

# ASX Announcement 6 December 2018



# **Gruyere Project - Updated Mine Plan**

# **Highlights**

- Gruyere confirmed as a global Tier 1 gold mine<sup>1</sup> with a long life and forecast high margins
- Life of mine average annual production plan has increased to approximately 300,000 ounces per annum (2016 Feasibility Study: 270,000 ounces per annum)
- Average All-in Sustaining Costs (AISC) over the life of mine forecast at A\$1,025 per ounce (US\$738 per ounce<sup>2</sup>)
- Mill processing throughput lifted from 7.5 Mtpa to 8.2 Mtpa resulting from previously announced and fully funded scope changes
- Attila and Alaric Ore Reserves now incorporated into the production schedule
- First gold production remains on target for June 2019 quarter
- As at 30 November 2018, all major equipment and materials are on site with overall Project and EPC construction (process plant and associated infrastructure) 85% and 77% complete respectively

Gold Road Resources Limited (**Gold Road**) and Gruyere Mining Company Pty Ltd, a member of the Gold Fields Limited group (**Gold Fields**), provide an Updated Mine Plan and construction update following final designs and updated cost information for the Gruyere Gold Project (**Project**), which is being developed as a 50:50 Joint Venture approximately 200 kilometres east of Laverton in Western Australia.

#### **CONTACT DETAILS**

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The Updated Mine Plan is based on updates and enhancements to the Feasibility Study (**FS**) completed in October 2016. The FS was completed by Gold Road prior to entering into a 50:50 Gruyere development joint venture with Gold Fields in November 2016.

Construction of the Gruyere process plant and infrastructure continues to progress as expected, with on-schedule commissioning of the power station completed and mining operations commenced.

**Gold Fields Executive Vice President Australasia, Stuart Mathews, said:** "With first gold remaining on target for the June 2019 quarter, we have the confidence in Gruyere to be able to provide this update to the life of mine plan for this world-class project. The Updated Mine Plan indicates an increase in annual average gold production to 300,000 ounces per annum. This update also provides more clarity around Gruyere's AISC and gold production forecasts."

Gold Road Managing Director and CEO, Duncan Gibbs, said: "It has been an incredible journey for Gold Road, since discovering Gruyere in 2013. For Gold Road the Updated Mine Plan means an attributable forecast share of approximately 150,000 ounces of gold on average per annum over the 12 year mine life. The cash flow Gruyere will produce from 2019 will be substantial and allow us to deliver tremendous value for shareholders, many of whom have backed us since before we made the discovery. Gold Road continue to work closely with Gold Fields, to safely and successfully conclude construction and commissioning of this world-class gold operation."

<sup>&</sup>lt;sup>1</sup> Tier 1: greater than 10 year mine life; greater than 300,000 ounces per annum; greater than 3.5 million ounce Ore Reserve and costs at the lower end of the cost curve

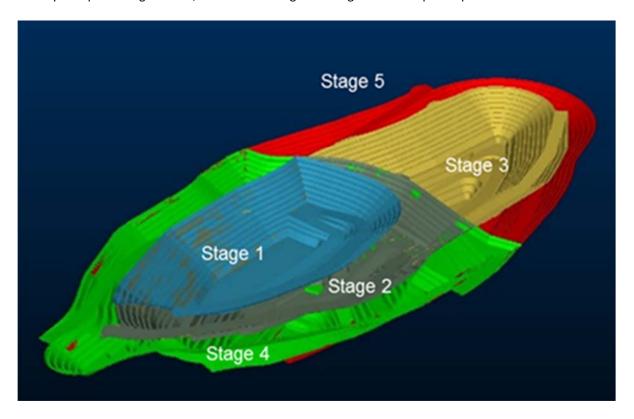
<sup>&</sup>lt;sup>2</sup> Exchange rate A\$1.00 : US\$0.72 (2016 FS: A\$1.00 : US\$0.73)



## Mine Plan

The Gruyere Joint Venture (**Gruyere JV**) has approved the Updated Mine Plan. This is the first update to the Gruyere mine plan since the FS was completed by Gold Road in October 2016, prior to the establishment of the Gruyere JV with Gold Fields. The new life of mine plan is based on the knowledge and confidence gained from the advancing construction at Gruyere, and preparation for commissioning ahead of a planned safe and efficient start-up.

The Updated Mine Plan reflects a new staged pit design, which aims to provide lower risk delivery of ore supplies to Gruyere's processing facilities, while maintaining a similar grade and strip ratio profile to the 2016 FS.



The ore for the first two years of production has been subject to a grade control drilling programme, mostly completed as part of the FS, which provides confidence in the Ore Reserve in the early years of production.

The Gruyere JV has committed significant investment into growth projects with ongoing exploration on the Gruyere JV tenement areas and pre-feasibility studies on the Golden Highway deposits (located approximately 25 kilometres from Gruyere). The Updated Mine Plan now includes 3.6 Mt at 1.55 g/t Au for 178,500 ounces of Ore Reserves from the Attila and Alaric deposits on the Golden Highway.

Gruyere JV will provide 2019 production guidance in the March 2019 quarter. The operations team has developed strategies to ensure a smooth production ramp-up. The team's efforts have resulted in the Gruyere JV planning a six to seven-month ramp-up to full production from the time of first gold in the June 2019 quarter.

The forecast life of mine production now averages approximately 300,000 ounces per annum. The increase from an average of 270,000 ounces per annum in the FS is driven by the opportunistic purchase of larger SAG and Ball Mills lifting processing throughput to 8.2 Mtpa in fresh rock from 2021, slight improvements to expected metallurgical recoveries and the addition of the two Golden Highway deposits.



# **Business Plan Gold Production and AISC Outlook 2020-2030**

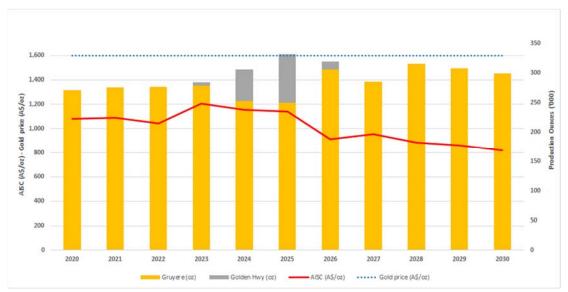


Figure 1: Gold Production and AISC Outlook 2020 - 2030

A modest increase in costs from the 2016 FS occurred in line with general inflation rates, with average AISC over life of mine forecast at A\$1,025 per ounce (US\$738 per ounce³) (Figure 1).

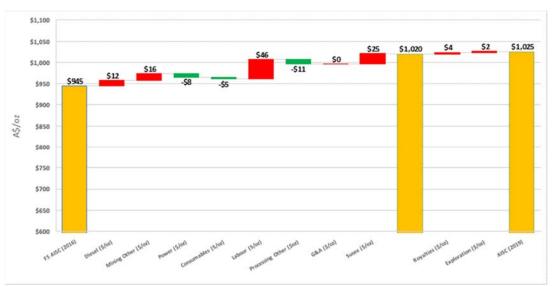


Figure 2: Waterfall chart showing AISC variance between 2016 FS and 2019 Updated Mine Plan

As illustrated in Figure 2 above, labour costs, rising diesel costs, increased prices for key mine supplies and equipment, and sustaining capital expenditure over mine life are partly offset by a favourable contracted gas price for the powerhouse and reduced plant reagent costs.

The projected AISC is further increased by exploration expenditure and higher gold royalties (due to updated gold price assumptions which increase life of mine revenue above the FS estimate).

Minimal growth capital is anticipated therefore AIC is projected to be marginally higher than AISC averaging A\$1030/oz over mine life.

<sup>&</sup>lt;sup>3</sup> Exchange rate A\$1.00 : US\$0.72 (2016 FS: A\$1.00 : US\$0.73)



The Gruyere orebody continues at depth below the current A\$1,600 per ounce Reserve pit design, with an additional 2.3 million ounces in Mineral Resource based on a A\$1,850 per ounce pit optimisation. At a higher gold price, or more importantly, with potential improvements to operating costs and optimisation of technical parameters gained through operations, there remains potential to further expand the final pit stage in the future.

Key outcomes of the Updated Mine Plan are summarised below:

Key Outcomes	Updated Mine	Feasibility Study	Variance
	Plan	2016	
Project Processing Life (years)	12	13	-8%
Life of Mine Ore Mined (Mt)	96.6	91.6	5%
Stripping Ratio (waste:ore) <sup>1</sup>	2.85	2.77	3%
Gold Mined (Moz)	3.75	3.52	6%
Gold Recovered (Moz)	3.47	3.21	8%
Life of Mine Average Annual Throughput (Mtpa) <sup>2</sup>	8.2	7.5	9%
Life of Mine Head Grade (g/t)	1.21	1.20	1%
Annualised Gold Production (average koz pa)	300	270	10%
All In Sustaining Cost (A\$/oz)	1,025	945	8%
Gold Price assumed (A\$/oz)	1,600	1,500	6%

Notes:

- 1 Updated Mine Plan strip ratio includes Gruyere at 2.7:1 and Attila and Alaric at 5.8:1
- 2 Average fresh rock throughput after 2021

# **Construction Progress**

The Gruyere process plant and associated infrastructure is being constructed under an Engineering Procurement and Construction (EPC) contract with the ACJV, a joint venture between Amec Foster Wheeler (now a subsidiary of the Wood Group Plc) and Civmec. With engineering design at 97% and procurement of major equipment completed, the remaining works are largely on a fixed price basis. The contract includes milestone performance incentives, liquidated damages for late delivery, and is guaranteed by performance bonds.

The ACJV continues to deliver plant construction to a high quality. At 30 November 2018, overall Project and EPC construction was 85% and 77% complete respectively.

All civil and concrete works for the process plant are complete with structural steel, plate steel and tankage nearing completion. The major equipment and materials required to complete construction are on site. Remaining works are focussed on piping, electrical and instrumentation and delivery of plant systems for commissioning which commences in the March 2019 quarter.

Limited work to complete the process water supply bore fields and associated pipelines is ongoing. Civil works on the tailings storage facility and installation of the tailings decant recovery pipelines have been completed. All other infrastructure construction is complete, and the power station is now fully commissioned.

Construction remains on schedule for first gold production in the June 2019 quarter.



















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# **Mining Progress**

Downer EDI Mining Pty Ltd (**Downer**) commenced mining operations in early November 2018. Mining, with a single excavator and truck fleet, is initially focusing on completing the pre-strip and second stage ROM pad development, with first ore to be mined in the March 2019 quarter. The Gruyere JV expects mining rates to peak at approximately 30 Mtpa in 2023 and average 16 Mtpa over mine life.

# Community

The Gruyere operations team have been working with Downer to identify employment and contracting opportunities for the local community members upon commencement of mining operations. One Yilka person who joined the Downer team as an excavator operator was one of the first in the team to break ground in the Liebherr 9400 Excavator.



For further information, please visit www.goldroad.com.au or contact:

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## Mineral Resource Estimate for the Yamarna Leases - December 2017

	Gruyere Project Joint Venture - 100% basis			Gold Road - 50%		
Project Name / Category	Tonnes	Grade	Contained Metal	Tonnes	Grade	Contained Metal
	(Mt)	(g/t Au)	(Moz Au)	(Mt)	(g/t Au)	(Moz Au)
Gruyere Total	143.46	1.27	5.88	71.73	1.27	2.94
Measured	14.06	1.16	0.53	7.03	1.16	0.26
Indicated	91.52	1.27	3.73	45.76	1.27	1.87
Measured and Indicated	105.58	1.25	4.26	52.79	1.25	2.13
Inferred	37.88	1.33	1.62	18.94	1.33	0.81
Attila + Alaric + Montagne + Argos + YAM14 Total	13.19	1.48	0.63	6.59	1.48	0.31
Measured	0.29	1.99	0.02	0.14	1.99	0.01
Indicated	7.11	1.63	0.37	3.56	1.63	0.19
Measured and Indicated	7.40	1.64	0.39	3.70	1.64	0.20
Inferred	5.79	1.28	0.24	2.89	1.28	0.12
Total Yamarna	156.65	1.29	6.51	78.32	1.29	3.25
Measured	14.35	1.18	0.54	7.17	1.18	0.27
Indicated	98.63	1.29	4.10	49.31	1.29	2.05
Measured and Indicated	112.98	1.28	4.65	56.49	1.28	2.32
Inferred	43.67	1.32	1.86	21.83	1.32	0.93

#### Ore Reserve Estimate for the Yamarna Leases - December 2017

	Gruyere Project Joint Venture - 100% basis			Gold Road - 50%		
Project Name / Category	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)
Gruyere Total	93.76	1.18	3.56	46.88	1.18	1.78
Proved	14.91	1.09	0.52	7.45	1.09	0.26
Probable	78.85	1.20	3.04	39.43	1.20	1.52
Attila + Alaric Total	3.59	1.5	0.18	1.80	1.5	0.09
Proved	0.32	1.7	0.02	0.16	1.7	0.01
Probable	3.27	1.5	0.16	1.63	1.5	0.08
Total Yamarna	97.35	1.20	3.74	48.68	1.20	1.87
Proved	15.23	1.11	0.54	7.62	1.11	0.27
Probable	82.12	1.21	3.20	41.06	1.21	1.60

### Notes:

- All Mineral Resources and Ore Reserves are completed in accordance with the JORC Code 2012 Edition
- Mineral Resources are inclusive of Ore Reserves
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding
- All dollar amounts are in Australian dollars
- All Mineral Resources are reported at various cut-off grades according to material type, metallurgical recovery and distance to the Gruyere Mill (in construction). Gruyere 0.34 g/t Au (fresh), 0.30 g/t Au (transition), 0.29 g/t Au (Oxide). Attila, Argos, Montagne and Alaric 0.50 g/t Au. YAM14 0.40 g/t Au. All Mineral Resources are constrained within a A\$1,850/oz optimised pit shell derived from mining, processing and geotechnical parameters from ongoing Pre-Feasibility Studies and operational studies
- The **Ore Reserves** are evaluated using variable **cut off grades**: Gruyere 0.34 g/t Au (fresh), 0.30 g/t Au (transition), 0.29 g/t Au (oxide). Attila 0.70 g/t Au (fresh), 0.60 g/t Au (transition), 0.55 g/t Au (oxide). Alaric 0.67 g/t Au (fresh), 0.62 g/t Au (transition), 0.57 g/t Au (oxide). The Ore Reserves are constrained within a **A\$1,600/oz mine design** derived from mining, processing and geotechnical parameters as defined by Pre-Feasibility Studies and operational studies. **Ore block tonnage dilution averages and gold loss estimates**: Gruyere 4.9% and 0.4%. Attila 14% and 3%. Alaric 20% and 6%. The 2016 Ore Reserve was evaluated using a gold price of A\$1,400/oz (ASX announcement dated 8 February 2016)
- The Gruyere JV is a 50:50 joint venture between Gold Road and Gruyere Mining Company Pty Limited a wholly owned Australian subsidiary
  of Gold Fields. Figures are reported on a 100% basis unless otherwise specified
- Gold Road holds an uncapped 1.5% net smelter return royalty on Gold Fields' share of production from the Gruyere JV once total gold production from the Gruyere JV exceeds 2 million ounces



### **Competent Persons Statements**

#### **Exploration Results**

The information in this report which relates to Exploration Results is based on information compiled by Mr Justin Osborne, Executive Director-Exploration and Growth for Gold Road. Mr Osborne is an employee of Gold Road, and a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM 209333). Mr Osborne is a shareholder and a holder of Performance Rights. Mr Osborne has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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 Osborne consents to the inclusion in the report of the matters based on this information in the form and context in which it appears

#### **Mineral Resources**

The information in this report that relates to the Mineral Resource for Gruyere is based on information compiled by Mr Mark Roux. Mr Roux is an employee of Gold Fields Australia and is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM 324099) and is registered as a Professional Natural Scientist (400136/09) with the South African Council for Natural Scientific Professions. Mr Justin Osborne, Executive Director-Exploration and Growth for Gold Road and Mr John Donaldson, General Manager Geology for Gold Road have endorsed the Mineral Resource for Gruyere on behalf of Gold Road.

- Mr Osborne is an employee of Gold Road and a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM 209333). Mr Osborne is a shareholder and a holder of Performance Rights.
- Mr Donaldson is an employee of Gold Road and a Member of the Australian Institute of Geoscientists and a Registered Professional Geoscientist (MAIG RPGeo Mining 10147). Mr Donaldson is a shareholder and a holder of Performance Rights.

The information in this report that relates to the Mineral Resource Estimation for Attila, Argos, Montagne, Alaric and YAM14 is based on information compiled by Mr Justin Osborne, Executive Director-Exploration and Growth for Gold Road, Mr John Donaldson, General Manager Geology for Gold Road and Mrs Jane Levett, Principal Resource Geologist for Gold Road.

Mrs Levett is an employee of Gold Road and is a Member of the Australasian Institute of Mining and Metallurgy and a Chartered Professional (MAusIMM CP 112232).

Messrs Roux, Osborne and Donaldson and Mrs Levett have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Messrs Roux, Osborne and Donaldson and Mrs Levett consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.

#### Ore Reserves

The information in this report that relates to the Ore Reserve for Gruyere is based on information compiled by Mr Daniel Worthy. Mr Worthy is an employee of Gruyere Mining Company Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM 208354). Mr Max Sheppard, Principal Mining Engineer for Gold Road has endorsed the Ore Reserve for Gruyere on behalf of Gold Road.

Mr Sheppard is an employee of Gold Road and is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM 106864).

The information in this report that relates to the Ore Reserve for Attila and Alaric is based on information compiled by Mr Max Sheppard, Principal Mining Engineer for Gold Road.

Mr Worthy and Mr Sheppard have sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity currently 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 Worthy and Mr Sheppard consent to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

## **New Information or Data**

Gold Road confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources and Ore Reserves that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not materially changed from the original market announcement.