



**BLACKHAM**  
Resources Limited

Sept 2016    ASX : BLK

**Australia's newest gold miner**  
Precious Metals Summit, Colorado





## Australia's newest gold miner

- Gold mining at Matilda Gold Project commenced in July 2016
- Plant wet commissioning has commenced and gold production imminent
- 4 large gold systems with 5.1Moz resource & 860km<sup>2</sup> landholding
- Market cap ~ A\$226M with strong liquidity ~ A\$40/resource oz
- Expansion study underway aiming to grow production to 175-230kozpa and better monetarise the large resource

# Corporate Information



## CAPITAL STRUCTURE

Market cap. @ A\$0.80	A\$226M
Shares on issue	282M
Liquidity - 1 month volume	29M
Options @ avg \$0.26/share	33M
Cash @ 1 Sept 2016	A\$43.7M
Debt @ 30 June 2016	A\$37.3M

## SHAREHOLDER ANALYSIS

<b>Top 20</b>	<b>59%</b>
HSBC Nominees	13.0%
Hunter Hall	9.7%
Citicorp Nominees	6.1%
JP Morgan Nominees	5.3%
National Nominees	5.4%
Directors & management (fully diluted)	6.2%

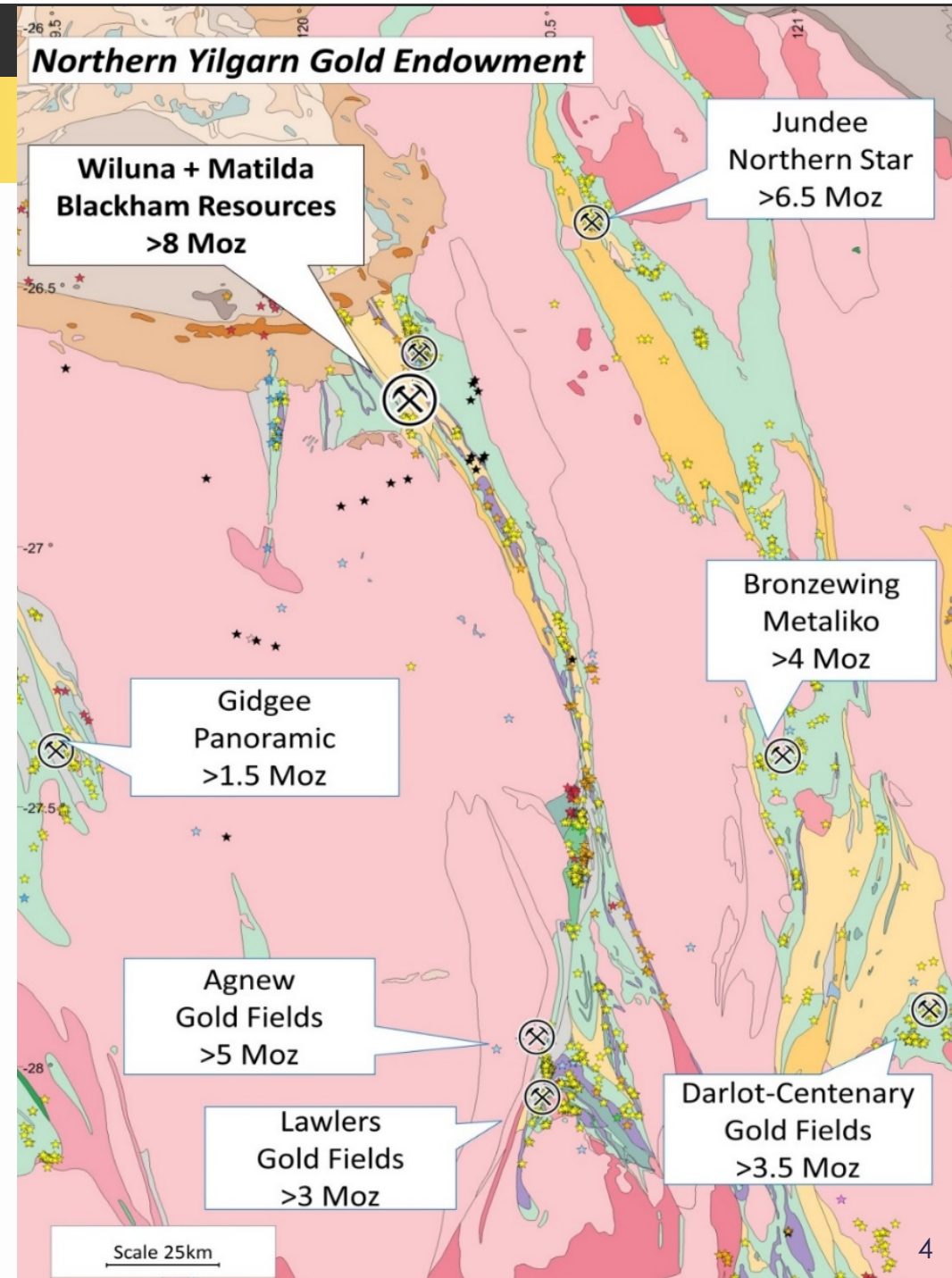
## BOARD OF DIRECTORS

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-Exec Director	Geology
Peter Rozenauers	Non-Exec Director	Mining Finance & Corporate



# Regional Endowment

- Large, highly prospective tenement holding
- In Australia's largest gold belt stretching 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



# Blackham & Matilda Strategy



## Blackham Strategy

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

## Matilda Strategy

### Stage 1

- **Gold production this quarter from oxides & high grade free milling reefs**
- Low risk start up with soft free milling ore will be used to repay debt
- Aggressive exploration on high grade reefs & base load oxide ore

### Stage 2

- Huge optionality of the Wiluna sulphides - 3.5Moz @ 5.8g/t
- Rapidly growing long term mine plan
  - +5 year reserves & +8 years including mining inventory
- **Expansion options study underway to expand annual production to 175-230kozpa**

# Matilda progress to date



## Matilda Progress to date

- Mar 2014, acquired gold plant and mine and consolidated the Wiluna Goldfield
- Dec 2014, scoping study - Mineral Inventory **5.0Mt @ 2.8g/t for 454,000oz Au**
- June 2015, BLK completed \$38.5M deal with Orion Mine Finance
- DFS published in Feb 2016 and improved to June 2016
  - Mineral Inventory **9.3Mt @ 2.9g/t for 873,000oz Au**
  - Reserves **7.0Mt @ 2.5g/t for 560,000oz Au**
  - Very strong conversion of Mineral Inventory to Reserves
- 5.1Moz of resource (48% indicated) - acquisition and exploration cost of <\$6/oz
- June 2016 approvals & **July 2016 Mining commenced**
- **Sept 2016 Wet commissioning of plant begins**
- **Gold production ~ 15 months** after receiving the Orion funding deal

## Matilda Development & Operating Plan

- Commencing safe efficient production this quarter
- Continue to improve and optimise operations and mine plan
- Further reserve upgrades expected with **>4Moz resource outside the mine plan**
- Finalise expansion plans to fully utilise vast and diversified resource base

# Milestones driving share price performance

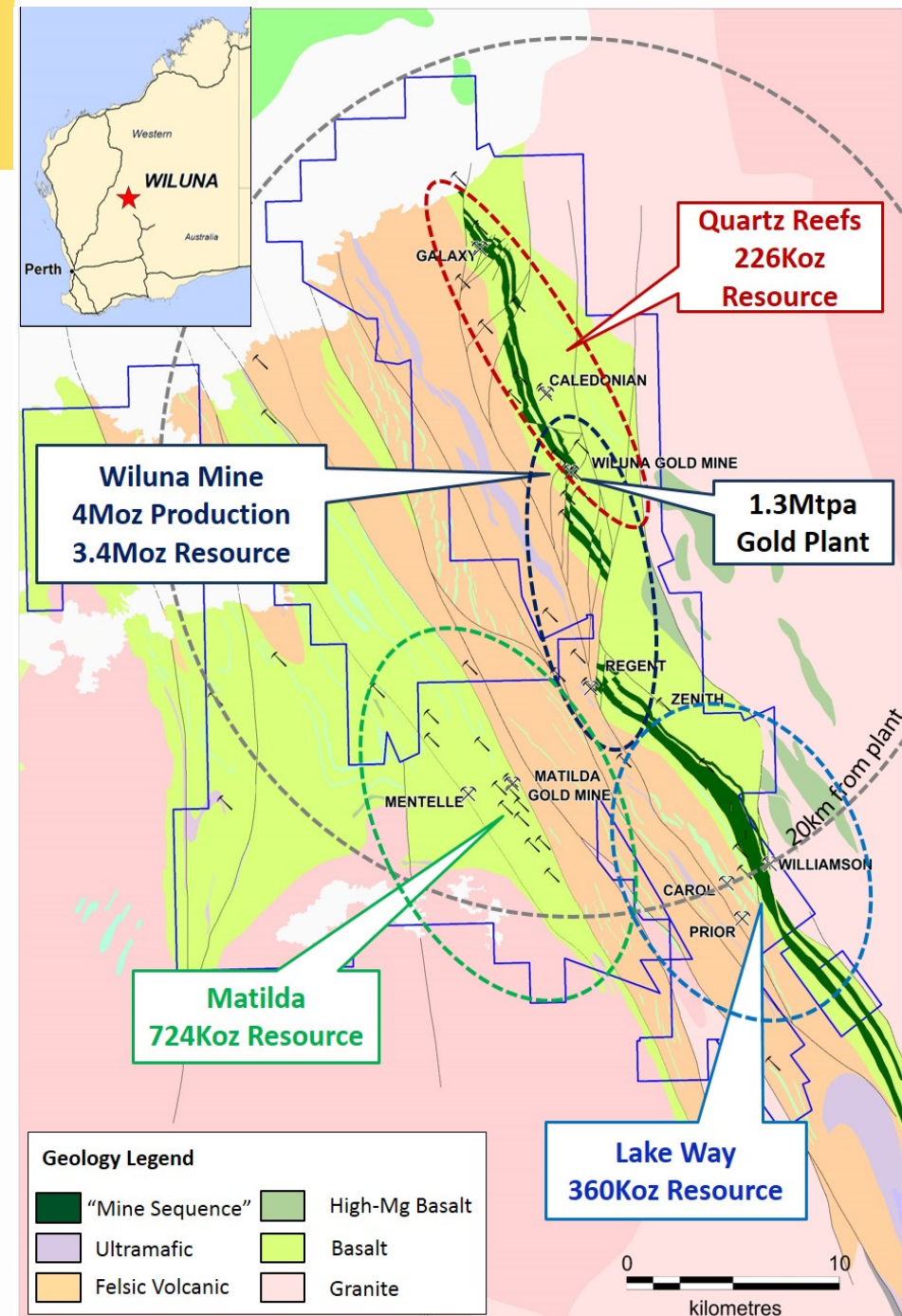


# Matilda Gold Project an embarrassment of riches

- Resource **48Mt @ 3.3 g/t for 5.1Moz Au**  
– 48% indicated resource level
- Reserves **7.0Mt @ 2.5 g/t for 560,000oz Au**
- Consolidated Wiluna goldfield with all deposits < 20km of plant
- Mix of open pit & high grade UG ore
- +860km<sup>2</sup> of tenure & 55km of strike
- 4 large gold 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

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



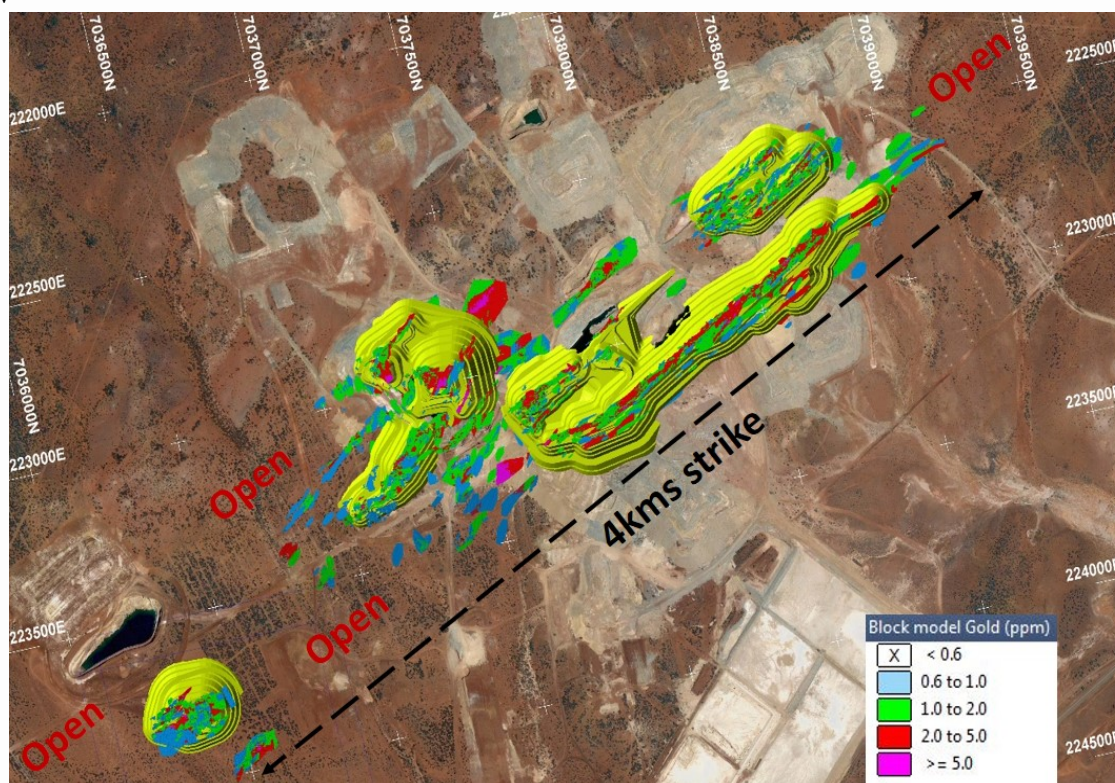
# Matilda Mine – base load ore and growing



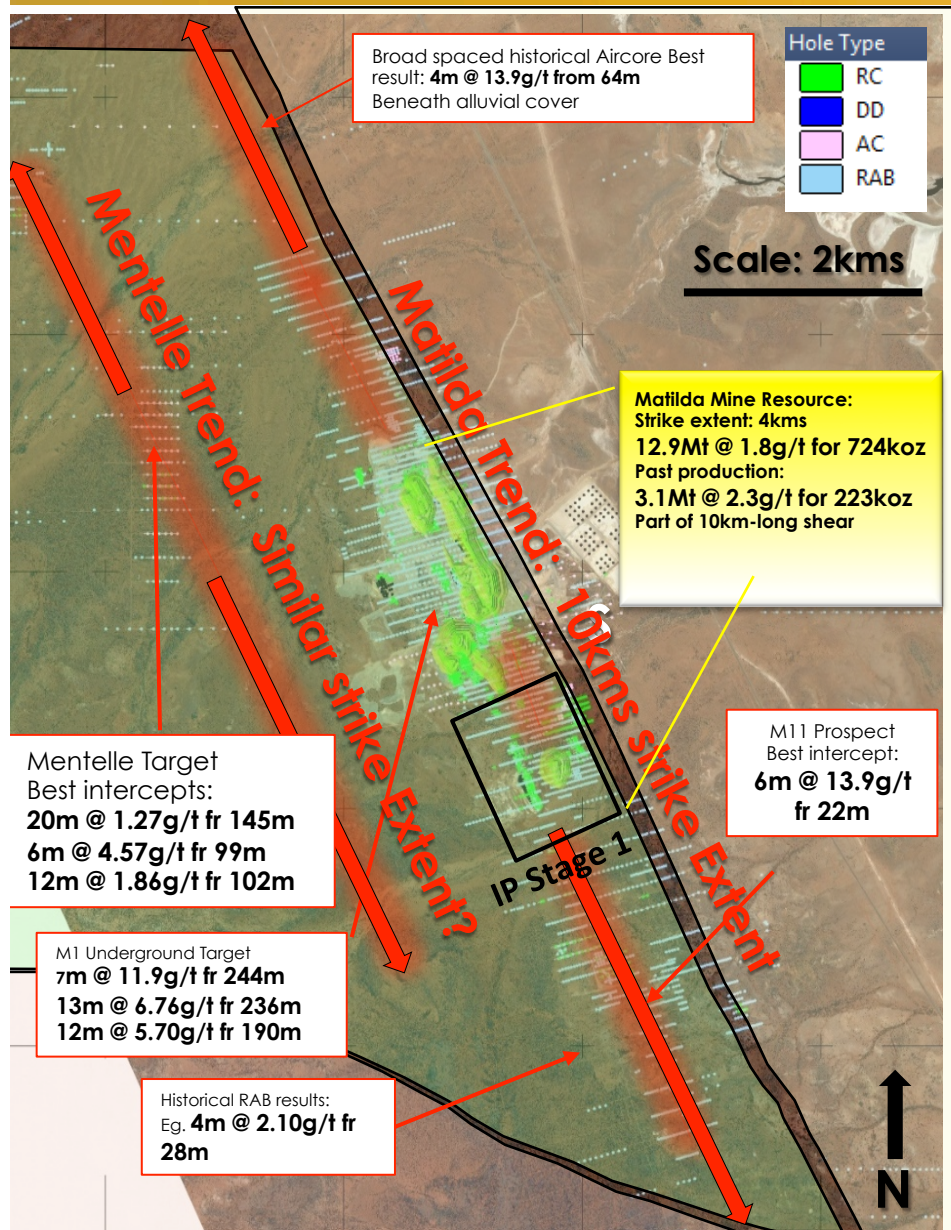
- 10kms stacked, repeating gold lodes
- Soft, deeply weathered oxide ore
- Production (1987-1993):
  - 2.2 Mt@ 2.6g/t = 181,000oz au
- Mineral Inventory continues to grow
  - 3.7Mt @ 1.8g/t for 213,000oz Au - 96% reserves
  - Gravity & leach recoveries 93%
  - Soft rock and ore with significant free digging

Resources	Mt	Grade	Ounces
Measured	0.2	2.1	13,000
Indicated	7.8	1.8	447,000
Inferred	5.1	1.6	261,000
<b>Total</b>	<b>13.1</b>	<b>1.7</b>	<b>721,000</b>

**Important source of large tonnage  
base load ore capable of  
80-90kozpa**

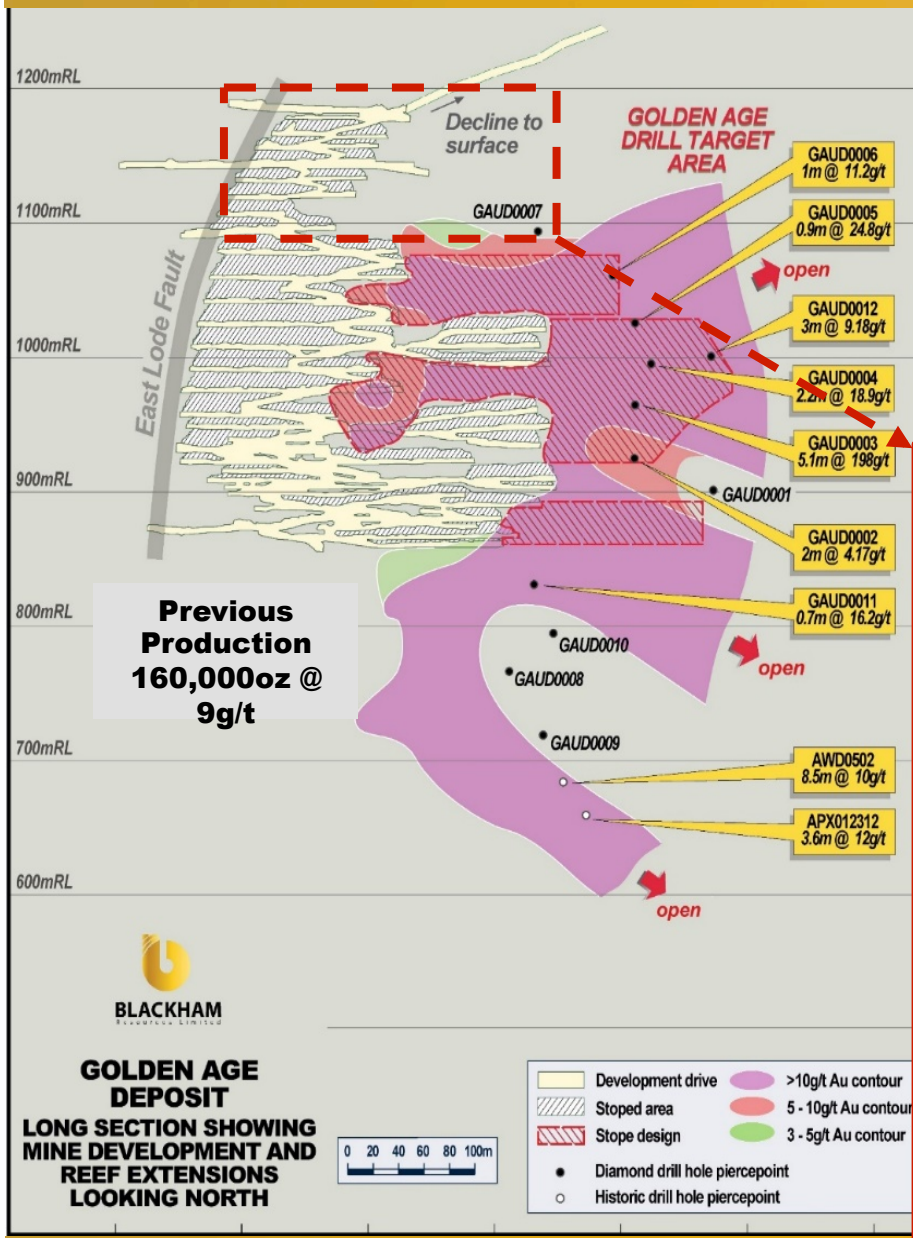


# Matilda regional stacking & repeating lodes

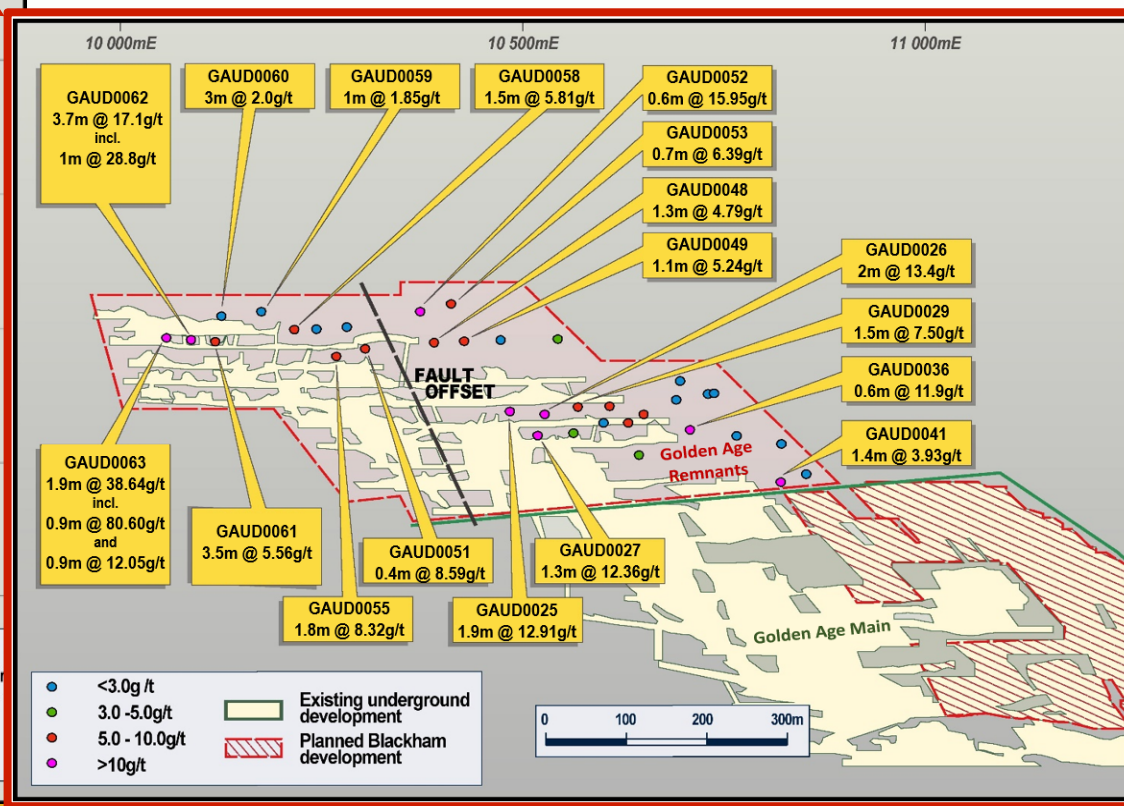


- **>10kms of prospective shear zone**
- Historical drilling identified mineralisation up to 3km from the mine area
- Ineffective historical RAB requiring RC follow up along strike and at depth
- **Alluvial cover to north & south an impediment to previous exploration**
- Mentelle Trend - prospective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

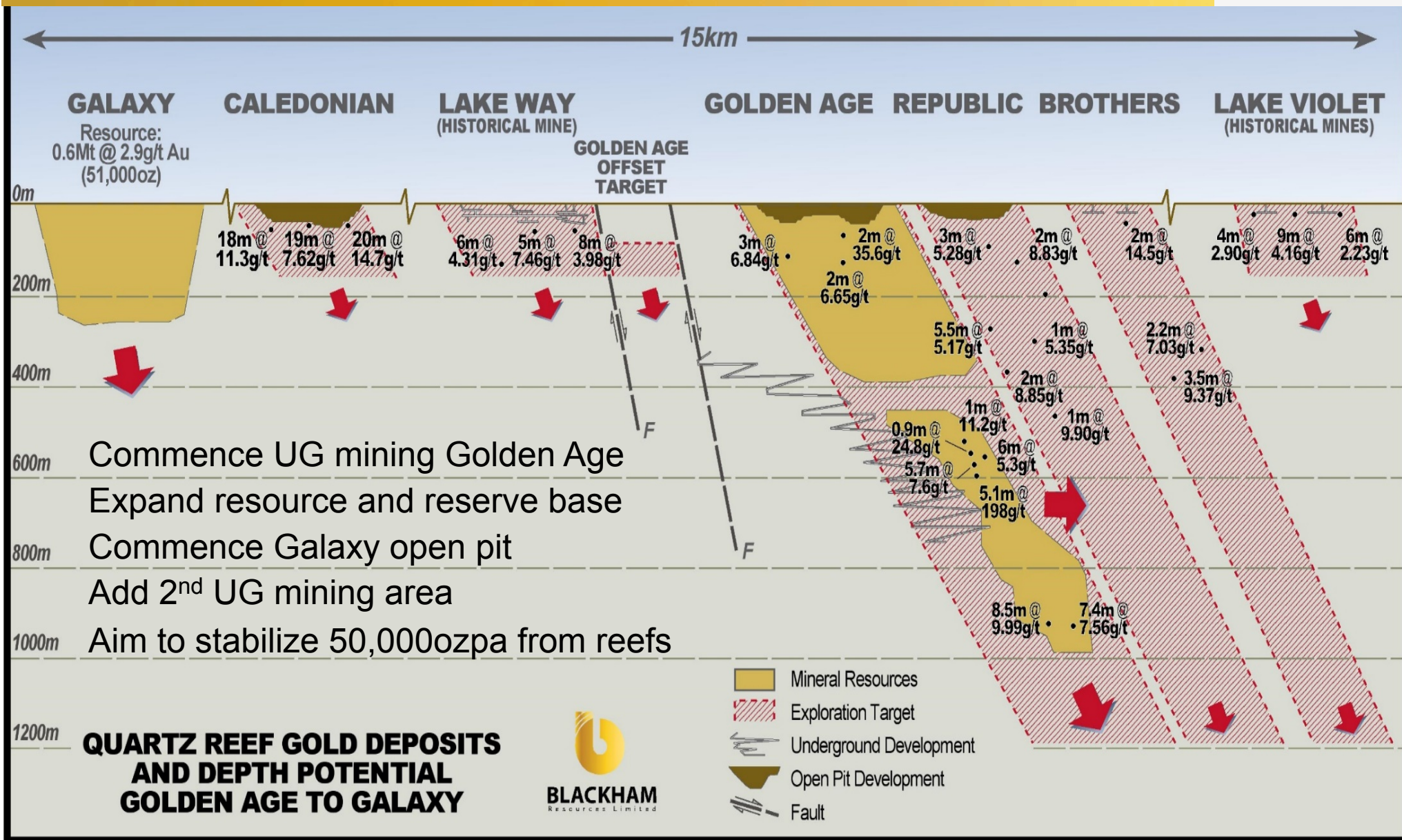
# Golden Age – high grade quartz reef



- Produced 160,000oz Au @ 9.0g/t
- Middle Resource **185kt @ 9.0g/t** for **54,000oz**
- UG mining has commenced
- 2,700M successful drill programme completed outside resource area**



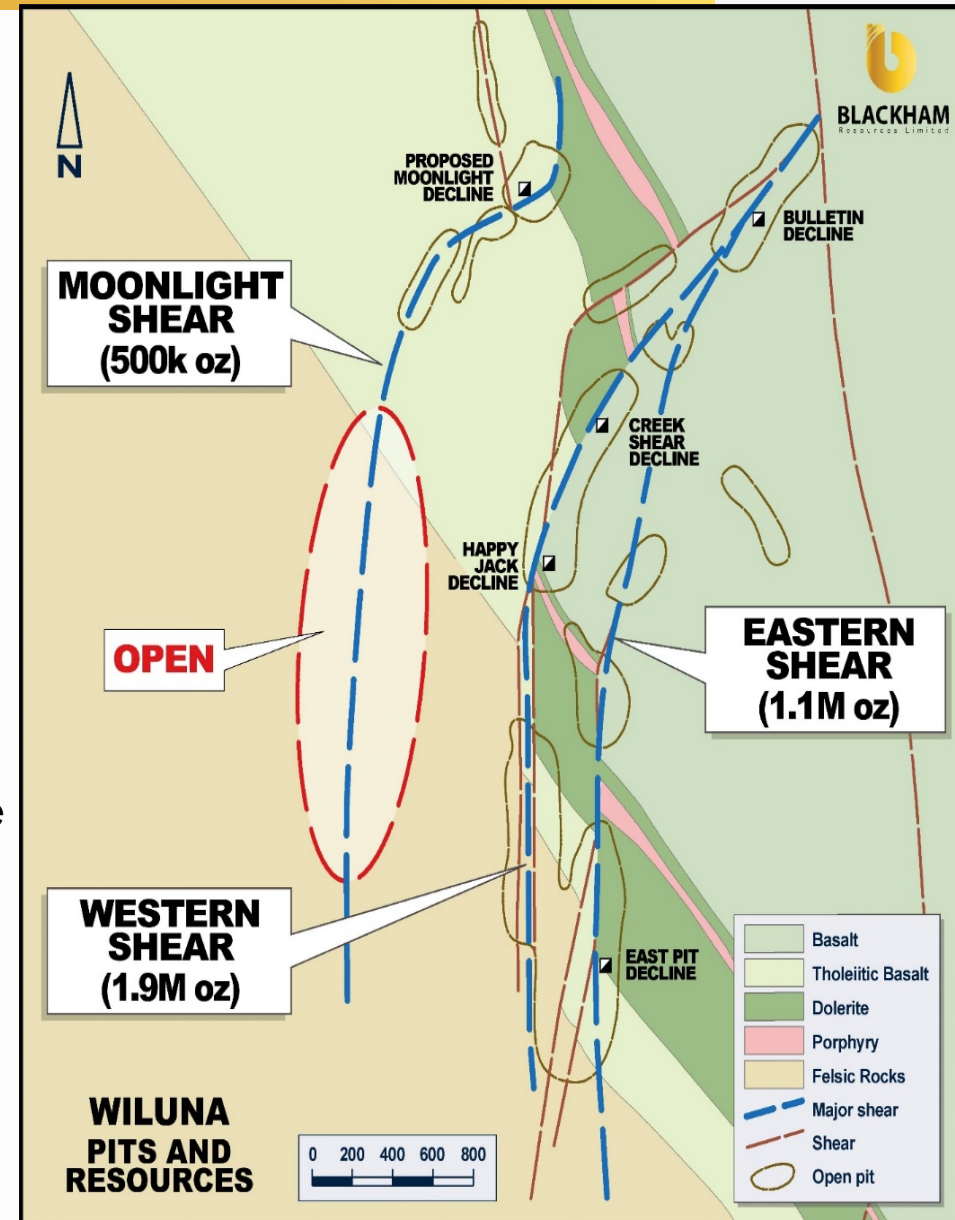
# High grade quartz reefs strategy



# High grade Wiluna 3.5Moz prize



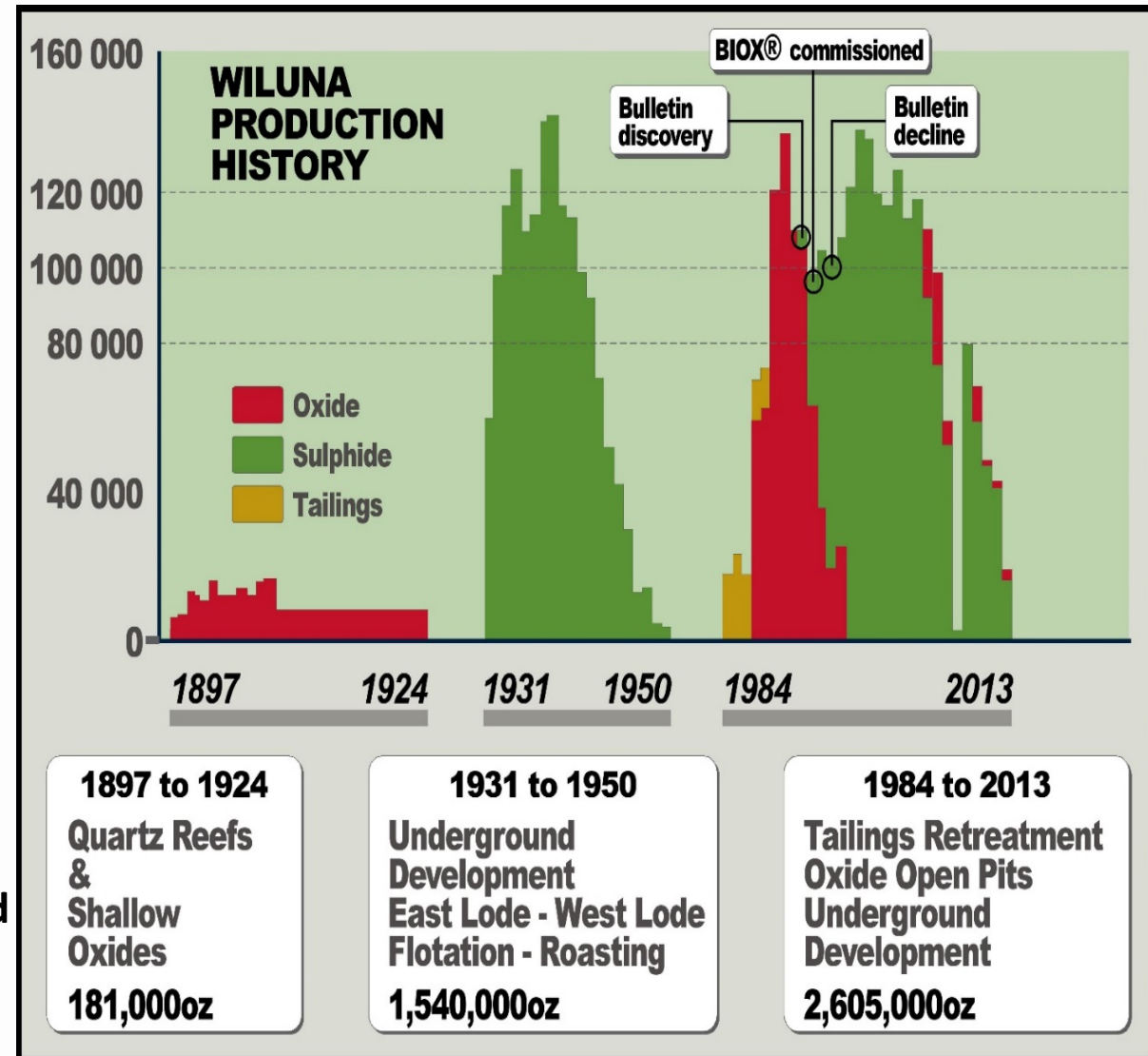
- Sulphide resources **18Mt @ 5.8g/t for 3.5Moz**
- Limited drilling required with 46% resources indicated
- Substantial mine development and 5 declines in place
  - 83% average recoveries over 20 years
    - opportunities to improve floatation recoveries
- Operating history gives good understanding of processing costs
- Mining plan is the key to unlocking the value
- Feasibility and development confirms sulphides are economic - **AISC A\$1,140/oz**
- Drilling and mining studies over Wiluna open pit and underground ongoing
- 25,000m drill programme underway



## 4.3Moz Wiluna Production and more to come



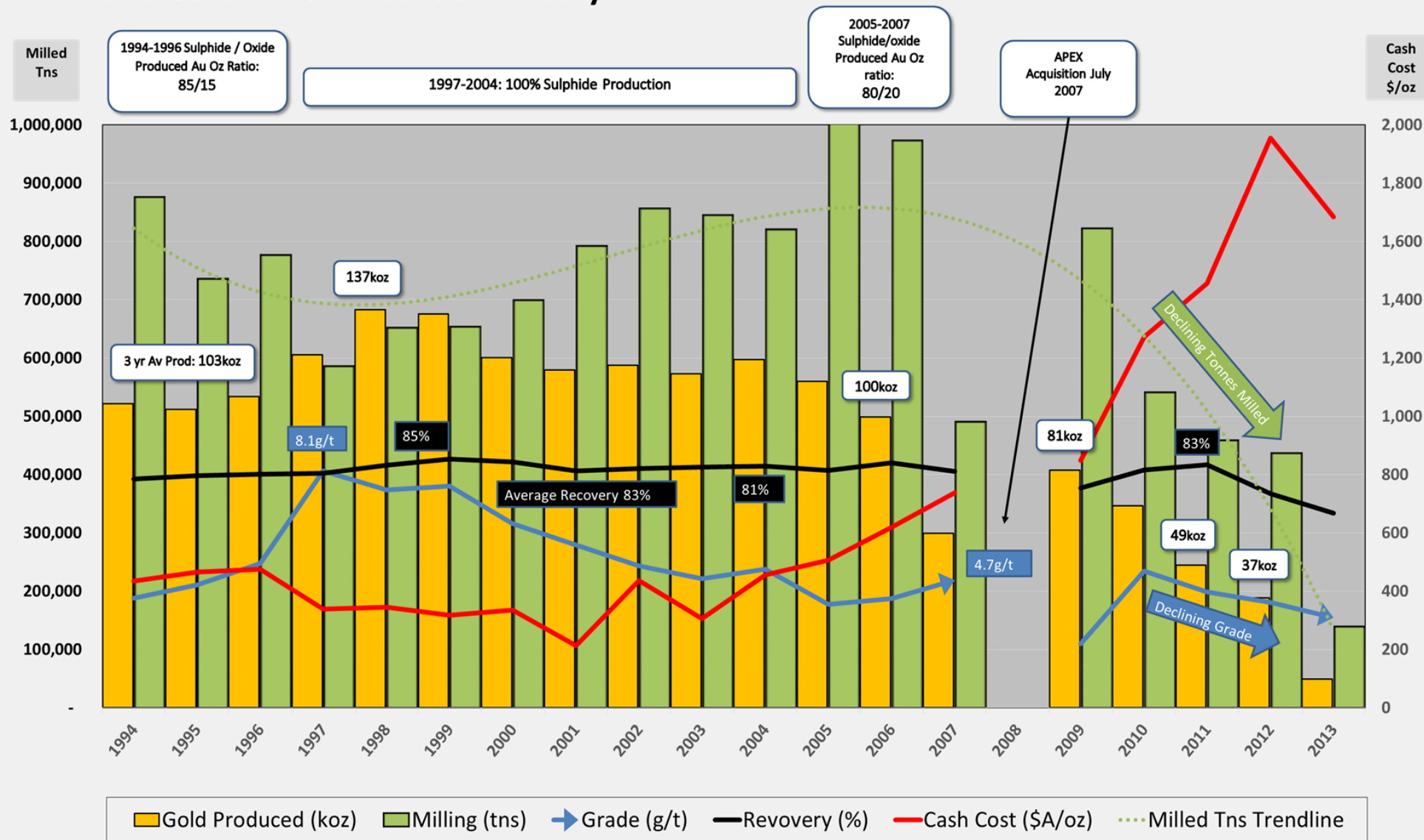
- ▶ Long History of Production +4.3Moz
- ▶ Historical Oxide, Quartz, Tailings ~1Moz
- ▶ BIOX Fitted to Existing Oxide Plant (Comm May 1993)
- ▶ 2007: Project broken up - Wiluna mine assets sold to Apex for \$29.5M
- ▶ Apex spends \$71M on exploration expenditure
- ▶ Nov 2011 Blackham acquires Matilda Gold Project for \$1.4M
- ▶ Mar 2014 Blackham acquires Wiluna plant and mine for \$2.1M upfront and \$2.6M in deferred consideration



# Mining plan the key to unlocking value



## Wiluna Gold Mine Production History



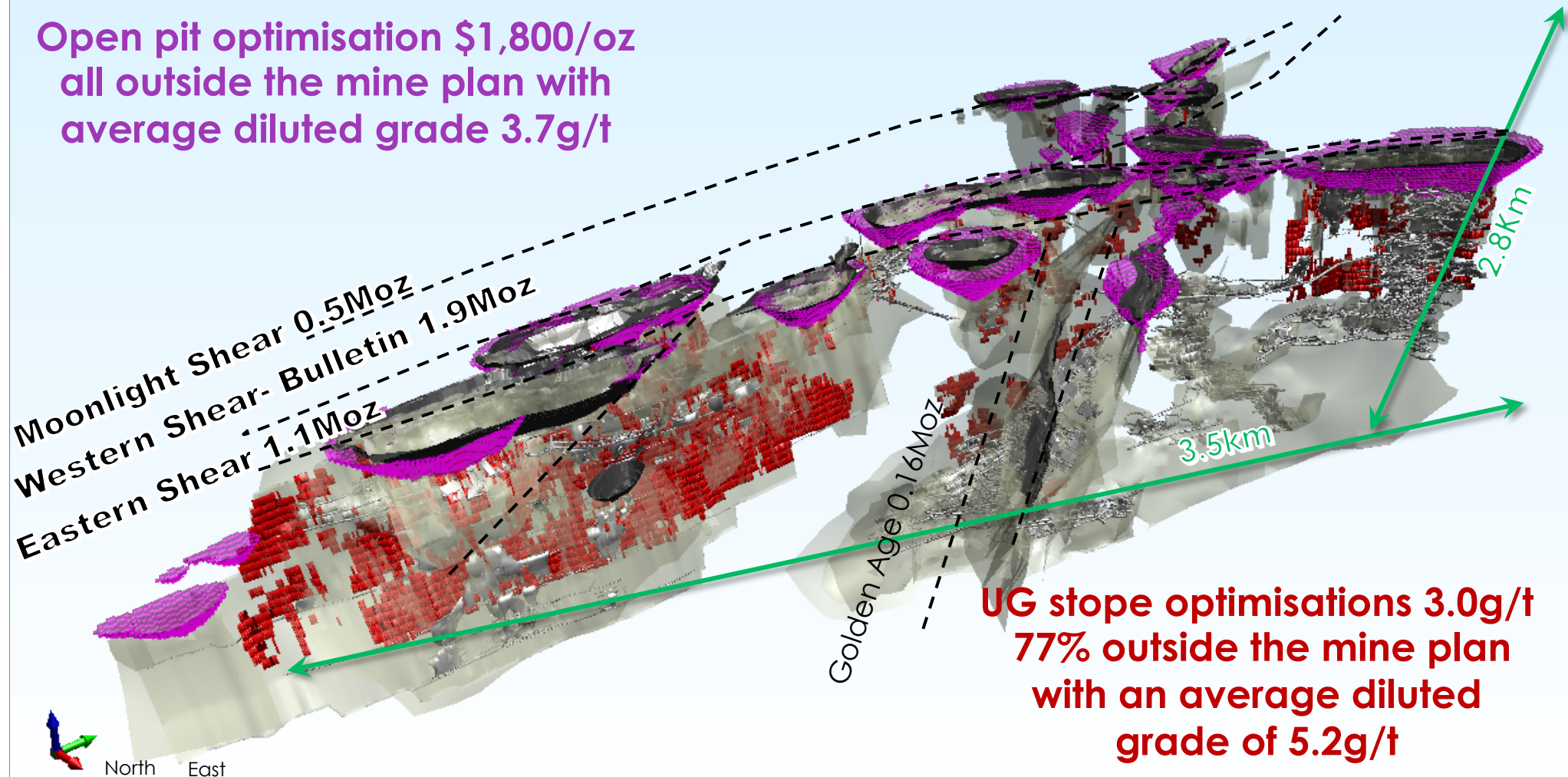
# Wiluna mine plan growing



Wiluna Resources  
3.5Moz

After 12 months work current  
Wiluna UG mine plan  
~511Koz

Open pit optimisation \$1,800/oz  
all outside the mine plan with  
average diluted grade 3.7g/t



UG stope optimisations 3.0g/t  
77% outside the mine plan  
with an average diluted  
grade of 5.2g/t

# Plant expansion study to unlock 3.5Moz prize



		Matilda Ores	Wiluna Ores	Combined
Throughput <sup>1</sup>	Mtpa	1.7	<b>0.6 to 1</b>	<b>2.3 to 2.7</b>
Grade	g/t	2.0	4.9	2.9
Recovery	%	92%	84%	88%
				<b>175-230kozpa</b>
<b>Production<sup>2</sup></b>	<b>Kozpa</b>	<b>100kozpa</b>	<b>75-130kozpa</b>	<b>a</b>
Resources	Koz	1.6Moz @ 1.7g/t	3.5Moz @ 5.8g/t	5.1Moz @ 3.3g/t
Inventory	Koz	362koz	511koz	873koz
Mine Life <sup>4,5</sup>	Years	~4	~5	~4.5
Capital <sup>3</sup>	\$M	\$32	<b>?</b>	
Timing <sup>3</sup>		Sep-16	Mar to Dec 18	
<b>EBITDA<sup>6</sup></b>	<b>\$M</b>	<b>\$60M</b>	<b>\$45-\$70M</b>	<b>\$105-\$130M</b>

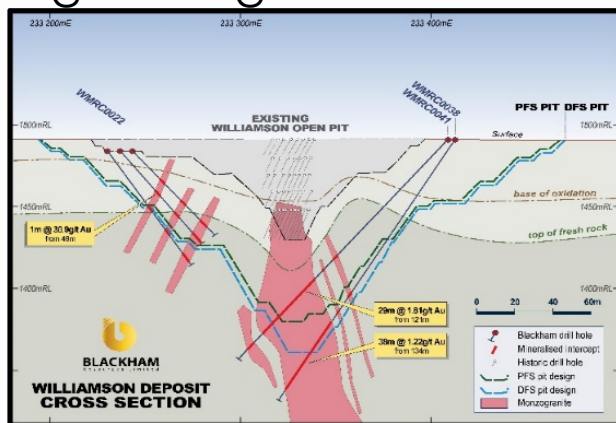
1. Wiluna expansion study commenced to workout the optimal plant throughput
2. Throughput is the main unknown in determining annual production
3. Study will quantify the capex and timing for the additional throughput
4. Drill programmes continuing on the free milling ore from Matilda and Quartz reefs
5. Drilling & mining studies over the 3.5Moz Wiluna open pit & underground
6. EBITDA assumes A\$1,700/oz revenue and \$1,120/oz AISC per quarterly 22 July 2016

# Lake Way - large mineralized system

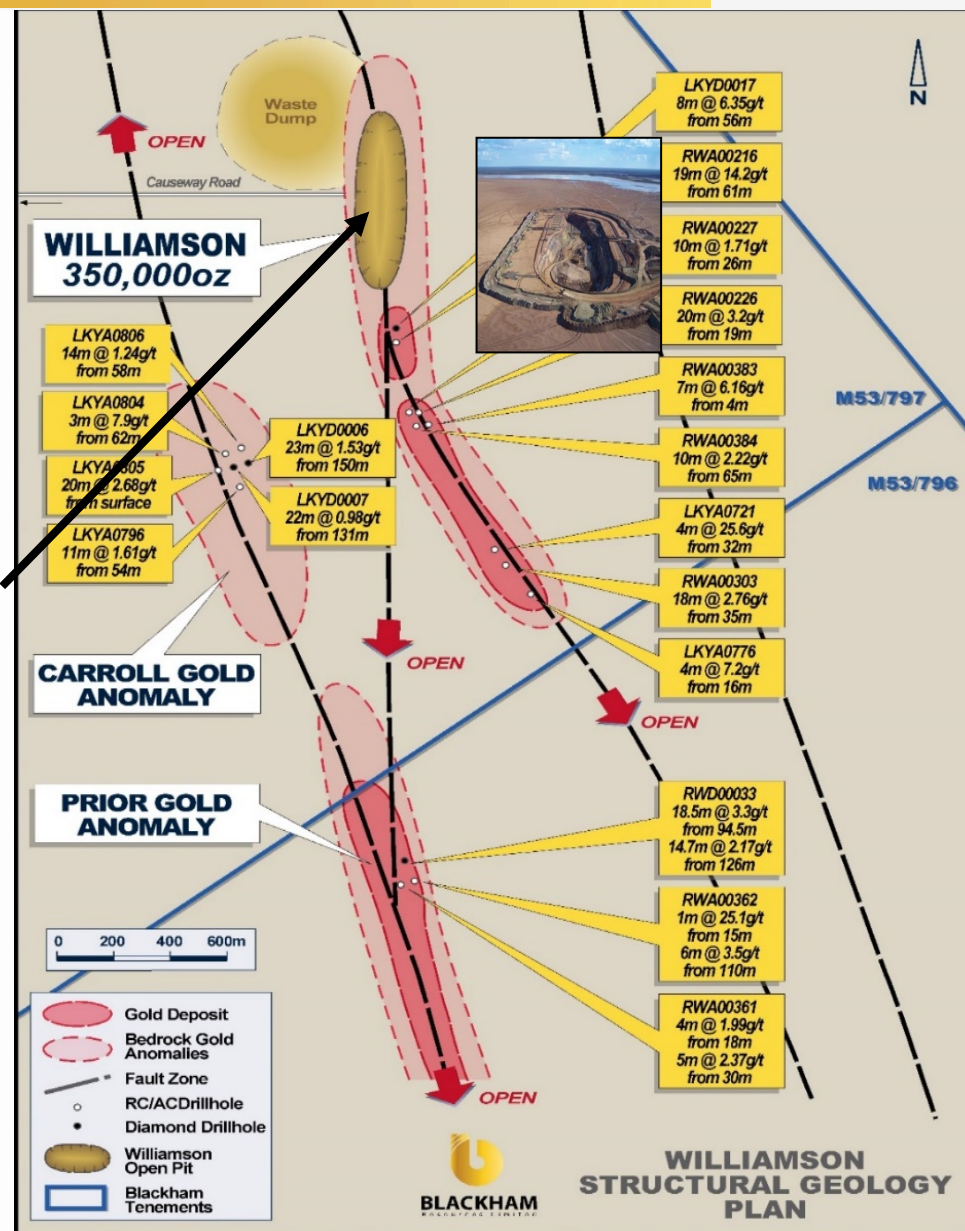


- 19km south along strike from Wiluna
- **Large tonnage potential** Williamson
- Historically produced 663kt@2.0g/t for 42,000Au
- Free milling **95%** DFS recoveries
- Main lode up to **40m wide**
- High grade underground gold

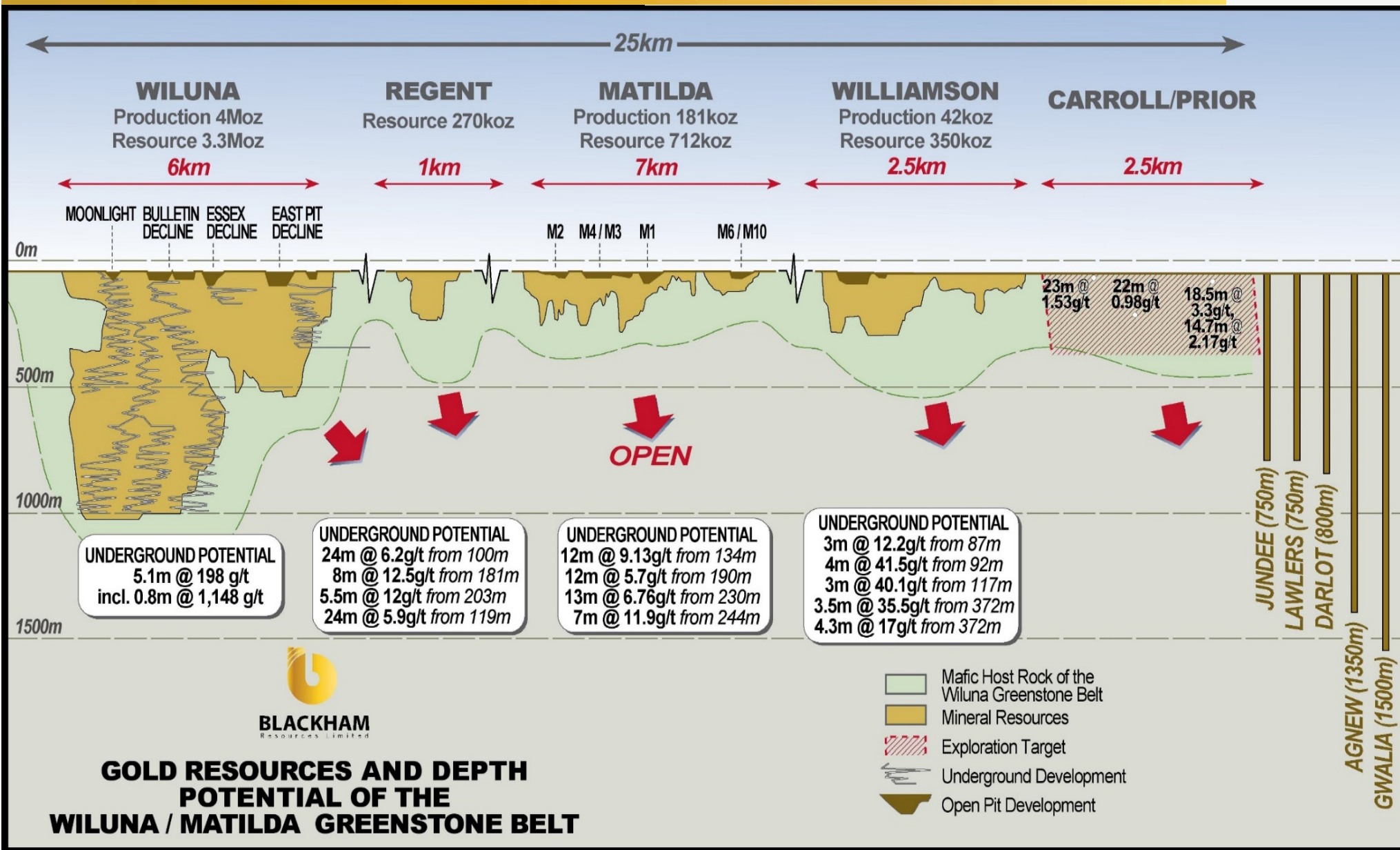
**3m@40.1g/t**  
**4.3m@17.0g/t**  
**3.5m@35.5g/t**  
**2m @ 95.1g/t**



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>



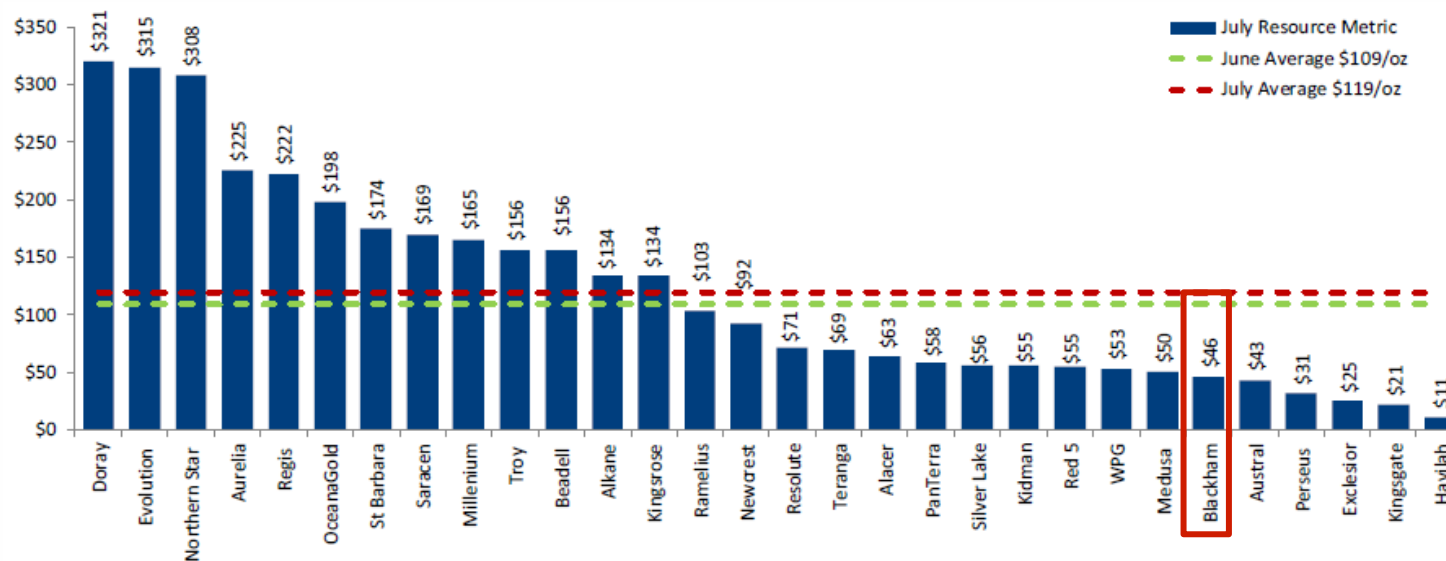
# Just scratching the surface



# Australian Gold Producer Peers

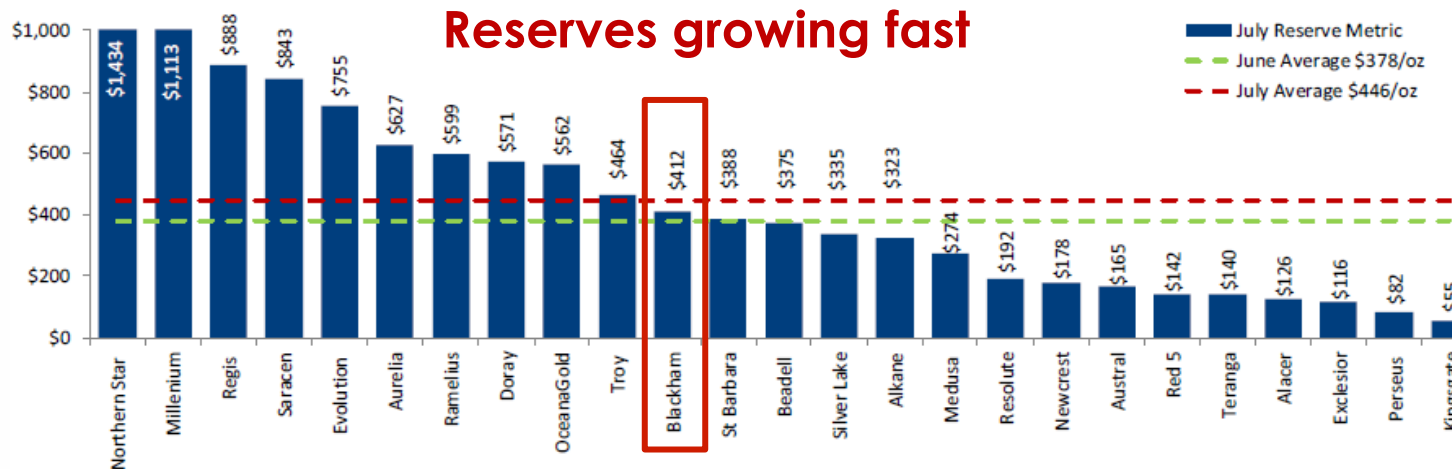


## Producers - EV / Resource (A\$/oz AuEq)



**BLK has >4.5Moz in resources outside of reserves that it is working on with a view to increase the mine life**

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



Capital Group

# Blackham's Matilda Vision



- Gold production imminent
- Gold producer +8 years in mine plan from limited drilling
- High margins and returns for shareholders
- **Expansion study underway aiming to grow production to 175-230kozpa and better monetarise the 5.1Moz resource**



# 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 Bruce Kendall, who is a full-time employee of the Company. Mr Kendall 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 Kendall 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 March 2016, 17 June 2016 and 27 June 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 17 June 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.*

# 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	7.8	1.8	447	5.1	1.6	261	13.1	1.7	<b>721</b>
Golden Age				0.4	4.5	51	0.9	3.7	107	1.3	3.8	<b>158</b>
Galaxy				0.4	3.1	42	0.4	2.2	25	0.8	2.7	<b>68</b>
Western/ Bulletin Shear				5.7	5.6	1031	5.4	5.2	924	11.3	5.4	<b>1,955</b>
Eastern Shear				3.4	5.4	595	3.4	4.3	479	6.8	4.9	<b>1,075</b>
Moonlight Shear				0.4	3.4	47	3	4.6	451	4.0	4.5	<b>498</b>
Williamson Mine				3.3	1.6	170	3.8	1.6	190	7.1	1.6	<b>360</b>
Regent				0.7	2.7	61	3.1	2.1	210	3.8	2.2	<b>271</b>
<b>Total</b>	<b>0.2</b>	<b>2.1</b>	<b>13</b>	<b>22</b>	<b>3.4</b>	<b>2,444</b>	<b>25</b>	<b>3.3</b>	<b>2,647</b>	<b>48</b>	<b>3.3</b>	<b>5,106</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 14 March 2016, 17 June 2016 and 27 June 2016 .

## Appendix B: Gold Reserves



Mine	Category	Tonnes	Mined g/t	Reserve Oz
Matilda Mine	Proven	195,000	1.9	12,000
Matilda Mine	Probable	3,297,000	1.8	192,000
Golden Age	Probable	112,000	6.0	21,000
Galaxy	Probable	338,000	2.8	30,000
Williamson	Probable	1,517,000	1.4	69,000
Bulletin Sulphides	Probable	938,000	4.7	142,000
East-West Sulphides	Probable	516,000	5.2	87,000
Stockpiles	Probable	124,000	1.7	7,000
<b>Total Proven Reserves</b>		<b>195,000</b>	<b>1.9</b>	<b>12,000</b>
<b>Total Probable Reserves</b>		<b>6,842,000</b>	<b>2.5</b>	<b>548,000</b>
<b>Total Reserves</b>		<b>7,037,000</b>	<b>2.5</b>	<b>560,000</b>

**Very strong conversion of mining inventory to reserves from scoping  
through to pre-production**

*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 17<sup>th</sup> June 2016 ASX announcement.*

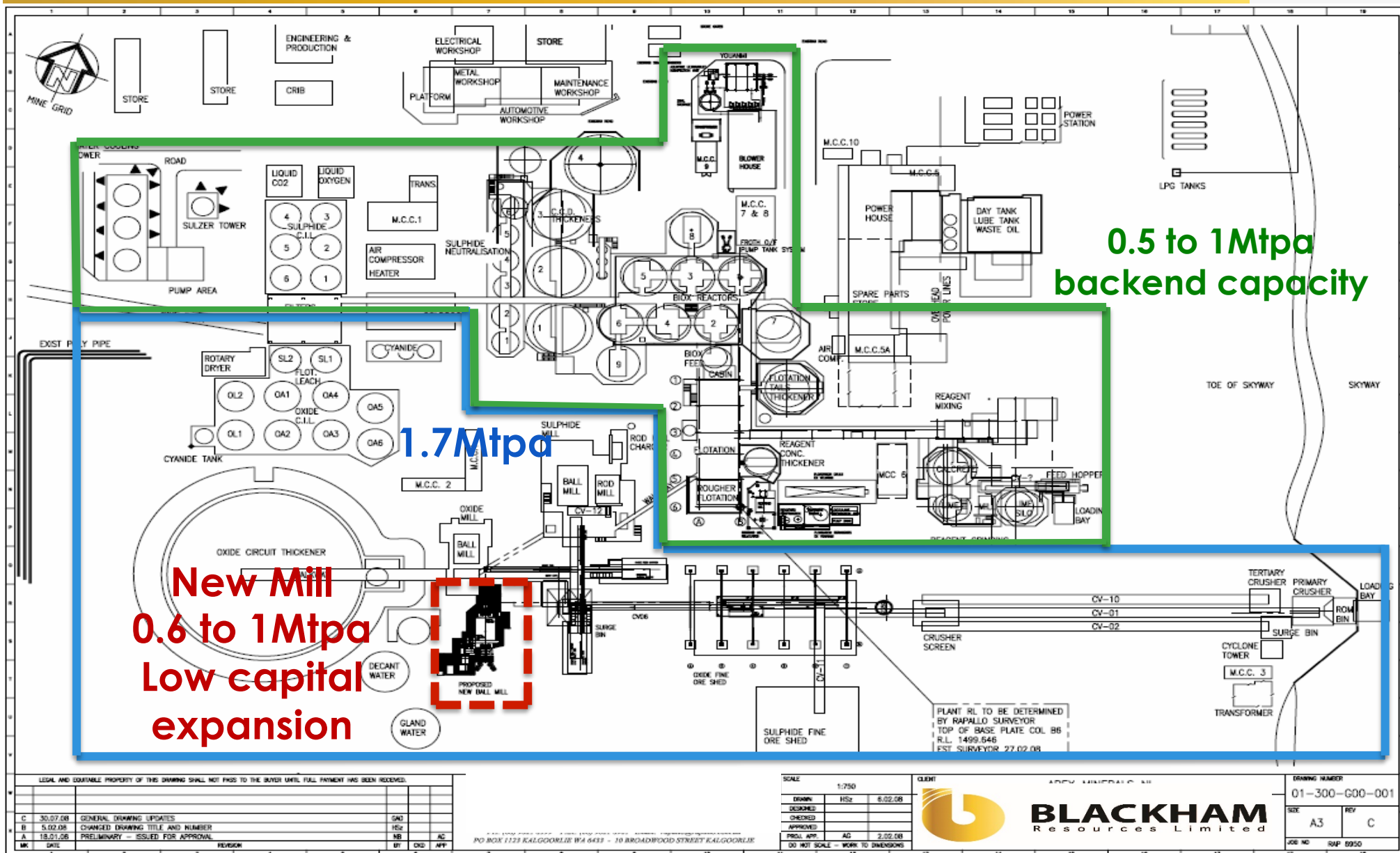
# Wiluna plant refurbishment is well advanced



- 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 – 280 rooms available
- Sealed airstrip and roads
- Biox circuit capable of treating refractory ores
- UG infrastructure already in place
- Mining approvals in place
- **Existing infrastructure minimizes capex, risk and development**
- **Commissioning the gold plant underway**



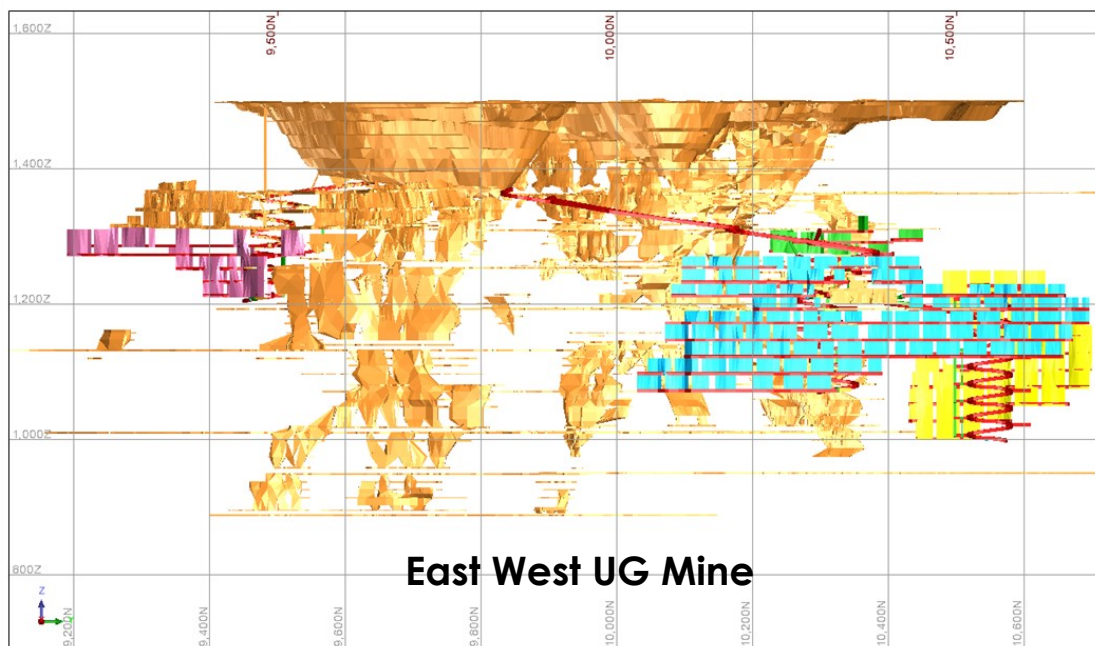
# Wiluna Mill Expansion Study up to 2.7Mtpa



# Bulletin and East West UG mining solutions

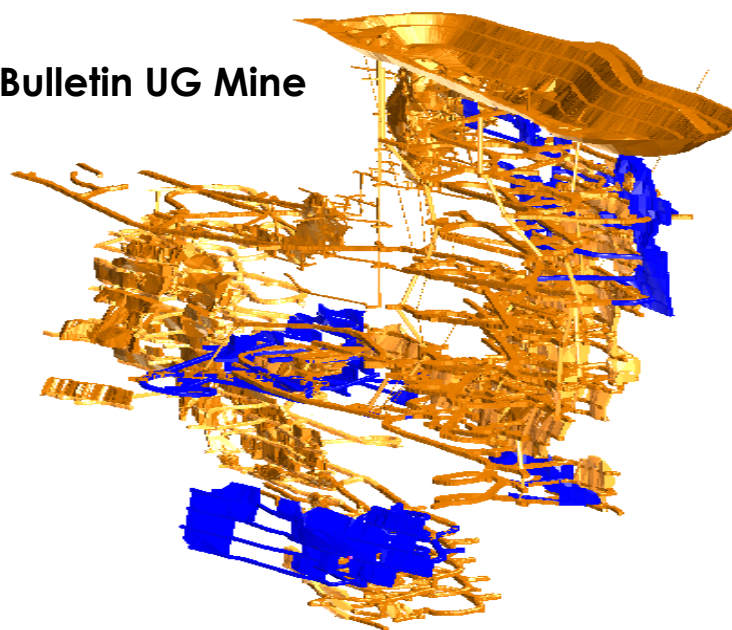


Wiluna has 4 existing declines. BLK leveraging off development.  
Focused on ore <600m deep with short haul to surface  
Long hole open stoping with 5.0g/t diluted ore grade  
**Feasibility confirms economics 4 month payback**



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

**Bulletin UG Mine**



**Oblique section looking south west - Bulletin UG mine design**

# 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

