



Our platform for growth

- ▶ Operations producing 80-85,000oz pa with strong margins and cashflow
- ▶ Ability to leverage off existing personnel and infrastructure to bring new open pits online quickly
- ▶ Exploration campaign to grow mine life delivering outstanding results
- ▶ Maiden deep drilling program now underway to secure long-term future



August 2016



This presentation contains only a brief overview of Millennium Minerals Limited (“Millennium”). The contents of this presentation, including matters relating to the geology of Millennium’s projects, may rely on various assumptions and subjective interpretations which it is not possible to detail in this presentation and which have not been subject to any independent verification.

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The information contained in this presentation is not suitable for detailed investigation or analysis of any particular issue. Current and potential investors and shareholders should seek independent advice before making any investment decision in regard to Millennium or its activities.



The Turnaround is Complete



- ▶ Significant operational turnaround at the 100%-owned Nullagine Gold Project
- ▶ Debt eliminated, Market Cap ~ \$190M (25 cps)
- ▶ A\$20.4M cash at 30 June 2016
- ▶ A\$10M exploration spend for 2016
- ▶ Tracking ahead of 2016 guidance – 80-85,000oz at AISC of A\$1180-1220/oz
- ▶ Generating strong cash-flows from our Nullagine Operation
- ▶ Large inventory +1Moz, Ore Reserves of 159,000oz (and growing)
- ▶ Major drilling programs underway to increase reserves and mine life
 - ▶ *Brownfields oxide ore drilling already delivering strong results*
 - ▶ *Deeper fresh ore drilling also delivering strong results*
- ▶ Plant expansion study underway to determine best economic solution to process deeper ore
- ▶ Poised for further growth as inventory and mine life increases

Capital Structure – ASX Code: MOY

Shares on Issue

756.7M

Market Cap (26cps)

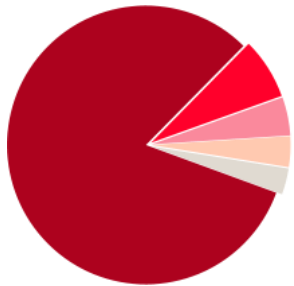
~\$200M

Cash at 30 June'16

\$20.4M

Debt

NIL



Key Shareholders

- IMC Group - **48%**
- JPMorgan Nominees - **4%**
- Pybar - **2.5%**
- Board and Management - **2%**
- Mr David Teoh - **1.7%**

Board

Richard Procter

Non Executive Chairman

Michael Chye

Non Executive Director

Greg Bittar

Executive Director

Tim Kennedy

Non Executive Director

Management

Glenn Dovaston

Chief Executive Officer

Richard Hill

Chief Financial Officer

Peter Cash

General Manager Corporate

Pierre Malherbe

Company Secretary

Millennium Minerals Share Price – as at 28 July 2016

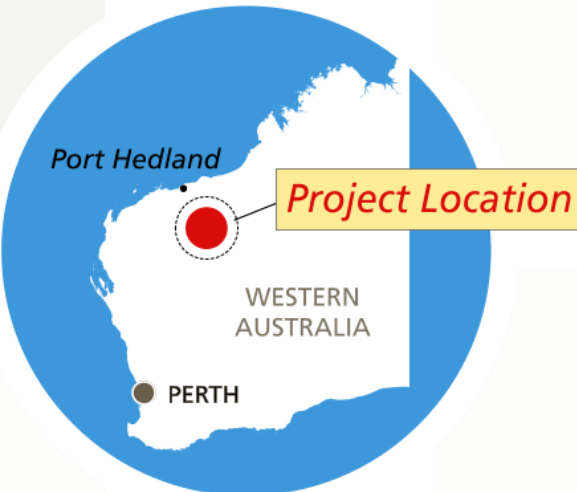




Nullagine – Highly Profitable, and Just Warming Up



▶ Operations



▶ People & Infrastructure



▶ Brownfields resource development

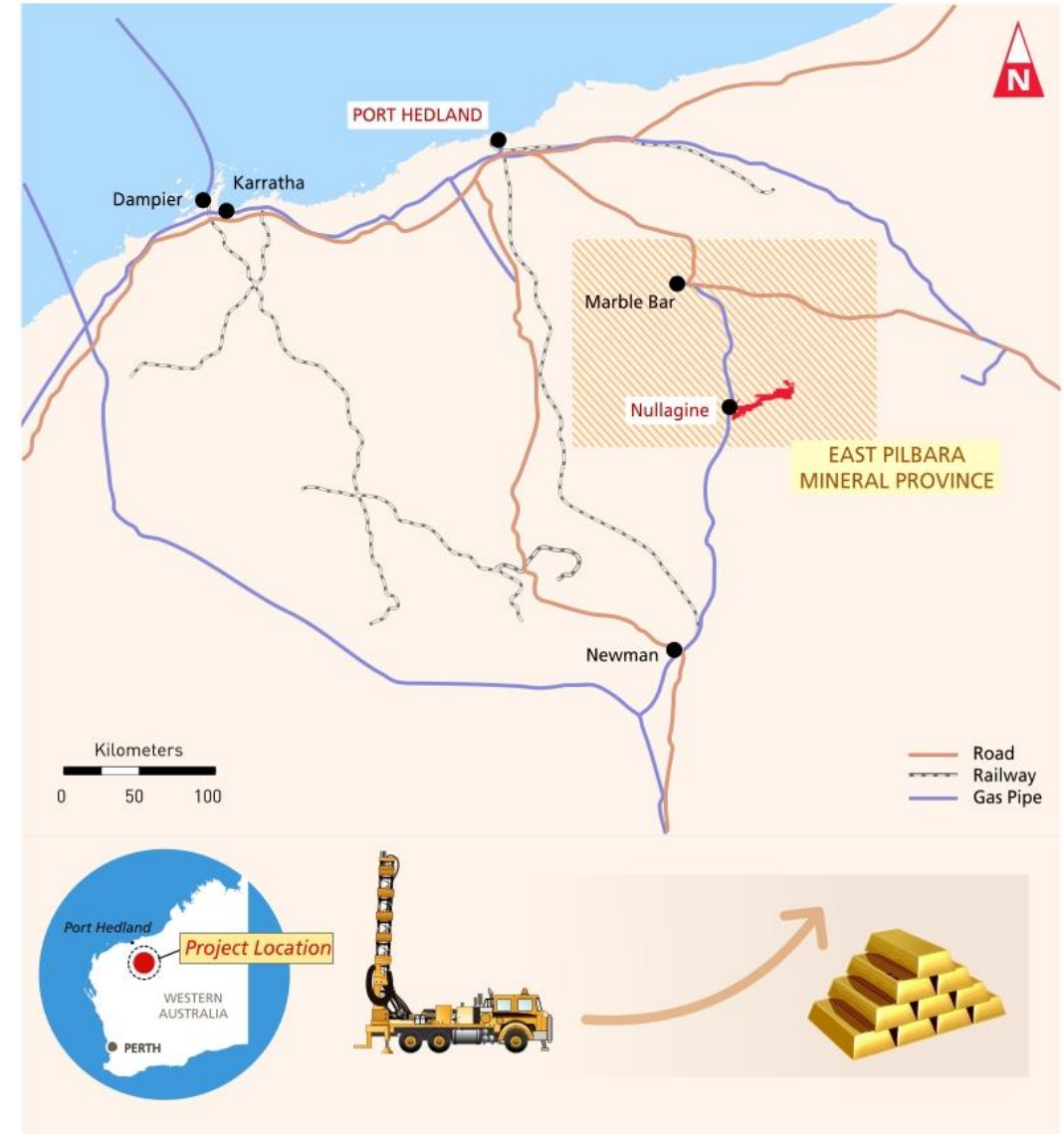
▶ Fresh ore development



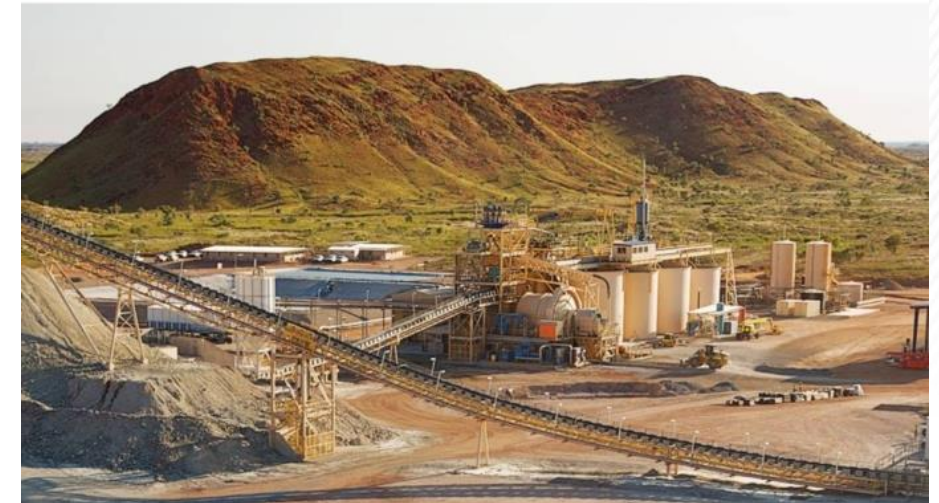
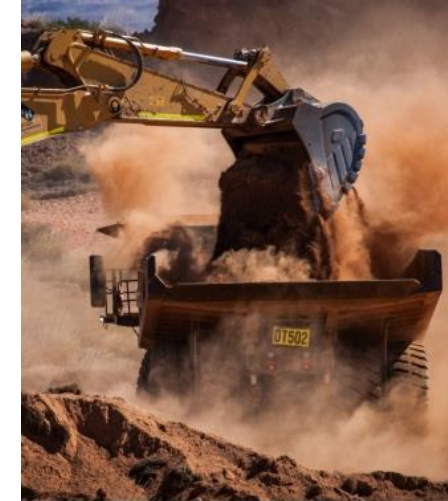
Nullagine – Highly Profitable, and Just Warming Up



- ▶ Located 185km north of Newman in the East Pilbara mineral province
- ▶ 264 km² highly prospective landholding within the Mosquito Creek gold belt
- ▶ Numerous open pits over a 25km with four major mining camps
- ▶ Produced 45,926 oz at AISC of A\$1193/oz for 1H 2016
- ▶ Processing utilising conventional CIL methods, throughputs over 1.9 Mtpa with current recoveries over 90%
- ▶ Generated cash-flow of A\$17.1M in first half 2016
- ▶ Tracking ahead of 2016 guidance: 80-85,000oz at AISC of A\$1180/oz – A\$1220/oz



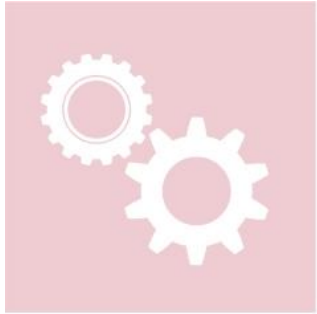
- ▶ Strong focus on optimising process and mining efficiencies
- ▶ Clear understanding of mineralisation and geological controls
- ▶ Effective partnering arrangements with contractors
- ▶ Ability to leverage current market conditions to reduce supply and procurement costs
- ▶ Strong focus on cost control to optimise margins
- ▶ Ability to bring new deposits online quickly through the resource development, optimisation and approval process



Gold Hedging

- ▶ 50% of forecast Q3 production @ A\$1689/oz
- ▶ 40% of forecast Q4 production @ A\$1719/oz plus extra 9,289oz @ A\$1846/oz

Nullagine Project – Built, Operational and Paid-For



► Operations



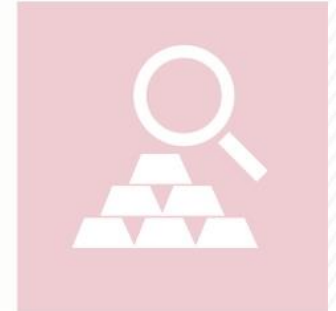
► Brownfields resource development



► People & Infrastructure



► Fresh ore development



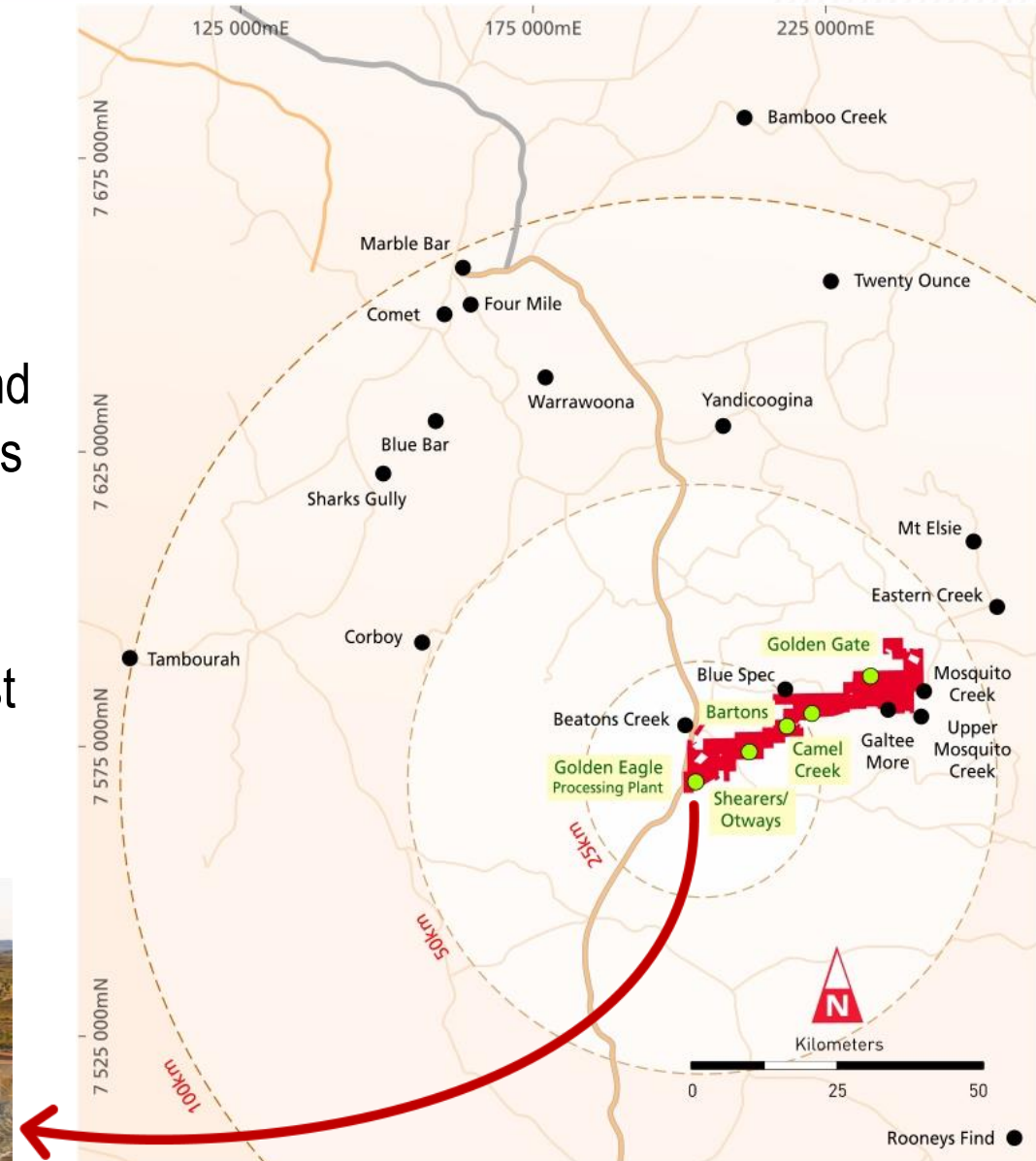
Nullagine Project – Built, Operational and Paid-For



- ▶ Near-new 1.9Mtpa CIL ore treatment plant located adjacent to the largest deposit in the field (Golden Eagle)
- ▶ Constructed in 2012 for initial capital cost of \$89M
- ▶ Only gold processing plant within 400km
- ▶ Extensive infrastructure includes 140-person camp, access and haulage roads, borefields, powerstation, workshops and offices
- ▶ All tenements now 100%-owned following recent ownership rationalisation - heritage and native title all in place.
- ▶ Scoping Study underway on plant expansion to determine best economic solution to process deeper ore



Golden Eagle Processing Plant



Nullagine Project – A Committed Team, Delivering Results



- ▶ Strong, passionate team committed to delivering growth
- ▶ Attracting people from across the mining industry who see a strong future with Millennium



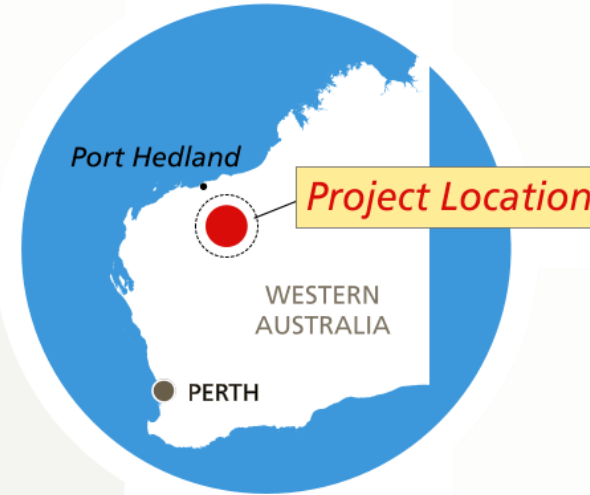
The Exploration Opportunity – Brownfields Resource Development



► Operations



► People & Infrastructure



► Fresh ore development



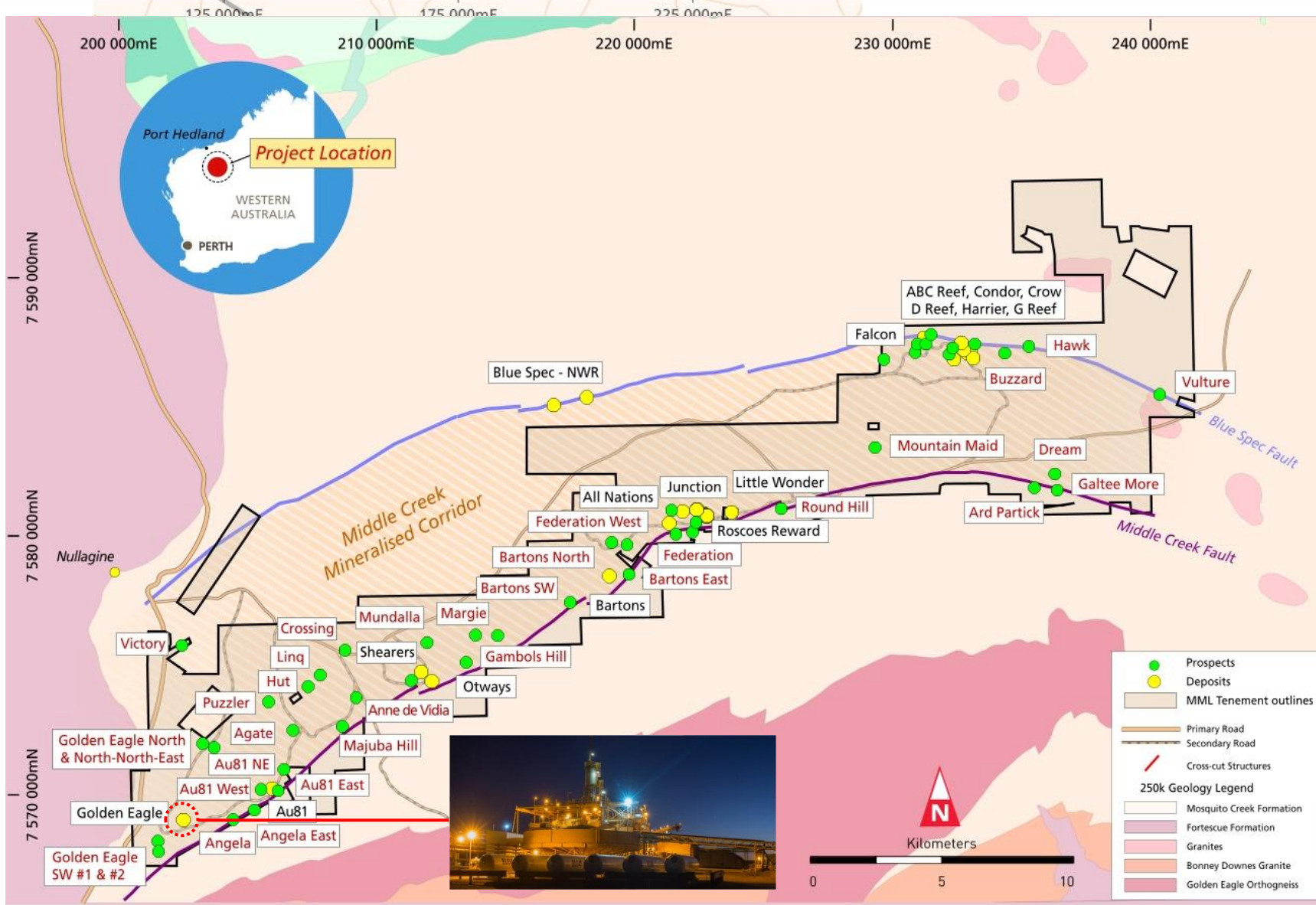
► Brownfields resource development





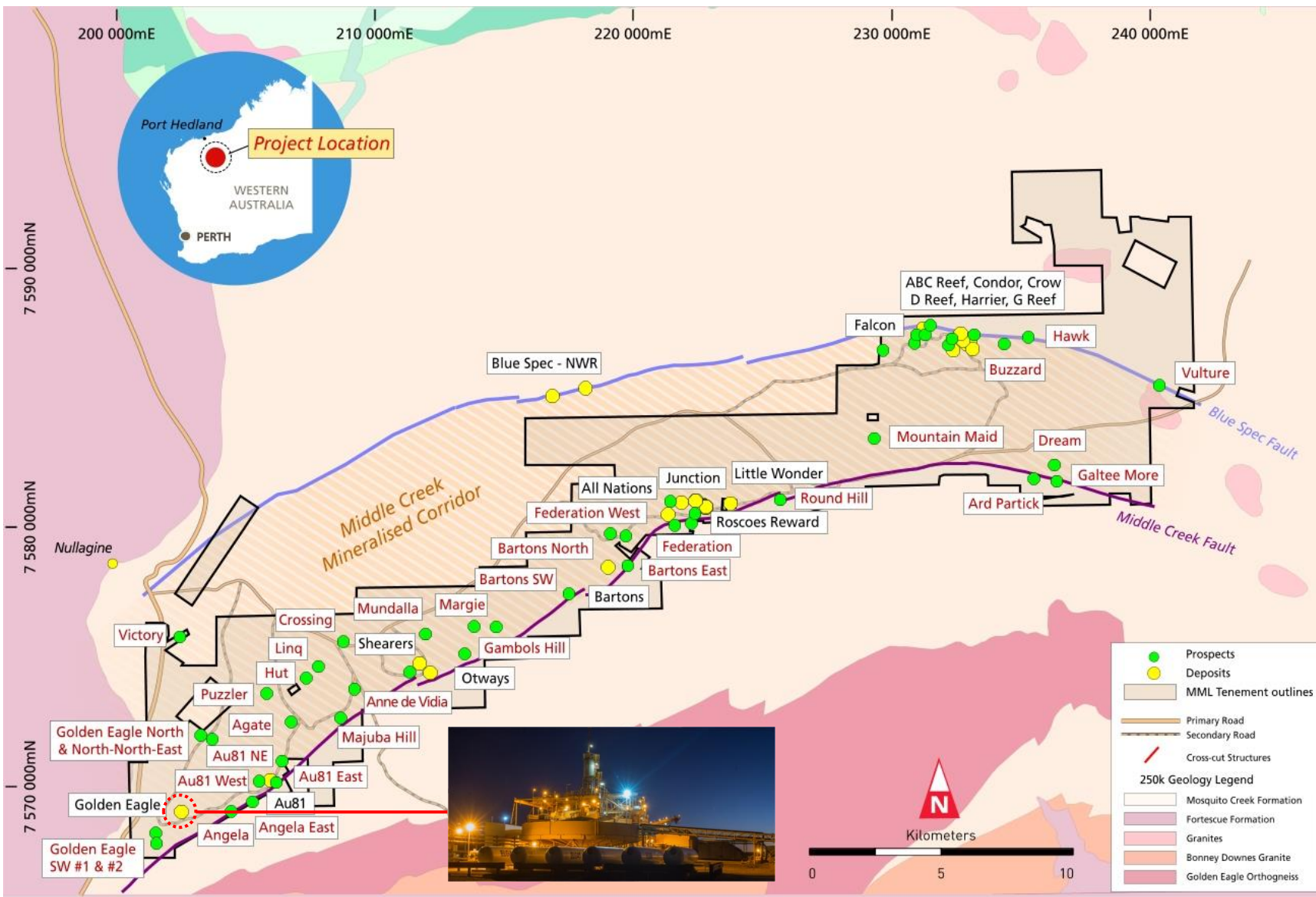
- ▶ Initial focus has been on targeting incremental oxide ounces
 - ▶ *Near-mine, shallow targets including extensions adjacent to existing pits*
 - ▶ *New brownfields discoveries*
- ▶ Potential to rapidly delineate and develop new oxide discoveries – historical drilling generally less than 50m below surface
- ▶ 110,000m drilling program commenced in December 2015 – \$10M exploration budget for 2016
- ▶ Immediate success with 27% increase in Ore Reserves to 159,000oz after just three months of drilling
- ▶ Further update in Mineral Resources and Ore Reserves on track for October 2016

The Exploration Opportunity – Brownfields Resource Development



- ▶ Similarities to Eastern Goldfields, Leonora District, Paddington/Mt Pleasant district of 30 years ago
- ▶ 40km strike length with +30 targets defined – advanced near-mine opportunities through to brownfield targets
- ▶ Numerous opportunities to grow mine life
- ▶ Discoveries can be converted quickly into Reserves to leverage existing plant and infrastructure

Oxide Exploration Program – Delivering Immediate Success



- ▶ First resource/reserve upgrade delivered in April 2016 following just 3 months of drilling
- ▶ Ore Reserves increased by 27% to 159,000oz from 125,400oz (net of mining depletion of 23,166oz):
 - ▶ 3.52Mt at 1.4g/t Au for 159,000oz
- ▶ Mineral Resources net of depletion:
 - ▶ 27.2Mt at 1.2g/t Au for 1.078Moz
- ▶ Numerous outstanding results received since April upgrade – to be included in the next update in October 2016

June 2016 Quarterly Activities Report

“Outstanding operational, exploration and financial results in June Quarter”

► Mundalla

14 m @ 2.70g/t Au including 2 m @ 7.53 g/t Au (FMX215)

7 m @ 3.94 g/t Au including 2 m @ 8.08 g/t Au (FMX207)

► Agate

3 m @ 4.97g/t Au including 1 m @ 12.05 g/t Au (OMX011)

3 m @ 2.43g/t Au including 1 m @ 5.33 g/t Au (OMX008)

► Crossing

16 m @ 1.47 g/t Au including 1 m @ 6.45 g/t Au (FMX351)

11 m @ 1.43 g/t Au (FMX352)

► Golden Eagle South

6 m @ 10.05 g/t Au including 1 m @ 55.00g/t Au (GERC12056)

37 m @ 1.00 g/t Au (GERC12005)

► All Nations

12 m @ 8.54 g/t Au including 4 m @ 24.19 g/t Au (ANRD00082)

13 m @ 2.63 g/t Au including 2 m @ 9.77 g/t Au (ANRD00109)

► Anne de Vida

4 m @ 43.00 g/t Au including 1 m @ 171.01 g/t Au (FMX313)

2 m @ 5.70 g/t Au including 1 m @ 8.61 g/t Au (FMX273)

► Hut

21 m @ 1.77 g/t Au (FMX331)

32 m @ 1.10 g/t Au (FMX339)

► Linq

11 m @ 3.23 g/t Au including 1 m @ 11.95 g/t Au (FMX237)

5 m @ 1.43 g/t Au (FMX446)

► Gambols Hill

6 m @ 4.15g/t Au including 1 m @ 19.60 g/t Au (FMX427)

6 m @ 2.43g/t Au including 1 m @ 6.20 g/t Au (FMX425)

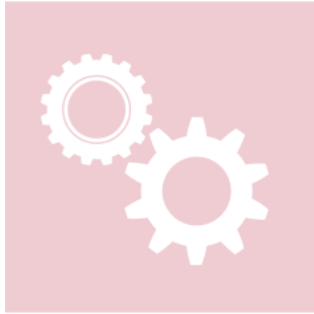
► Majuba Hill

22 m @ 3.08g/t Au including 1 m @ 17.55 g/t Au (FMX512)

12 m @ 2.89g/t Au including 5 m @ 5.61 g/t Au (FMX514)



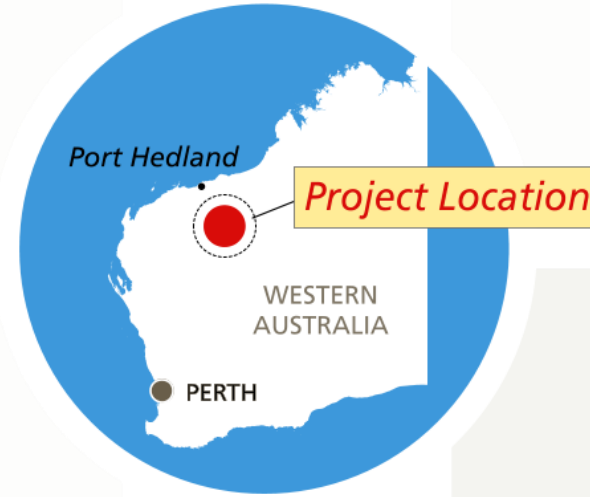
The Exploration Opportunity – Fresh Ore Development



► Operations



► Brownfields resource development



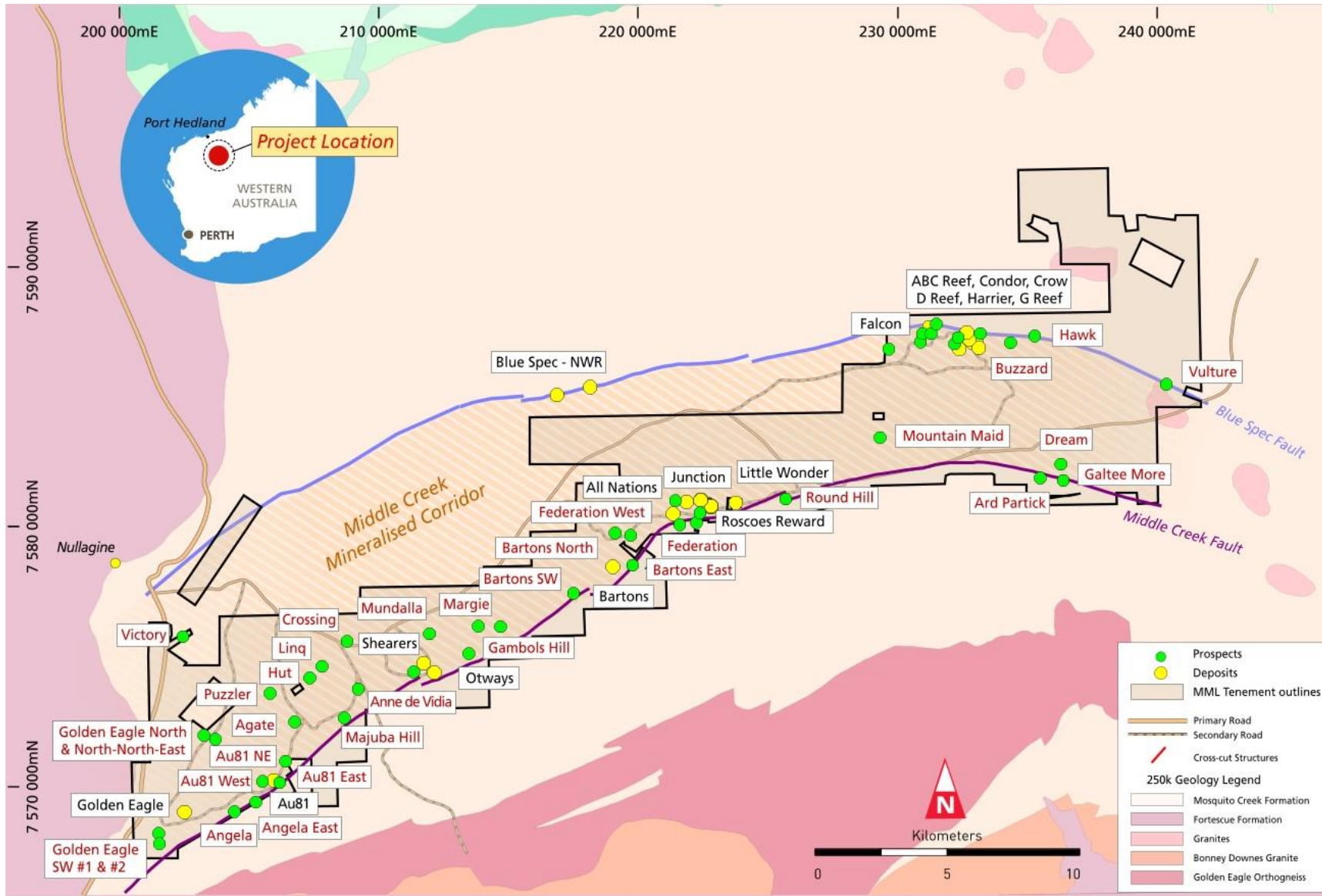
► People & Infrastructure



► Fresh ore development

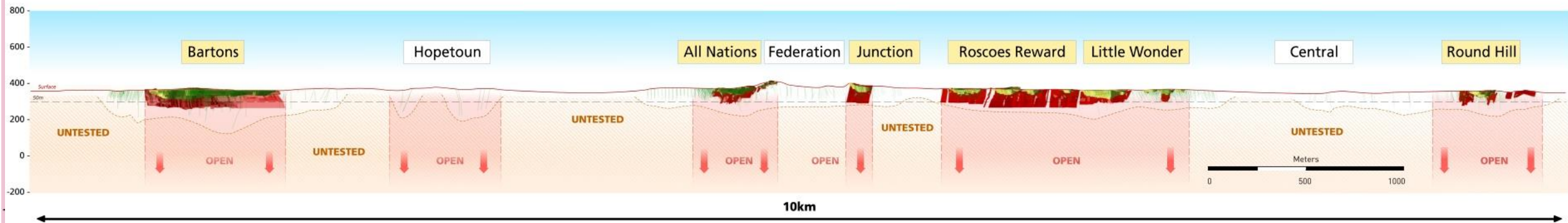


The Exploration Opportunity – Fresh Ore Development



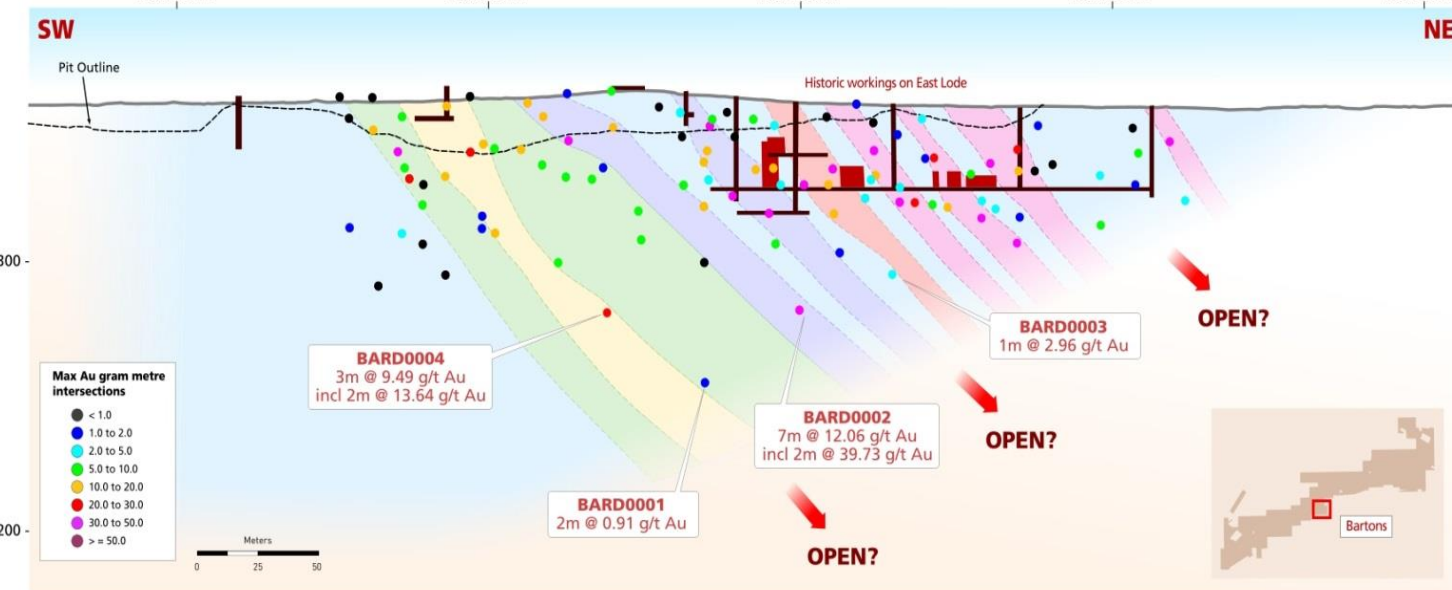
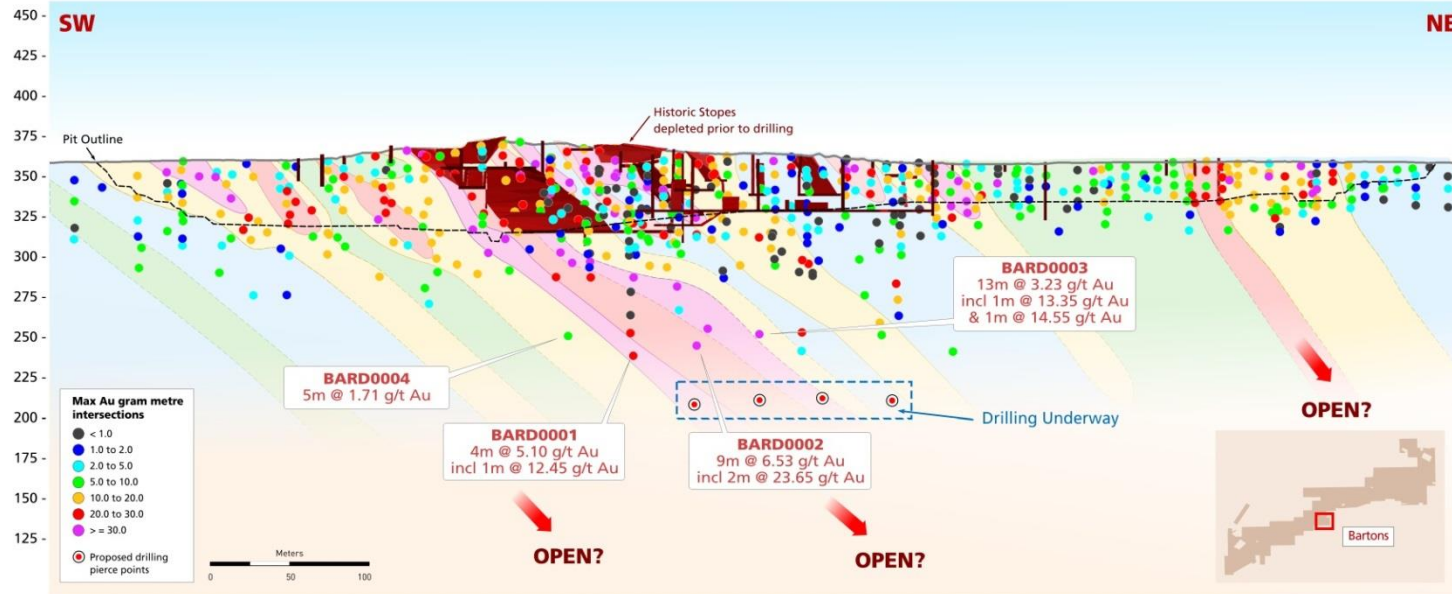
- ▶ ~12Mt of fresh ore currently included in Resource estimate
- ▶ Scoping study underway to determine best economic solution to process fresh ore
- ▶ Metallurgy not complex – similar issues to other goldfields in WA
- ▶ Now targeting deeper fresh ore potential beneath existing oxide open pits
- ▶ **Potential to significantly increase mine life**

Targeting Fresh Ore Mineralisation – Drilling Underway



- ▶ All of Millennium's known Resources remain open at depth
- ▶ Very little drilling below 50m
- ▶ Substantial upside for lateral and depth extensions
- ▶ Deep drilling program commenced on 4 July

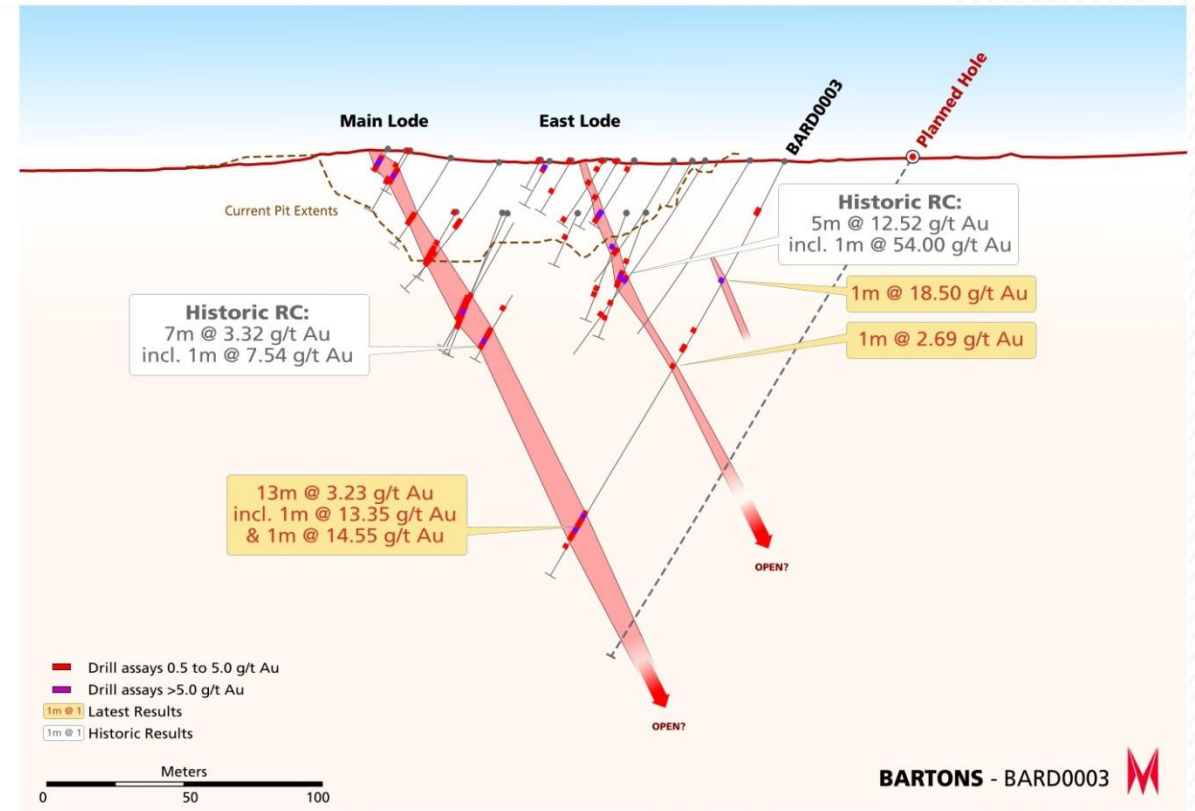
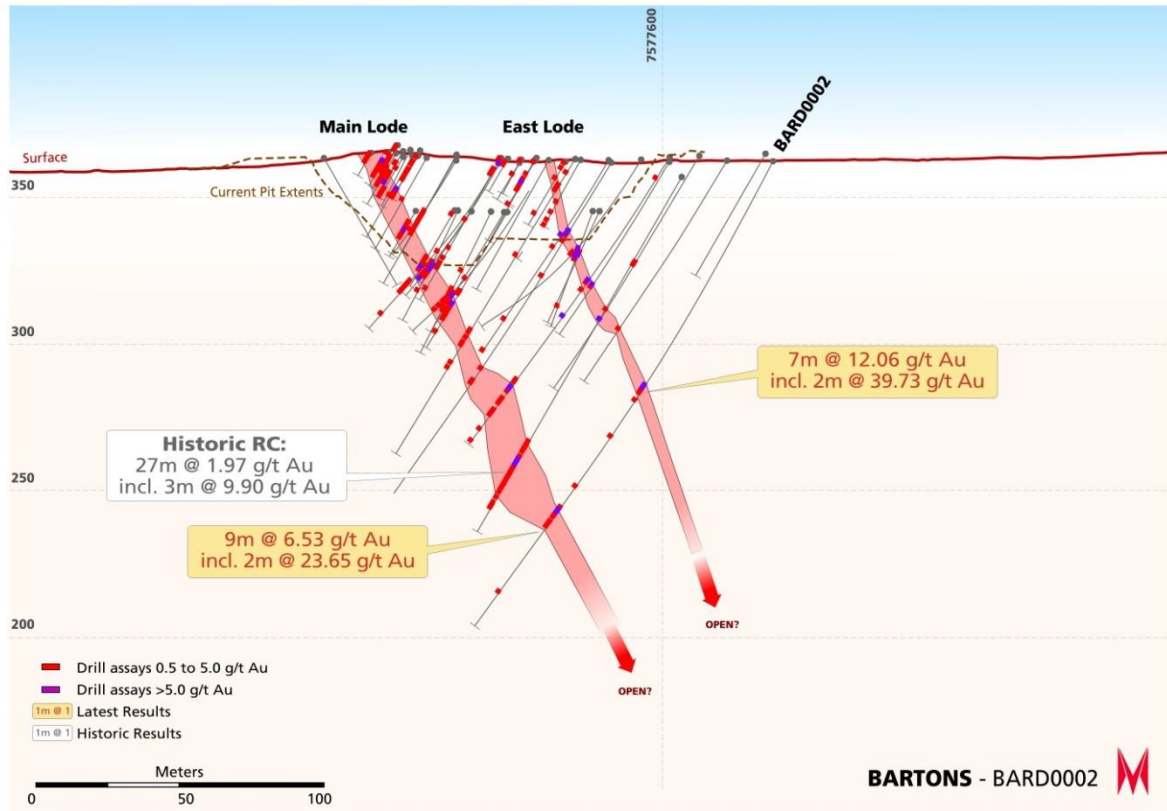
Bartons – Spectacular Results from First Four Deep Holes



- ▶ Outstanding results from first four deep holes drilled by Millennium at Nullagine
- ▶ Results support Millennium's theory that deeper primary mineralisation exists under the existing oxide deposits
- ▶ Results from initial drilling under the Bartons pit include:

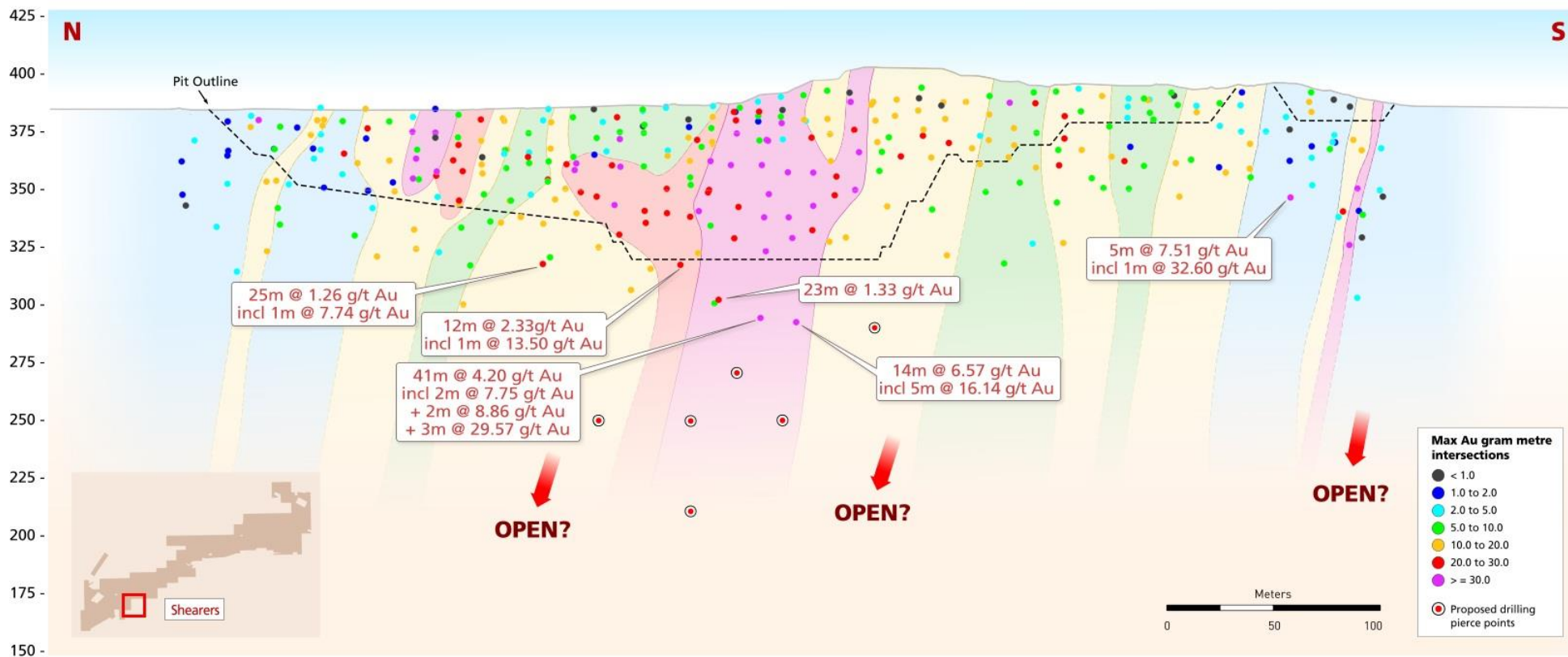
- ▶ 4 m @ 5.10 g/t incl. 1 m @ 5.37 g/t
- ▶ 7 m @ 12.06 g/t incl. 2 m @ 39.73 g/t
- ▶ 9 m @ 6.53 g/t incl. 2m @ 23.65 g/t
- ▶ 1m @ 18.5 g/t
- ▶ 13 m @ 3.23 g/t incl. 1m @ 13.35 g/t and 1 m @ 14.55 g/t
- ▶ 3 m @ 9.49 g/t incl. 2 m @ 13.64 g/t

Bartons – Spectacular Results from First Four Deep Holes



- ▶ Results clearly demonstrate continuity of mineralisation below the existing Bartons open cut
- ▶ High-grade down-plunge extensions up to 150m below surface
- ▶ Mineralisation remains open down-plunge
- ▶ Second phase of RC and diamond drilling now underway
- ▶ Designed to test for extensions 40 m vertical depth below latest intercepts

Shearers – Next Cab off the Rank



- ▶ Drill rig to commence drilling at Shearers immediately following Bartons
- ▶ Drilling will initially target interpreted high-grade down-plunge extensions to a maximum vertical depth of ~170m below surface
- ▶ Drilling will then focus on a number of other high priority targets

Nullagine Gold Project performing well with strong production and low costs

Strong outlook for CY 2016: 80,000-85,000oz at AISC of A\$1180/oz-A\$1220/oz

Debt-free balance sheet provides a strong platform for growth

Outstanding exploration upside at Nullagine

Initial resource upgrade in April 2016 demonstrates ability to **replace mined ounces and grow mine life**

Aggressive drilling program continuing with multiple upcoming share price catalysts

Ideally placed to benefit from **strong gold market environment**

Clear strategy to **become a low cost and margin focused mid-tier Australian gold producer**





The next chapter of growth

- ▶ Thanks for listening.
- ▶ Visit us in Booth 11 to find out more.



August 2016



Mineral Resources and Ore Reserves

On 25 January 2015, the Company announced an updated Mineral Resources and Ore Reserves statement reported in accordance with the JORC Code 2012, which included the below:

2016 Mineral Resource estimate by resource category

Mineral Resource Category	Million Tonnes	Grade (g/t Au)	Thousand Ounces
Measured	12.50	1.2	497
Indicated	7.53	1.3	321
Inferred	7.18	1.2	262
Total	27.20	1.2	1078

2016 Ore Reserve estimate by reserve category

Ore Reserve Category	Million Tonnes	Grade (g/t Au)	Thousand Ounces
Proven	2.53	1.5	121
Probable	0.38	1.8	21
Stockpiles	0.61	0.9	18
Total	3.52	1.4	159

In accordance with Listing Rule 5.23, the Company confirms it is not aware of any new information or data that materially affects the information included in its announcement of 25 January 2016, and that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

Competent Persons Statement – Exploration Results

Mr Andrew Dunn (MAIG), a geologist employed full-time by Millennium Minerals Limited, compiled the technical aspects of this Report. Mr Dunn is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralization and type of deposit under consideration and to the activity that is being reported on 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 Dunn consents to the inclusion in the report of the matters in the form and context in which it appears.