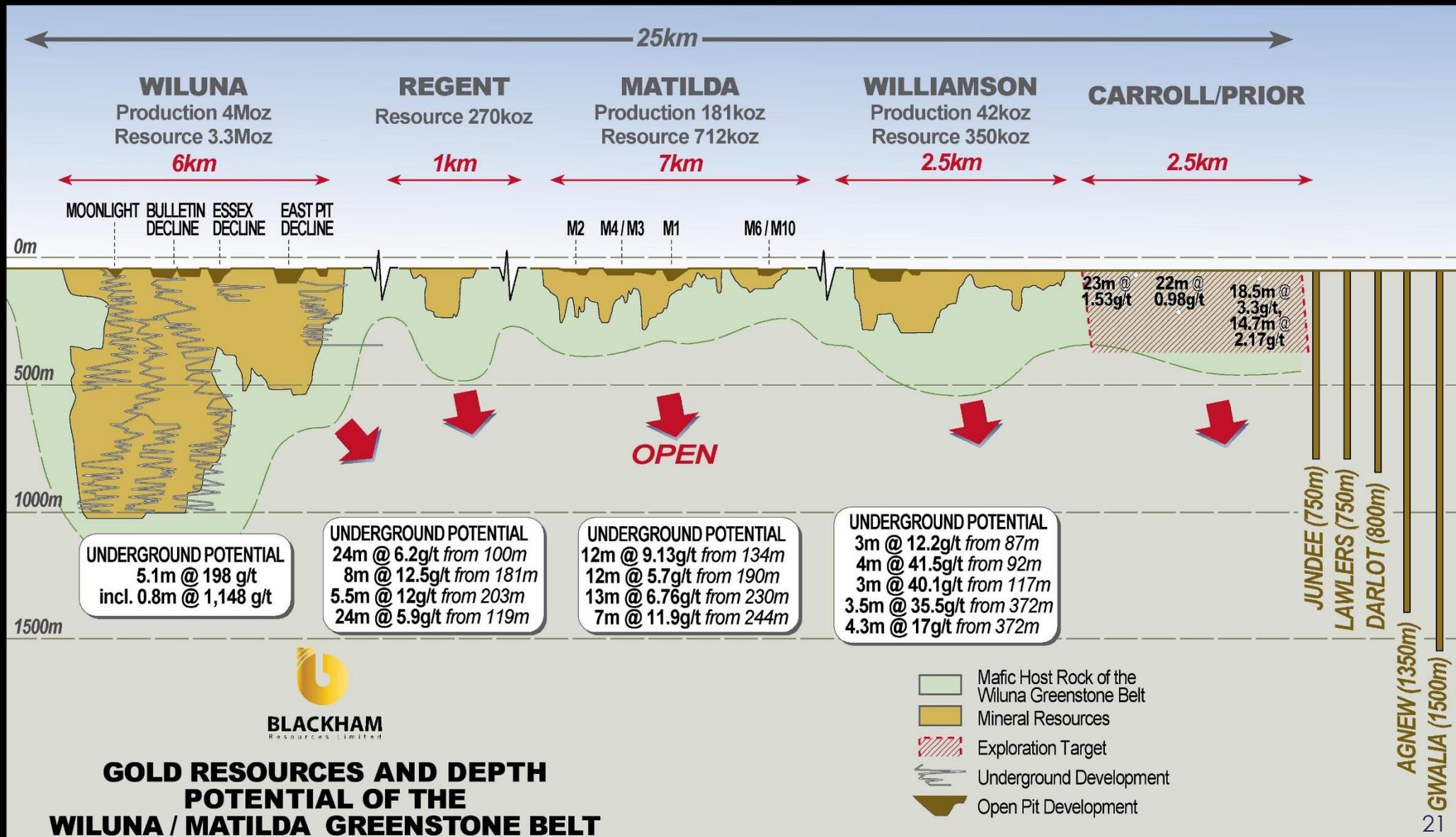


East West long section looking west showing old stopes and UG mine design



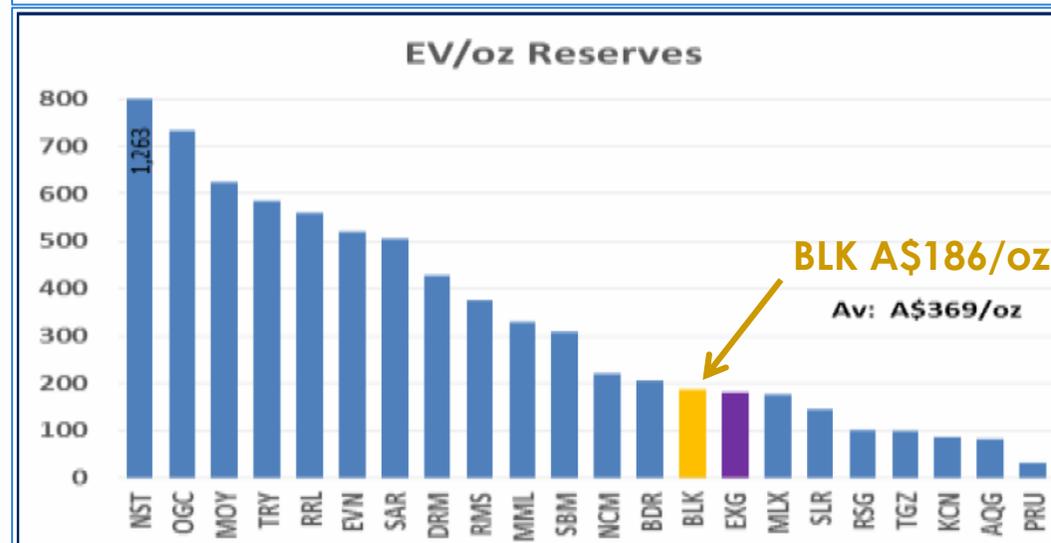
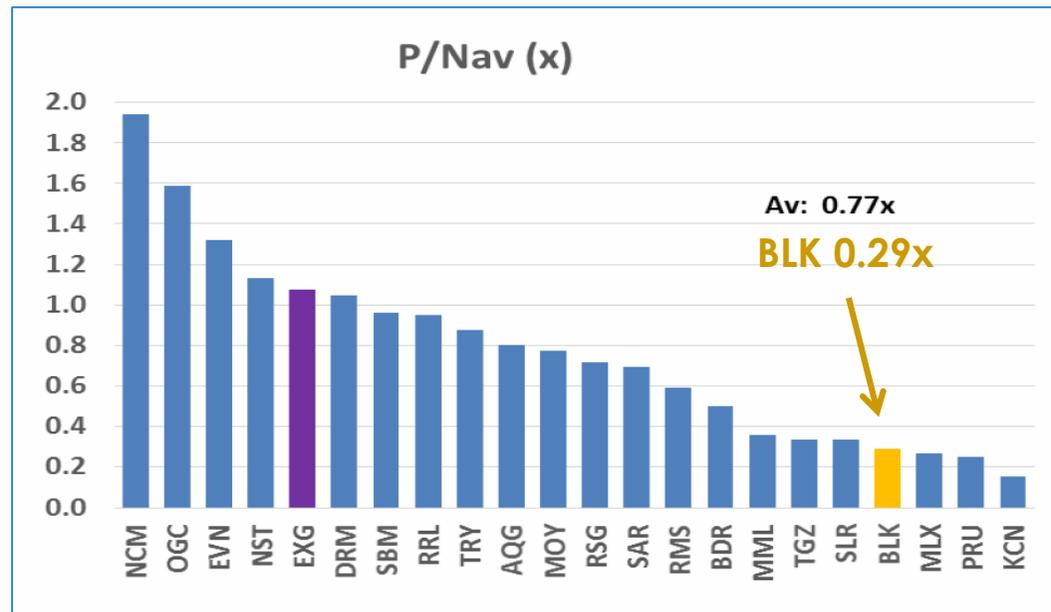
Oblique section looking south west - Bulletin UG mine design

# Just scratching the surface



## GOLD RESOURCES AND DEPTH POTENTIAL OF THE WILUNA / MATILDA GREENSTONE BELT

# Australian Gold Producer Peers



# Blackham's Matilda Vision



- Blackham is focused on its 100% owned 4.8Moz Matilda Gold Project in Western Australian
- +100,000ozpa<sup>1</sup> gold production with low risk start up
- 5 years reserves & 8 years in mine plan and growing
- Low capital – A\$32M and production inside 3 months
- High return opportunity for shareholders EBITDA +\$63Mpa
- **Target production by Sept 2016**
- **Large resource aiming to grow production significantly beyond 100,000ozpa**



# 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 14<sup>th</sup> March 2016 and 13<sup>th</sup> May 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 12 April 2016. 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.*

# Directors & Management



## **Mr Milan Jerkovic** Non-Executive Chairman Corporate & Mining

Mr Jerkovic has over 30 years of experience in the mining industry. 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. Milan's gold operations experience includes Kurrara Gold Mines, Hillgrove Gold, Browns Creek and Mt Muro.

## **Bryan Dixon** Managing Director Corporate & Mining

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 & COO** 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.

## **Greg Miles Non Executive Director** Geologist

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 Banking & Finance

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.

## **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.

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

Mr Boffey is a 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.

## **Mr Bruce Kendall,** Chief Geological Officer

Mr Kendall has over 20 years' experience in managing greenfield and brownfield exploration in gold and base metals. He was a joint winner of the 2012 AMEC Prospector of the Year and has previously been employed by the Independence Group, Jabiru Metals and AngloGold Ashanti.

## **Mr Jeff Dawkins,** CFO

Mr Dawkins is a Chartered Accountant with 25 years' experience predominantly in the mining sector. Previously, Jeff was CFO of Hanking Gold Mining as they re-commissioned the Marvel Loch Gold Project. He was CFO of Archipelago Resources as it successfully developed and transitioned into production the Toka Tindung Gold Project in Indonesia.

## **Stewart McCallion,** Plant Refurbishment 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 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.

# 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	724
Golden Age				0.4	4.5	62	0.7	3.5	88	1.1	4.4	150
Galaxy				0.4	3.0	38	0.4	2.2	28	0.8	2.6	66
Williamson Mine				3.3	1.6	170	3.8	1.6	190	7.1	1.6	360
Regent				0.7	2.7	61	3.1	2.1	210	3.8	2.2	271
Bulletin Upper				0.9	4.2	120	0.7	5.5	130	1.6	4.8	250
Henry 5 - Woodley - Bulletin Deeps				2.1	5.9	400	0.8	4.6	120	2.9	5.6	520
Happy Jack - Creek Shear Upper				0.1	2.2	7	0.4	3.2	46	0.5	3.0	53
Happy Jack - Creek Shear Lower				1.5	5.9	290	1.3	4.8	200	2.9	5.4	490
East Lode				1.0	5.2	170	2.3	4.7	340	3.3	4.8	510
West Lode				1.4	5.5	240	2.8	5.2	460	4.2	5.3	700
Burgundy - Calais				1.3	6.0	250	0.3	5.7	60	1.6	6.0	310
Other Wiluna Deposits				1.1	4.5	165	1.5	4.0	195	2.6	4.1	360
<b>Total</b>	<b>0.2</b>	<b>2.1</b>	<b>13</b>	<b>22</b>	<b>3.4</b>	<b>2,399</b>	<b>23</b>	<b>3.1</b>	<b>2,352</b>	<b>45</b>	<b>3.3</b>	<b>4,764</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 ASX announcement 14th March 2016 and 13th May 2016.

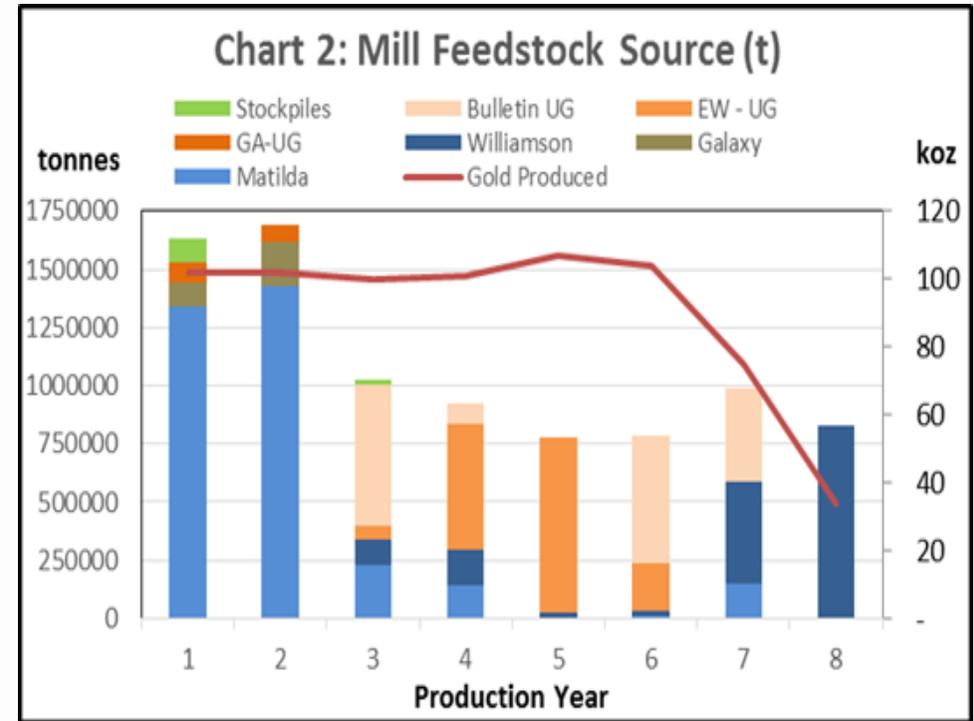
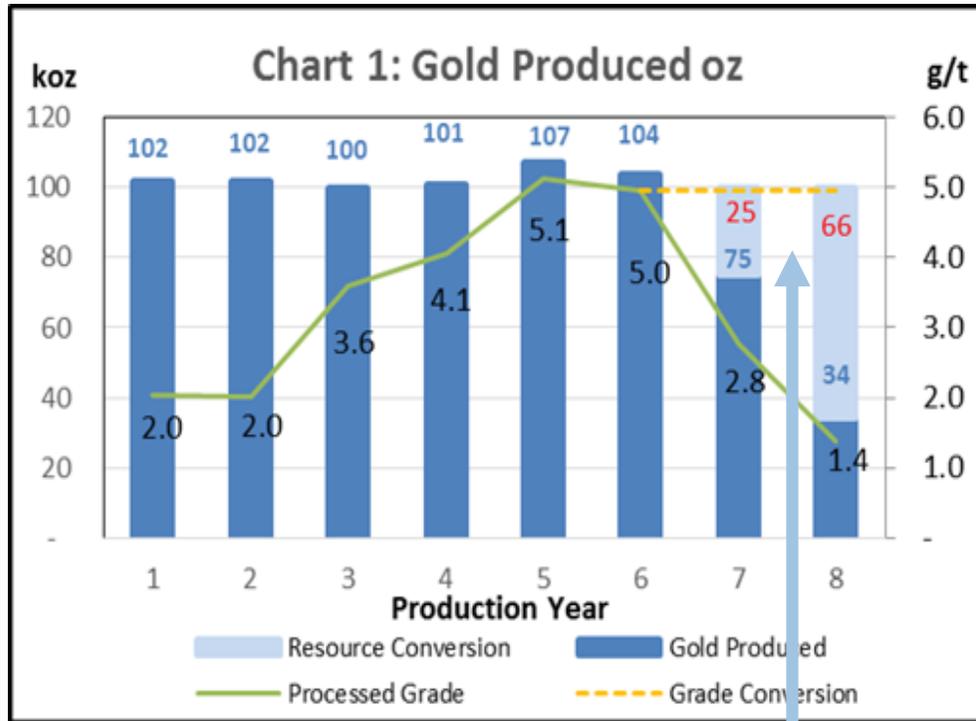


<b>Table 1: Matilda Gold Project Reserves</b>				
<b>Mine</b>	<b>Category</b>	<b>Tonnes</b>	<b>Mined g/t</b>	<b>Reserve Oz</b>
Matilda Mine	Proven	175,000	1.90	11,000
Matilda Mine	Probable	2,799,000	1.80	164,000
Golden Age	Probable	110,000	5.10	18,000
Galaxy	Probable	259,000	2.80	23,000
Williamson	Probable	1,433,000	1.40	65,000
Bulletin Sulphides	Probable	938,000	4.70	142,000
East-West Sulphides	Probable	516,000	5.20	87,000
Stockpiles	Probable	124,000	1.70	7,000
<b>Total Proven Reserves</b>		<b>175,000</b>	<b>1.90</b>	<b>11,000</b>
<b>Total Probable Reserves</b>		<b>6,179,000</b>	<b>2.50</b>	<b>506,000</b>
<b>Total Reserves</b>		<b>6,354,000</b>	<b>2.50</b>	<b>517,000</b>

**Very strong conversion of mining inventory to reserves  
from scoping through feasibility**

*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 24<sup>th</sup> February 2016 ASX announcement.*

# Aiming for sustainable mine plan



Resource to reserve conversion ongoing

# Mine plan growing and improving in quality



Period Ending		Production Years								Total
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	
<b>Surface Mining</b>										
Waste Mined	BCM	11,663,193	7,795,674	4,765,761	97,652	-	-	-	-	24,322,280
Ore Mined	BCM	851,733	659,943	539,981	181,059	-	-	-	-	2,232,716
Ore Mined	t	1,814,893	1,440,971	1,385,447	503,494	-	-	-	-	5,144,805
Total Movement	BCM	12,514,926	8,455,617	5,305,742	278,711	-	-	-	-	26,554,996
Strip Ratio	Waste:Ore BCM	13.7	11.8	8.8	0.5	-	-	-	-	10.9
Grade Mined	g/t	1.8	1.9	1.6	1.5	-	-	-	-	1.7
<b>Underground Mining</b>										
Ore Mined	t	88,926	106,994	651,098	726,768	930,145	475,731	391,692	-	3,371,353
Grade Mined	g/t	5.3	5.6	4.7	5.1	5.2	5.1	4.5	-	5.0
<b>Processing</b>										
Tonnes Processed	t	1,631,746	1,692,021	1,026,286	924,878	777,837	784,717	991,435	829,005	8,657,925
Grade Processsed	g/t	2.0	2.0	3.6	4.1	5.1	5.0	2.8	1.4	3.0
Recovery	%	95%	93%	84%	84%	83%	83%	85%	92%	86.9%
Recovered Grade Processed	g/t	1.9	1.9	3.0	3.4	4.3	4.1	2.3	1.3	2.6
Recovered Ounces	oz	101,640	101,596	100,268	101,050	106,773	104,434	74,545	33,894	724,200