ASX Announcement
13 February 2019

Annual Mineral Resource and Ore Reserve Statement

Highlights

- **Ore Reserve ($1,600/oz) Increased 5% to 3.92 million ounces (+176,000 ounces)[1]**

  Gruyere Deposit:
  - Ore Reserve grade increased 5% to 1.24 g/t Au (not included in the current life-of-mine plan)[2]
  - Proved Ore Reserve increased 15% to 604,000 ounces

  Golden Highway Deposits:
  - Additional Ore Reserves of 130,000 ounces (available for future mine plans)
  - Maiden Ore Reserves declared at Argos and Montagne
- **Mineral Resource ($1,850/oz) increased 2% to 6.61 million ounces (+103,200 ounces)**
  - Gruyere Mineral Resource decreased 1.7% (-97,000 ounces)
  - Golden Highway Mineral Resource increased 17% (99,300 ounces)
  - Central Bore Underground Mineral Resource added at 13.05 g/t Au (101,300 ounces)
- **Increased grade of Gruyere Reserve and additional 0.13 million ounces are complementary to the 2018 life-of-mine plan**
- **Gold Road attributable Ore Reserve now totals 1.96 million ounces, with a Mineral Resource of 3.31 million ounces**

ASX Code GOR

ABN 13 109 289 527

CONTACT DETAILS

Principal & Registered Office
Level 2, 26 Colin St
West Perth WA 6005

www.goldroad.com.au
perth@goldroad.com.au

T +61 8 9200 1600
F +61 8 9481 6405

Well-funded mid-tier gold development and exploration company, Gold Road Resources Limited (**Gold Road** or the **Company**) presents the Mineral Resource and Ore Reserve statement as at December 2018. All Mineral Resources and Ore Reserves are currently located within the Gruyere Project Joint Venture (**Gruyere JV**) tenements and are reported on a 100% basis unless otherwise specified with 50% attributable to Gold Road (Figure 1). The Gruyere JV is a 50:50 joint venture managed by Gruyere Mining Company Pty Ltd, a member of the Gold Fields Limited group (**Gold Fields**). Gold Road, on behalf of the Gruyere JV, manages all exploration activities and resource development to pre-feasibility completion on the JV tenements other than the Gruyere Gold Project (**Gruyere**).

The 2018 exploration campaign targeted additional higher grade deposits along the Golden Highway trend to supplement the 12 year life-of-mine plan already established for the Project. Construction and mining at Gruyere is on schedule, with mining and stockpiling of ore commencing in January 2019[3]. Mining depletion is yet to be reported.

Commenting on the increase to the annual statement, Duncan Gibbs, Managing Director and CEO said
"Positive exploration results and excellent technical work by the Gold Road exploration and Gruyere JV operational teams has increased the reserve by 5% to almost 4 million ounces, including the Maiden Ore Reserve additions on the Golden Highway. Encouragingly the Golden Highway Mineral Resource increased by 17% to almost 700,000 ounces, and the addition of a robust high-grade underground resource at Central Bore increases the mineralisation options available to the Gruyere JV. The increased reserve grade and ounces has the potential to add further value to the recently updated Gruyere Mine Plan."

[1] Mineral Resource and Ore Reserves are reported on a 100% basis unless otherwise specified, 50% is attributable to Gold Road and 50% attributable to Gold Fields. Changes to values are compared to the December 2017 annual statement (ASX announcement dated 21 February 2018)
[2] ASX announcement dated 6 December 2018
[3] ASX announcement dated 29 January 2019

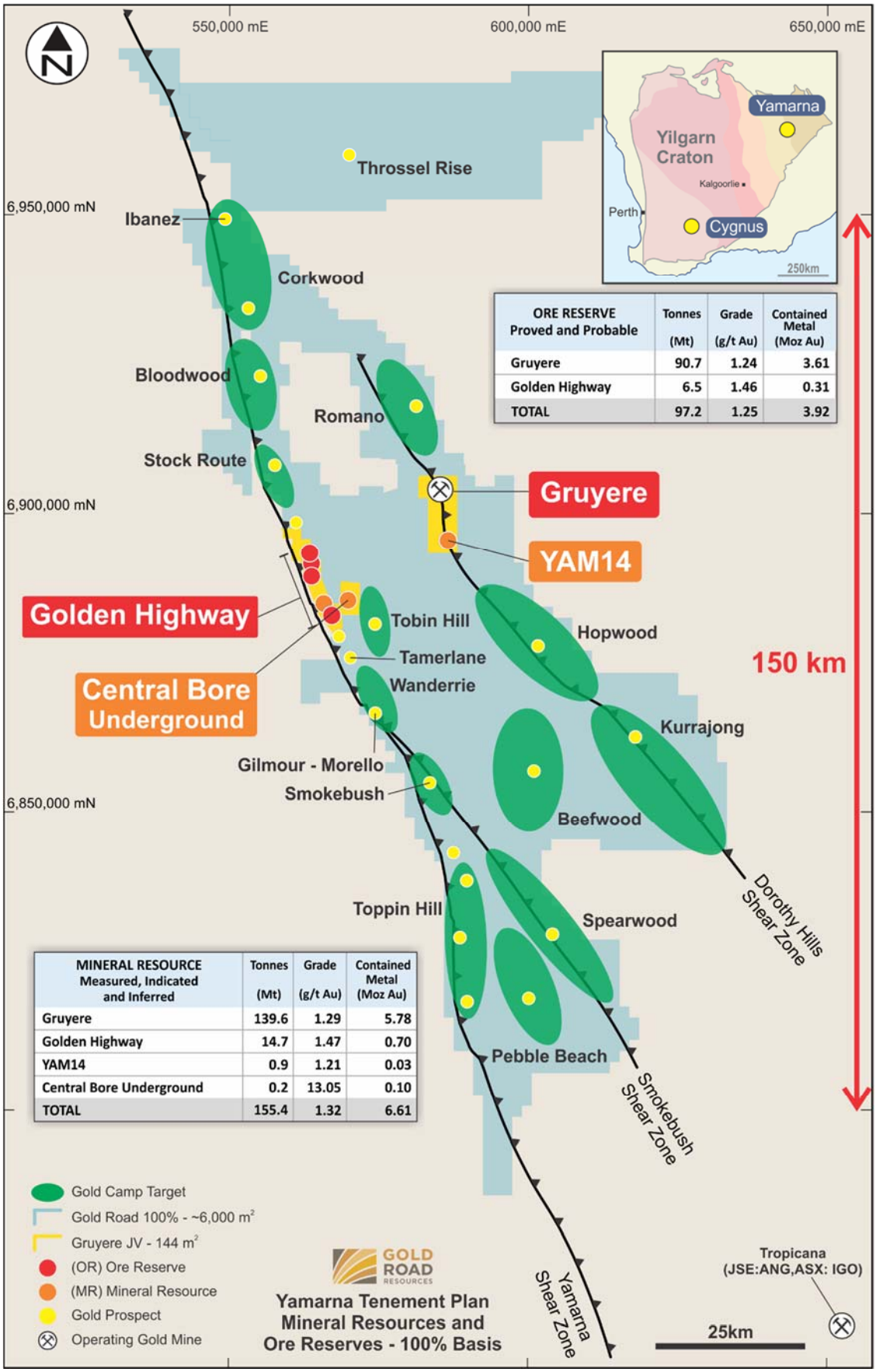


Figure 1: *Yamarna tenement plan with Ore Reserves and Mineral Resources reported on a 100% basis as at December 2018. All current reported deposits are situated within the Gruyere Joint Venture with Gold Fields*

Ore Reserve Summary

The Ore Reserve is derived from Gruyere, and the Golden Highway Deposits which include Attila, Alaric, Argos and Montagne (Figure 3), all of which are in the Gruyere JV. The Gruyere estimate is based on ongoing operational studies, while the Golden Highway estimate is based on Pre-feasibility Studies (**PFS**) completed by Gold Road. The Ore Reserve totals **97.20 million tonnes at 1.25 g/t Au for 3.92 million ounces of gold**. Ore Reserves are reported on a 100% basis at a $1,600/oz gold price (US$1,200 at US$0.75:A$1.00) (Table 1 and Figure 2). The Ore Reserve **increased by 176,000 ounces (+5%)** from the previous Ore Reserve at December 2017.

The Ore Reserves are estimated from their respective Mineral Resources after consideration of the level of confidence and by taking account of material and relevant modifying factors. The Proved Ore Reserve estimate is based on the Measured Mineral Resources. The Probable Ore Reserve estimate is based on the Indicated Mineral Resources. No Inferred Mineral Resources have been included in the Ore Reserve.

Table 1: Ore Reserve comparison to December 2017 (total Proved and Probable)

	Ore Reserve - December 2018			Previous Ore Reserve - December 2017		
Project Name	**Tonnes (Mt)**	**Grade (g/t Au)**	**Contained Metal (Moz Au)**	**Tonnes (Mt)**	**Grade (g/t Au)**	**Contained Metal (Moz Au)**
Gruyere	90.65	1.24	3.61	93.76	1.18	3.56
Golden Highway Total:	6.54	1.46	0.31	3.59	1.55	0.18
Attila	*3.61*	*1.54*	*0.18*	*3.21*	*1.55*	*0.16*
Alaric	*0.99*	*1.44*	*0.05*	*0.38*	*1.49*	*0.02*
Montagne	*1.50*	*1.37*	*0.07*	-	-	-
Argos	*0.44*	*1.26*	*0.02*	-	-	-
Total 100% Basis	**97.20**	**1.25**	**3.92**	**97.35**	**1.20**	**3.74**
Gold Road Attributable	**48.60**	**1.25**	**1.96**	**48.68**	**1.20**	**1.87**

Notes:

- *All Ore Reserves are completed in accordance with the 2012 JORC Code Edition*
- *All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding*
- *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 Limited. Figures are reported on a 100% basis unless otherwise specified, 50% is attributable to Gold Road*
- *Gold Road holds an uncapped 1.5% net smelter return royalty on Gold Field's share of production from the Gruyere JV once total gold production exceeds 2 million ounces*
- *The Ore Reserves are constrained within a $1,600/oz mine design derived from mining, processing and geotechnical parameters as defined by PFS and operational studies*
- *The Ore Reserve is evaluated using variable cut-off grades: Gruyere - 0.30 g/t Au, Attila - 0.65 g/t Au (fresh), 0.58 g/t Au (transition), 0.53 g/t Au (oxide). Alaric - 0.59 g/t Au (fresh), 0.56 g/t Au (transition), 0.53 g/t Au (oxide), Montagne – 0.64 g/t Au (fresh), 0.60 g/t Au (transition), 0.58 g/t Au (oxide), Argos – 0.66 g/t Au (fresh), 0.64 g/t Au (transition), 0.59 g/t Au (oxide)*
- *Ore block tonnage dilution averages and gold loss estimates: Gruyere - 4.9% and 0.4%. Attila - 14% and 3%. Alaric - 20% and 6%. Montagne – 9% and 7%. Argos 10% and 12%*
- *All dollar amounts are in Australian dollars unless otherwise stated*

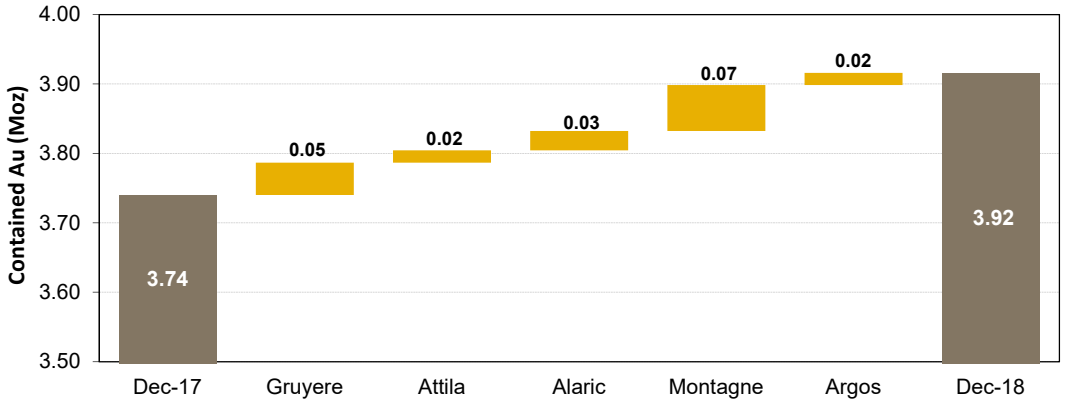


Figure 2: *Waterfall chart showing contribution to the increase in Ore Reserve Contained Metal (ounces). Apparent differences may occur due to rounding*

Following modifications to the mine design submitted for the operational plan, and updates to the geology and grade model, the Ore Reserve at Gruyere has increased by 46,500 at 5% higher grade (Figure 2). Grade control drilling completed in 2017 converted 79,000 ounces to the Proved category with minimal variance from the Probable estimate previously reported.

The Golden Highway Ore Reserves are within economic trucking distance of the Gruyere process plant and provide a source of supplementary mill feed during Gruyere's mine life. Maiden Ore Reserves are declared for the Montagne and Argos Deposits containing a total of 66,100 ounces and 17,700 ounces of gold respectively within new open pit designs. The existing Ore Reserves at Attila and Alaric have increased by 17,800 and 27,900 ounces of gold respectively, following modifications to the mine design incorporating reductions to mining and processing costs.

The additional Ore Reserves from Gruyere and the Golden Highway will be available for future life of mine updates beyond the Gruyere Mine Plan published in December 2018[4].

Details of the mining and processing costs, dilution assumptions, and pit designs for each deposit are contained in the Material Information Summaries.

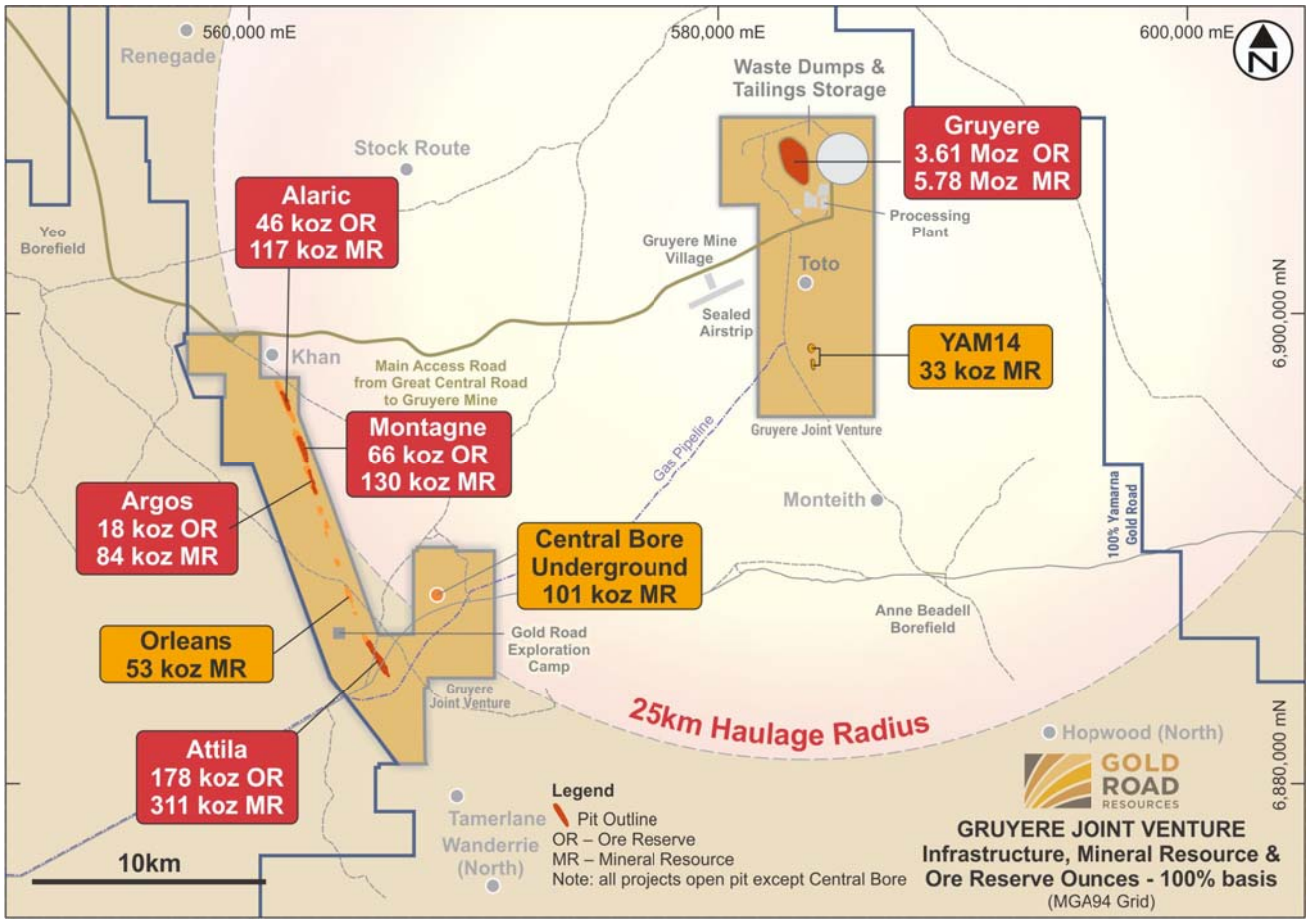


Figure 3: *Gruyere JV infrastructure plan with Mineral Resource and Ore Reserve locations*

[4] ASX announcement dated 6 December 2018

Mineral Resource Summary

The Mineral Resource is derived from the Gruyere Deposit, the Golden Highway Deposits, YAM14 and Central Bore (Figure 3), all of which are in the Gruyere JV. As at December 2018, the Mineral Resource is **155.37 million tonnes at 1.32 g/t Au for 6.61 million ounces**, an increase of 2% from the Mineral Resource reported at December 2017 (Table 2 and Figure 4). Mineral Resources are reported on a 100% basis and are constrained within optimised pit shells or underground stope shapes based on a $1,850/oz gold price and deposit-specific modifying factors and cut-off grades.

Table 2: Mineral Resource comparison to December 2017 (total Measured, Indicated and Inferred categories)

	Mineral Resource - December 2018			Previous Mineral Resource - December 2017		
Project Name	**Tonnes (Mt)**	**Grade (g/t Au)**	**Contained Metal (Moz Au)**	**Tonnes (Mt)**	**Grade (g/t Au)**	**Contained Metal (Moz Au)**
Gruyere	139.56	1.29	5.78	143.46	1.27	5.88
YAM14	0.85	1.21	0.03	0.87	1.21	0.03
Central Bore	0.24	13.05	0.10	-	-	-
Golden Highway Total	14.72	1.47	0.70	12.32	1.50	0.60
Attila	*5.95*	*1.62*	*0.31*	*5.58*	*1.65*	*0.30*
Orleans	*1.01*	*1.64*	*0.05*	-	-	-
Argos	*2.17*	*1.20*	*0.08*	*1.92*	*1.27*	*0.08*
Montagne	*3.21*	*1.26*	*0.13*	*2.97*	*1.34*	*0.13*
Alaric	*2.38*	*1.53*	*0.12*	*1.85*	*1.57*	*0.09*
Total 100% Basis	**155.37**	**1.32**	**6.61**	**156.65**	**1.29**	**6.51**
Gold Road Attributable	**77.69**	**1.32**	**3.31**	**78.32**	**1.29**	**3.25**

Notes:

- *All Mineral Resources are completed in accordance with the JORC Code 2012 Edition*
- *All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding*
- *Mineral Resources are inclusive of Ore Reserves*
- *The Gruyere JV is a 50:50 joint venture between Gold Road and Gruyere Mining Company Pty Ltd, a wholly owned Australian subsidiary of Gold Fields Limited. Figures are reported on a 100% basis unless otherwise specified, 50% is attributable to Gold Road*
- *All Open Pit Mineral Resources are reported at various cut-off grades allowing for processing costs, recovery and haulage to the Gruyere mill. Gruyere - 0.30 g/t Au. Attila, Argos, Montagne, Orleans, and Alaric – 0.50 g/t Au. YAM14 – 0.40 g/t Au*
- *All Open Pit Mineral Resources are constrained within a $1,850/oz optimised pit shell derived from mining, processing and geotechnical parameters from ongoing PFS and operational studies*
- *Underground Mineral Resources at Central Bore are constrained within a 1.5m wide optimised stope with a 3.5 g/t Au cut-off reflective of a $1,850/oz gold price.*
- *All dollar amounts are in Australian dollars unless otherwise stated*

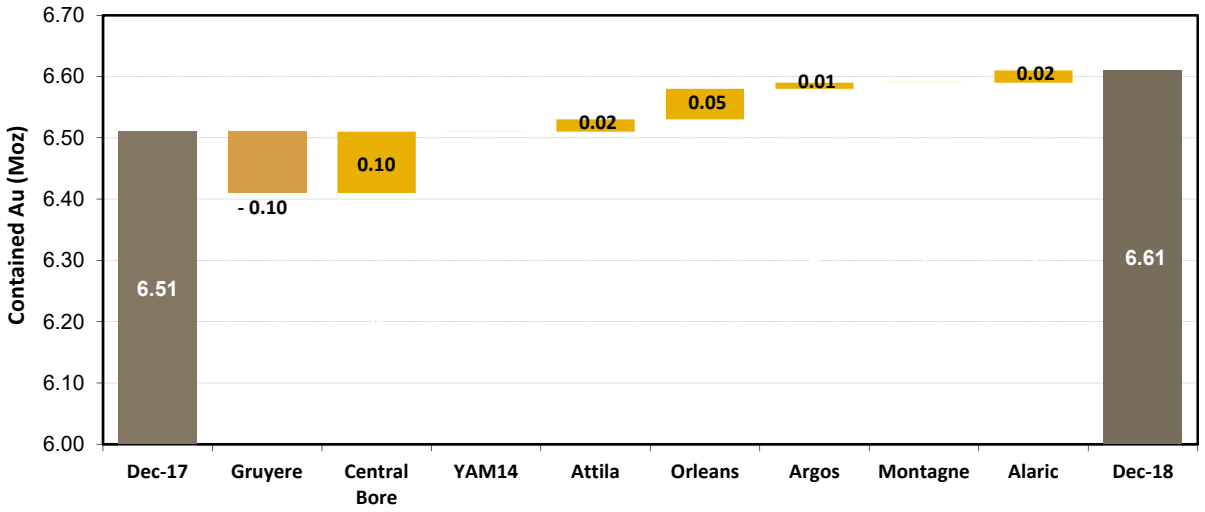


Figure 4: *Waterfall chart showing variations to the Mineral Resource Contained Metal (ounces of gold). Apparent differences may occur due to rounding*

The Gruyere Mineral Resource decreased by 1.7% to **139.56 million tonnes at 1.29 g/t Au for 5.78 million ounces** due to changes to the geology model and estimation methodology.

Central Bore has been re-instated as a Mineral Resource following detailed re-interpretation of the geology, and appropriate consideration of the potential for economic extraction utilising underground Mineable Stope Optimisation software. The Mineral Resource totals **241,500 tonnes at 13.05 g/t Au for 101,300 ounces** and is constrained inside optimised stopes assuming a 1.5 metre minimum width and a 3.5 g/t Au cut-off. Due to the narrow nature of the high-grade mineralisation, Gold Road considers it appropriate to report the diluted grade for this deposit.

The Mineral Resource for YAM14 remains materially unchanged at **853,500 tonnes at 1.21 g/t Au for 33,300 ounces** following optimisation with only minor changes to modifying factors. YAM14 is a deeply weathered, shallow open pit position that could potentially provide supplementary feed to the Gruyere process plant, which is situated 8 kilometres north of the deposit.

The Mineral Resource for the Golden Highway Deposits, approximately 25 kilometres to the west of Gruyere, increased by 99,300 ounces to 695,100 ounces as follows:

- Attila Mineral Resource increased 5% (15,100 ounces) to **5.95 million tonnes at 1.62 g/t Au for 310,900 ounces**, based on updated modifying factors
- Alaric Mineral Resource increased 26% (23,900 ounces) to **2.38 million tonnes at 1.53 g/t Au for 117,200 ounces** based on updated modifying factors
- Argos Mineral Resource increased 7% (5,500 ounces) to **2.17 million tonnes at 1.20 g/t Au for 83,800 ounces** based on updated modifying factors and additional drilling
- Montagne Mineral Resource increased 1% (1,700 ounces) to **3.21 million tonnes at 1.26 g/t Au for 130,100 ounces** based on updated modifying factors and additional drilling
- Orleans Mineral Resource added **1.01 million tonnes at 1.64 g/t Au for 53,100 ounces** based on additional drilling and a new resource estimate

Further details regarding Mineral Resources for each deposit can be found in the Material Information Summaries.

JORC Code 2012 Edition and ASX Listing Rules Requirement

The Company governs its activities in accordance with industry best practice. The Ore Reserve and Mineral Resource is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code 2012 Edition), Chapter 5 of the ASX Listing Rules and ASX Guidance Note 31.

Material Information Summaries for each of the contributors to this Mineral Resource and Ore Reserve Statement are provided in accordance with ASX Listing Rules 5.8 and 5.9 and the Assessment and Reporting Criteria, and JORC Code 2012 Edition requirements. These summaries can be found proceeding this section.

The Gruyere Mineral Resource and Ore Reserve estimate was compiled by Gold Fields Competent Persons and reviewed by Gold Road Competent Persons. The Golden Highway (Attila, Orleans, Argos, Montagne and Alaric), Central Bore, and the YAM14 Mineral Resources were compiled by Gold Road Competent Persons and reviewed by Gold Fields Competent Persons. All Mineral Resources were subject to internal geological peer review and validation, and documented handover meetings with the internal mining team for Resource evaluation. The Golden Highway (Attila, Argos, Montagne and Alaric) Ore Reserves were compiled and reviewed by Gold Road Competent Persons.

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

Gold Road Resources
Duncan Gibbs, Managing Director & CEO

Duncan Hughes, Manager – BD & Investor Relations
Tel: +61 8 9200 1600

Media Enquiries – Cannings Purple
Warrick Hazeldine or Peter Klinger
whazeldine@canningspurple.com.au
pklinger@canningspurple.com.au
Tel: +61 417 944 616 or +61 411 251 540

About Gold Road

Gold Road is pioneering development of Australia's newest goldfield, the Yamarna Belt, 200 kilometres east of Laverton in Western Australia. The Company holds interests in tenements covering approximately 6,000 km^2 in the region, which is historically underexplored and highly prospective for gold mineralisation. In November 2016, Gold Road entered a 50:50 joint venture with Gold Fields for the Gruyere JV covering 144 km^2.

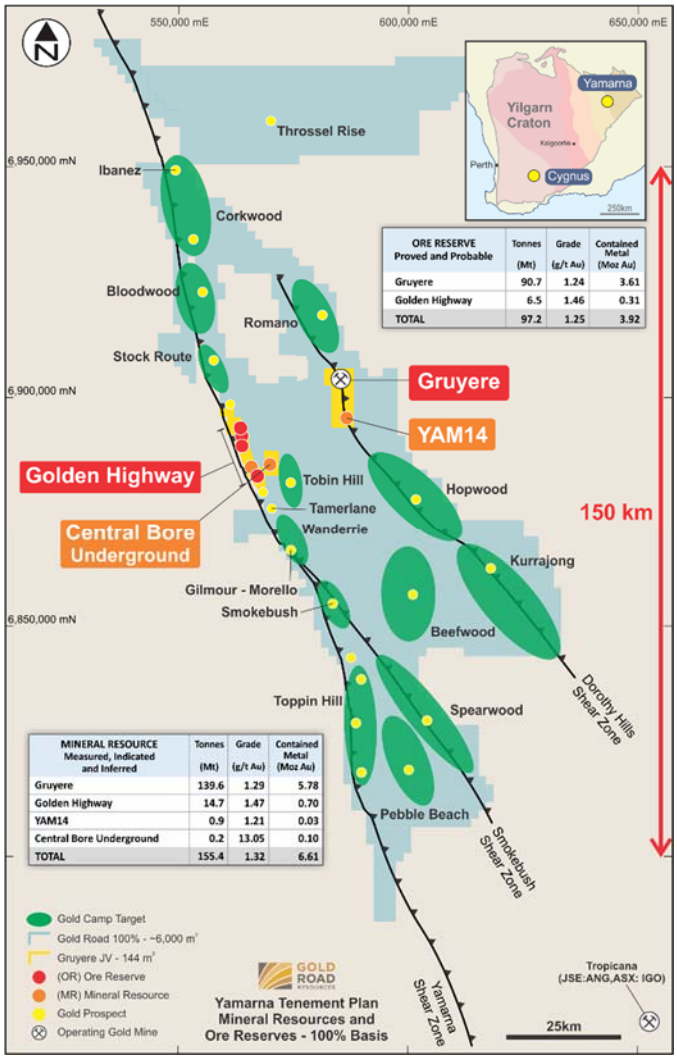
The Yamarna leases contain a gold Mineral Resource of 6.6 million ounces, including 5.8 million ounces at the Gruyere Deposit and an Ore Reserve of 3.9 million ounces. All current Mineral Resources and Ore Reserves are contained within the Gruyere JV project areas, of which the Company owns 50%.

The Current Operational Plan for Gruyere indicates the Project's Ore Reserve supports an average annualised production of 300,000 ounces for at least 12 years. Construction is underway on the Project, with first gold scheduled for the June 2019 quarter.

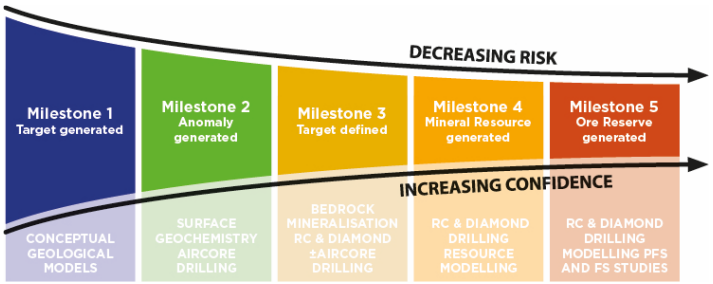
Gold Road continues to explore for multi-million ounce discoveries on its 100%-owned Yamarna tenements, and additional high-value deposits to add mine life to the Gruyere JV.

The Company is focused on unlocking the potential of the Yamarna Belt and has developed an extensive exploration plan focusing on new gold discoveries in the region.

Gold Road uses a staged **Project Pipeline** approach to manage, prioritise and measure success of the exploration portfolio. Each target is classified by **Milestone** and ranked using geological and economic criteria. Regular peer review, prioritisation and strategy ensure that the highest quality projects are progressed across all stages of exploration.



Location and Geology of the Yamarna Tenements (plan view MGA Grid) showing Gold Road's 100% tenements (blue outline) and Gold Road-Gold Fields Gruyere JV tenements (yellow outline), Mineral Resources, Ore Reserves (100% basis) and main Exploration Projects.



Exploration Project Pipeline and Milestones used by Gold Road for managing exploration success

Mineral Resource Estimate – December 2018

Project Name / Category	Gruyere Joint Venture - 100% basis			Gold Road - 50%		
	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)
Gruyere Total	**139.56**	**1.29**	**5.78**	**69.78**	**1.29**	**2.89**
Measured	16.44	1.17	0.62	8.22	1.17	0.31
Indicated	88.53	1.30	3.71	44.26	1.30	1.85
Measured and Indicated	**104.97**	**1.28**	**4.32**	**52.49**	**1.28**	**2.16**
Inferred	34.59	1.31	1.46	17.30	1.31	0.73
Golden Highway + YAM14 Total	**15.57**	**1.46**	**0.73**	**7.78**	**1.46**	**0.36**
Measured	0.29	1.99	0.02	0.14	1.99	0.01
Indicated	11.33	1.48	0.54	5.67	1.48	0.27
Measured and Indicated	**11.62**	**1.50**	**0.56**	**5.81**	**1.50**	**0.28**
Inferred	3.95	1.33	0.17	1.98	1.33	0.08
Central Bore	**0.24**	**13.05**	**0.10**	**0.12**	**13.05**	**0.05**
Measured	-	-	-	-	-	-
Indicated	-	-	-	-	-	-
Measured and Indicated	**-**	**-**	**-**	**-**	**-**	**-**
Inferred	0.24	13.05	0.10	0.12	13.05	0.05
Total	**155.37**	**1.32**	**6.61**	**77.69**	**1.32**	**3.31**
Measured	16.73	1.18	0.64	8.37	1.18	0.32
Indicated	99.86	1.32	4.25	49.93	1.32	2.12
Measured and Indicated	**116.59**	**1.30**	**4.88**	**58.29**	**1.30**	**2.44**
Inferred	38.78	1.39	1.73	19.39	1.39	0.86

Ore Reserve Estimate - December 2018

Project Name / Category	Gruyere Joint Venture - 100% basis			Gold Road - 50%		
	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Moz Au)
Gruyere Total	**90.65**	**1.24**	**3.61**	**45.33**	**1.24**	**1.80**
Proved	16.84	1.11	0.60	8.42	1.11	0.30
Probable	73.81	1.27	3.01	36.91	1.27	1.50
Golden Highway Total	**6.54**	**1.46**	**0.31**	**3.27**	**1.46**	**0.15**
Proved	0.32	1.67	0.02	0.16	1.67	0.01
Probable	6.22	1.45	0.29	3.11	1.45	0.15
Total	**97.20**	**1.25**	**3.92**	**48.60**	**1.25**	**1.96**
Proved	17.16	1.13	0.62	8.58	1.13	0.31
Probable	80.03	1.28	3.30	40.02	1.28	1.65

Notes:

- *All Mineral Resources and Ore Reserves are completed in accordance with the JORC Code 2012 Edition*
- *All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding*
- *Mineral Resources are inclusive of Ore Reserves*
- *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 Ltd. 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*
- *All Open Pit Mineral Resources are reported at various cut-off grades allowing for processing costs, recovery and haulage to the Gruyere Mill. Gruyere - 0.30 g/t Au. Attila, Argos, Montagne, Orleans, and Alaric – 0.50 g/t Au. YAM14 – 0.40 g/t Au. All Open Pit Mineral Resources are constrained within a $1,850/oz optimised pit shell derived from mining, processing and geotechnical parameters from ongoing PFS and operational studies. Underground Mineral Resources at Central Bore are constrained within a 1.5m wide optimised stope with a 3.5 g/t Au cut-off reflective of a $1,850/oz gold price*
- *The Ore Reserves are constrained within a $1,600/oz mine design derived from mining, processing and geotechnical parameters as defined by Pre-feasibility Studies and operational studies. The Ore Reserves are evaluated using variable cut-off grades: Gruyere - 0.30 g/t Au. Attila - 0.65 g/t Au (fresh), 0.58 g/t Au (transition), 0.53 g/t Au (oxide). Alaric - 0.59 g/t Au (fresh), 0.56 g/t Au (transition), 0.53 g/t Au (oxide), Montagne – 0.64 g/t Au (fresh), 0.60 g/t Au (transition), 0.58 g/t Au (oxide), Argos – 0.66 g/t Au (fresh), 0.64 g/t Au (transition), 0.59 g/t Au (oxide). Ore block tonnage dilution averages and gold loss estimates: Gruyere – 4.9% and 0.4%. Attila - 14% and 3%. Alaric - 20% and 6%. Montagne – 9% and 7%. Argos 10% and 12%*
- *All dollar amounts are in Australian dollars*

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 estimation for Gruyere is based on information compiled by Mr Mark Roux. Mr Roux is an employee of Gold Fields Australia, 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, Orleans, Argos, Montagne, Alaric, YAM14 and Central Bore 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 estimation for Gruyere is based on information compiled by Mr Daniel Worthy. Mr Worthy was an employee of Gruyere Mining Company Pty Ltd and 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 estimation 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 estimation for Attila, Argos, Montagne 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.

Appendix 1 - Material Information Summaries

Gruyere Mineral Resource

The 2018 Mineral Resource update for the Gruyere Project was completed by Gold Fields as Manager of the Gruyere JV. Gold Road Competent Persons maintain a comprehensive peer review protocol with its joint venture partner and are satisfied the Mineral Resource has been completed in accordance with the JORC Code 2012 Edition. The Mineral Resource is constrained within an $1,850 per ounce optimised pit shell and quoted above a 0.30 g/t cut-off grade. The December 2018 Mineral Resource totals **139,560,000 tonnes at 1.29 g/t Au for a total of 5,781,000 ounces** of gold (Table 1 and Figure 1). This includes a **Total Measured and Indicated (M&I) Resource of 4,323,000 ounces representing a 1.5% increase at 2.1% higher grade compared to 2017**.

Table 1: Summary of the Gruyere December 2018 and December 2017 Mineral Resource

Project Name / Category	Mineral Resource - December 2018			Mineral Resource - December 2017			Change %		
	Tonnes	Grade	Contained Metal	Tonnes	Grade	Contained Metal	Tonnes	Grade	Ounces
	(t)	(g/t Au)	(oz Au)	(t)	(g/t Au)	(oz Au)	(t)	(g/t Au)	(oz)
Gruyere Total	**139,560,000**	**1.29**	**5,781,000**	**143,461,000**	**1.27**	**5,878,000**	**-2.7%**	**+1.1%**	**-1.7%**
Measured	16,441,000	1.17	618,000	14,060,000	1.16	526,000	+17.0%	+0.5%	+17.5%
Indicated	88,529,000	1.30	3,705,000	91,518,000	1.27	3,732,000	-3.3%	+2.6%	-0.7%
Total M&I	**104,970,000**	**1.28**	**4,323,000**	**105,578,000**	**1.25**	**4,258,000**	**-0.6%**	**+2.1%**	**+1.5**
Inferred	34,600,000	1.31	1,458,000	37,883,000	1.33	1,620,000	-8.7%	-1.5%	-10.0%

Notes:

- *All Mineral Resources are completed in accordance with the JORC Code 2012 Edition*
- *All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding*
- *Mineral Resources are inclusive of Ore Reserves*
- *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 Ltd. Figures are reported on a 100% basis unless otherwise specified*
- *Reporting Cut-off Grade (2018 model) = 0.30 g/t Au*
- *Mining, processing and geotechnical parameters for evaluation were derived from ongoing operational planning studies*
- *All dollar amounts are in Australian dollars unless otherwise stated*

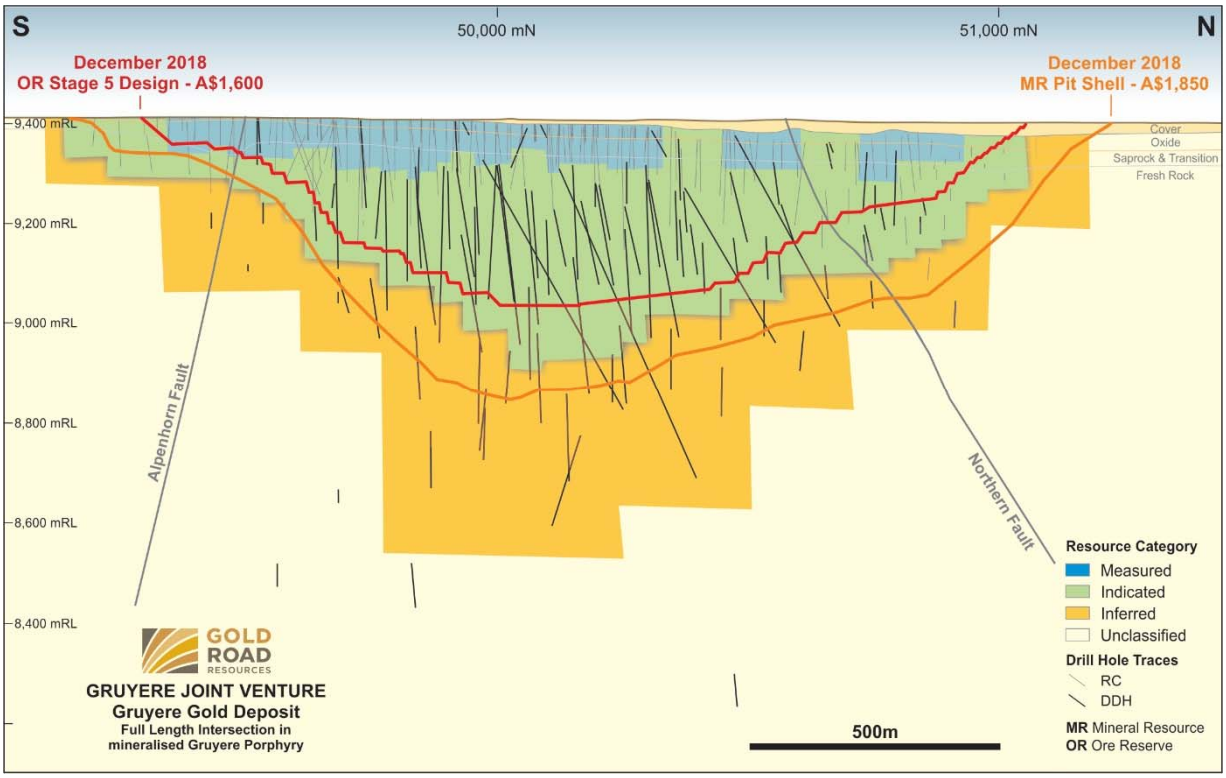


Figure 1: *Gruyere Deposit longitudinal projection (looking west, Gruyere Grid) illustrating resource categories and December 2018 Mineral Resource constraining pit shell and Ore Reserve stage 5 pit design*

Mineral Resource Variance

In comparison to the December 2017 Gruyere Mineral Resource declaration, the 2018 Gruyere Mineral Resource has decreased by 1.7% to 5.78 million ounces overall. However, the Measured and Indicated component has increased by 1.5% year-on-year.

An additional 158 grade control RC drill holes were included in this update with the results reconciling well with previous estimated grades in the upper portion of the Mineral Resource. Most significantly the Measured resource increased by 17.5% in contained gold (92,000 ounces) as a result of the grade control drilling upgrading the previously classified Indicated resource.

The decrease of 1.7% in gold ounces is primarily due to sub domaining of the higher-grade portion north of the Northern Fault, where the grade tenor increases from 1.25 g/t Au south of the fault, to 2.00 g/t Au in the northern domain. This resulted in a positive ounce reconciliation within the Measured and Indicated portion, which was offset by a decrease to the Inferred inventory at the extremities of the Mineral Resource due to a slight grade reduction and changes to the estimation methodology driving the pit to a shallower depth.

In comparison to the December 2017 update, there have been no other changes to modifying factors to the Mineral Resource optimisation.

Gruyere Geology

The Gruyere Deposit comprises a narrow to wide porphyry intrusive dyke (Gruyere Porphyry – a Quartz Monzonite) which is between 5 to 10 metres, at its narrowest, to a maximum 190 metres in width and with a mineralised strike over a current known length of 2,200 metres. The Gruyere Porphyry dips steeply (65 - 80 degrees) to the east. A sequence of intermediate to mafic volcaniclastic rocks defines the stratigraphy to the west of the intrusive, while intermediate to mafic volcanics and a tholeiitic basalt unit occur to the east.

Mineralisation is confined ubiquitously to the Gruyere Porphyry and is associated with pervasive overprinting albite-sericite-chlorite-pyrite (±pyrrhotite ±arsenopyrite) alteration which has obliterated the primary texture of the rock. Minor fine quartz-carbonate veining occurs throughout. Pyrite is the primary sulphide mineral and some visible gold has been observed in logged diamond drill core.

The Gruyere Deposit is situated at the north end of the Dorothy Hills Camp Scale Target identified by Gold Road during its regional targeting campaign completed in early 2013. The Gruyere Deposit comprises coincident structural and geochemical features within a major regional-scale structural corridor associated with the Dorothy Hills Shear Zone. This zone occurs within the Dorothy Hills Greenstone Belt at Yamarna in the eastern part of the Archaean Yilgarn Craton. The Dorothy Hills Greenstone is the most easterly known occurrence of outcropping to sub-cropping greenstone in the Yilgarn province of Western Australia.

Gruyere Project History

In 2012 Gold Road completed detailed aeromagnetic and radiometric surveys across its Yamarna tenement holdings. This dataset was the foundation for a major regional targeting program which combined multiple data sets and multi-scale concepts to identify discrete Camp Scale Targets capable of hosting multi-million ounce gold systems. A total of 10 Camp Scale Targets were defined. The first target tested in July 2013, the South Dorothy Hills Camp, a combined structural and redox target, defined low level gold anomalism from shallow RAB and auger drilling. Follow-up Reverse Circulation (**RC**) drilling completed in September 2013 intersected gold mineralisation in all seven holes at the Gruyere target. Subsequent extensional and resource drilling completed to June 2014 (38,000 metres comprising 26,000 metres RC and 12,000 metres diamond) allowed declaration of a JORC Code 2012 Edition Maiden Resource estimate in August 2014, only nine months from discovery.

Successful completion of Pre-feasibility Studies (**PFS**) in February 2016 and a Feasibility Study (**FS**) in October 2016, was followed by the 50:50 joint venture agreement with Gold Fields Australia to construct and operate the Gruyere Project.

Construction of the Gruyere Project commenced in January 2017. The Gruyere Project is now well advanced with the commencement of open pit mining in January 2019 and process plant and infrastructure construction now in excess of 90% complete.

Estimation Methodology

Gold grade estimation for the Primary Domain is summarised as follows:

1. Top-cuts were applied to 1 metre composites within mineralisation wireframes to manage the impact of high-grade samples to both the Discrete Gaussian Model and the applied linear estimate. The selection methodology to derive the top-cut value combines interrogation of disintegration points on the histogram with detailed analysis of the cumulative distribution plots.
2. Fifty gold grade realisations were simulated at point support and sampled at expected grade control support. From these sampled simulations, 50 kriged estimates are produced for each block.
3. Re-blocking and Localised Uniform Conditioning processes are then applied to develop a single simulation realisation for reporting the Mineral Resource and evaluation the Ore Reserve.
4. Estimation of the Measured component of the Mineral Resource utilises Ordinary Kriging. This is considered the most appropriate method with respect to the observed continuity of mineralisation, spatial analysis (variography) and greater data density provided by close spaced grade control drilling.

This simulation is representative of the probable grade and considers all resulting realisations, as well as a spatial ranking index associated with the expected mineralisation continuity. The technique represents a recoverable resource with incorporated information effect, enabling more effective and realistic mine planning.

The Mineral Resource has been constrained within an optimised pit shell using an $1,850 per ounce gold price. Blocks in the geological model within the optimised pit shell have been classified as Measured, Indicated or Inferred.

Mineral Resource Estimate

The operating strategy assumes conventional open pit methods utilising a contract mining fleet appropriately scaled to the size of the deposit with all ore processed in the Gruyere processing plant (under construction). Key parameters used in estimating the reported Gruyere Mineral Resource include:

- Mineralisation constrained within an optimised pit shell using an $1,850 per ounce gold price is considered to determine the portion of the total mineralised inventory that has a reasonable prospect of eventual economic extraction.
- Only Measured, Indicated and Inferred resource categories of mineralisation within this optimised pit shell have been reported as Mineral Resource.
- The cut-off grade used for reporting the resource contained within the optimised shell is 0.30 g/t Au.
- No allowance for dilution or mining recovery has been made.
- Mining and Geotechnical parameters established during the feasibility study.
- Processing costs and metallurgical recoveries utilised in the optimisation were established during the ongoing operational studies.

Gruyere Ore Reserve

Highlights

The December 2018 Gruyere Ore Reserve is declared at **90,653,000 tonnes at 1.24 g/t containing 3,610,000 ounces** of gold, representing an **increase of 48,000 ounces** compared to the previous December 2017 Ore Reserve. The variance takes into consideration additional near-surface grade control drilling and new domaining of a higher-grade zone north of the interpreted Northern Fault. The Ore Reserve is reported within the unchanged 5 stage mine design consistent with the Gruyere JV 2018 Business Plan.

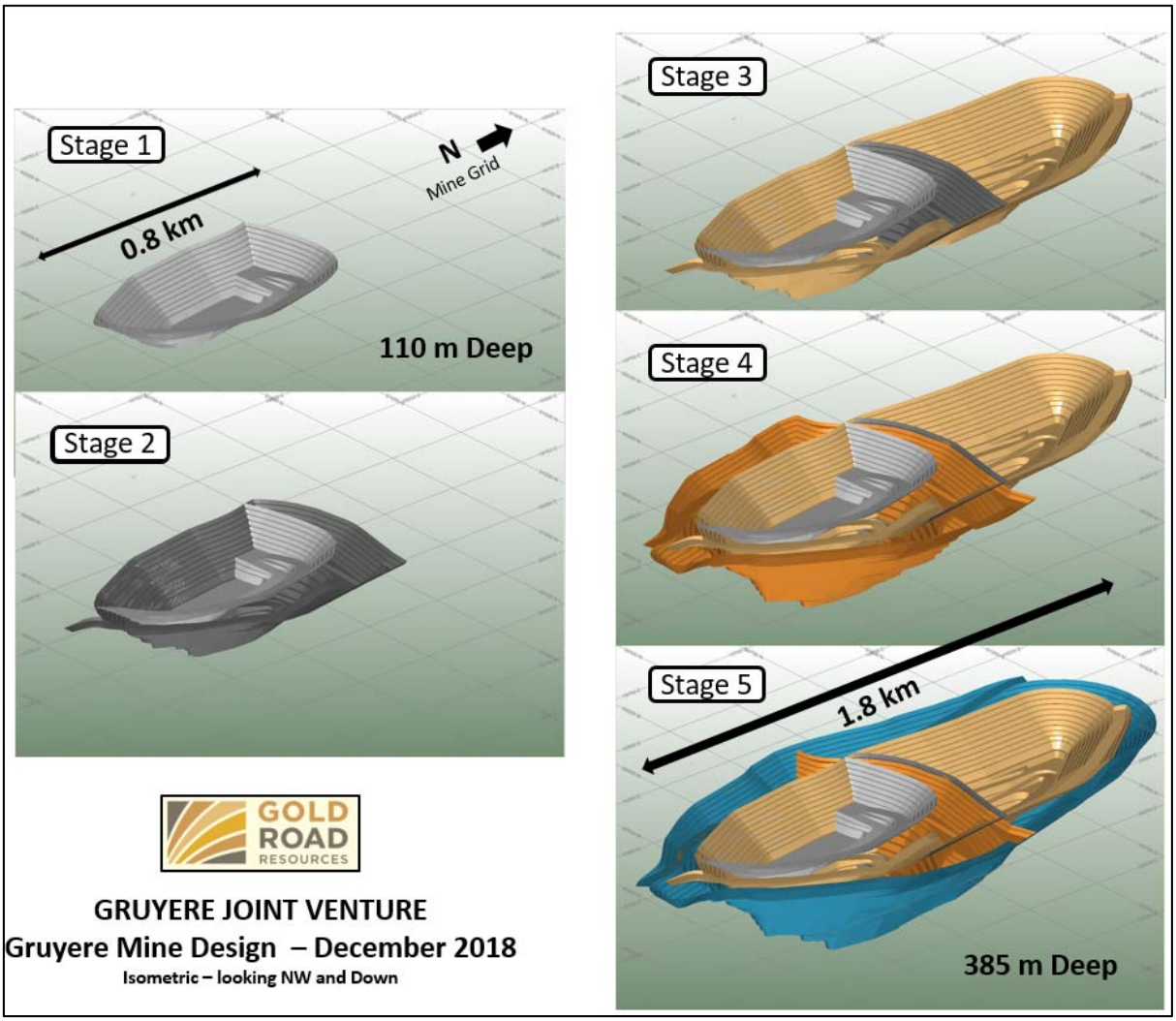


Figure 2: *Gruyere Ore Reserve pit design and dimensions*

Gruyere Ore Reserve

The Ore Reserve for the Gruyere Project is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition). The Mineral Resource is converted to Ore Reserve in consideration of the level of confidence in the Mineral Resource estimates and reflecting appropriate modifying factors. Mineral Resource estimates are reported inclusive of those Mineral Resources converted to Ore Reserves. The Proved Ore Reserve estimate is based on Mineral Resource classified as Measured. The Probable Ore Reserve estimate is based on Mineral Resource classified as Indicated. Table 2 presents a summary of the Gruyere Ore Reserve on a 100% Project basis at a $1,600 per ounce gold price.

Table 2: Gruyere Ore Reserve

Ore Reserve Category	Ore Reserve - December 2018			Ore Reserve – December 2017			Change %		
	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Moz)	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Moz)	Tonnes (t)	Grade (g/t Au)	Ounces (oz)
Proved	16.8	1.11	0.60	14.9	1.09	0.52	12.9%	1.5%	15.1%
Probable	73.8	1.27	3.01	78.8	1.20	3.04	-6.4%	6.0%	-1.1%
Total	**90.7**	**1.24**	**3.61**	**93.8**	**1.18**	**3.56**	**-3.3%**	**4.8%**	**1.3%**

Gruyere Operations

Mining

The Gruyere Project uses contract open pit mining utilising 400 tonne class excavators matched with 240 tonne rigid body dump trucks. An initial five-year contract was awarded to Downer EDI Mining in 2018.

The current Gruyere Ore Reserve supports a mine life until at least 2030. Mining operations commenced in November 2018, with first ore mining only occurring in January 2019 meaning no ore depletion has yet been recorded.

Key mining parameters considered in the Gruyere Ore Reserve estimate include:

- Mining costs derived from executed mining contract
- Mining dilution 4%, Ore loss 0.4%
- Overall wall slopes and pit design criteria established during Feasibility Study
- Cut-off grade 0.3 g/t Au considering:
  - Gold Price $1,600 per ounce
  - Metallurgical recovery
  - Mining unit costs including ore re-handle from executed mining contract
  - Ore processing costs
  - General and Administration costs
  - Royalties.

Mineral Processing

Processing will be via an 8.2 to 8.5 Mtpa Semi Autogenous Grinding and Ball Milling with Pebble Crushing (**SABC**) (depending on ore type) comminution circuit with gravity and Carbon in Leach (**CIL**) gold recovery at the Gruyere processing plant. First gold production from the Gruyere processing plant is scheduled for the June 2019 quarter.

Key metallurgical parameters for the Gruyere processing plant include:

- Recovery ranging between 91% and 93% depending on ore type
- Design grind size 125µm
- No deleterious elements.

Tailings Disposal

A single Tailings Storage Facility at the Gruyere Project has been constructed immediately east of the open pit and northeast of the Gruyere processing plant. The Integrated Waste Landform (i.e. a Tailings Storage Facility built within a Waste Rock Landform) will be constructed in stages over the mine life to store tailings from the processing plant. This facility has a total capacity of 92.43 million tonnes.

Infrastructure

On-site power is provided via a 45-megawatt gas-fired power station with a 198 kilometre gas pipeline extending from the Eastern Goldfields Gas Pipeline to the Gruyere process plant. APA Group designed and built their own pipeline and power station to provide power to the Gruyere Project on a 15 year take-or-pay contract. The power station has been fully commissioned and was operational by December 2018.

The Gruyere process plant is being constructed under an Engineering, Procurement and Construction contract by the Amec Foster Wheeler Civmec Joint Venture. The contract was awarded on a fixed-price lump-sum basis with scope of work covering the detailed design, procurement and installation of the process plant, administration office, workshop, warehouse as well as the main pipelines and powerlines to the borefield.

Capital Expenditure

Capital costs for the Gruyere Project are based on items that will maintain operations for planned Reserve-Only life of mine. Approved capital expenditure for the Gruyere Project is $621 million.

Operating Costs

Operating costs have determined on the following basis:

- All mining equipment required will be supplied by the mining contractor
- Mining operating costs have been estimated in the Gruyere 2018 Business Plan referencing the currently executed mining contract with technical services supplied by Gruyere JV employees
- Mine design and production schedules were prepared by competent mining engineers
- Mine dewatering requirements developed from FS level hydrogeological modelling
- Process operating costs were estimated in the Gruyere 2018 Business Plan
- General and Administration costs were estimated in the Gruyere 2018 Business Plan
- Budget pricing from local and international suppliers
- Operating costs assume a FIFO scenario with various rosters on site.

Legal Aspects and Tenure

Gruyere is located within the Yamarna Pastoral Lease (LA3114/854) which is wholly owned and managed by Gold Road. The Yamarna Pastoral Lease is located approximately 150 kilometres east of Laverton and covers an area of 149,000 ha. The lease renewal was granted on 1 July 2015 with the expiry date being 14 July 2062.

Mining Lease

The Gruyere mine and infrastructure is located on granted mining tenements and the Gruyere JV is the holder of all tenements required for the Gruyere Project.

Native Title

Gold Road entered into the Gruyere Central Bore Native Title Agreement (**GCBNTA**) in May 2016 with the Yilka People and Cosmo Newberry Aboriginal Corporation (**CNAC**) over their respective claim area following community consultation and negotiation meetings. As part of the formation of Gruyere JV, Gold Road assigned 50% of its rights under the GCBNTA to Gruyere Mining Company Pty Ltd, a member of the Gold Fields Limited group, and Gruyere Mining Company Pty Ltd agreed to assume 50% of the obligations under the GCBNTA. This agreement includes all of the Gruyere JV tenements.

The GCBNTA includes obligations on the Gruyere JV regarding heritage and the conduct of heritage surveys, pursuant to a Cultural Heritage Management Plan.

Royalty

The tenements are subject to the Mining Act 1978 (WA) and as part of this legislation annual rental payments for each tenement and a 2.5% royalty on gold sold is payable to the Government of Western Australia and appropriate allowance for other royalties payable to private parties.

Environment and Community

Environment

Gruyere is entitled to mine all declared material falling within its respective mineral rights and/or mining rights. All necessary statutory mining authorisations and permits are in place. Currently, there are no legal, NGO, or stakeholder issues that will impact the operation. Mining operations on tenements in Western Australia must be developed and operated in compliance with the Commonwealth and State environmental legislative requirements.

Community

The Gruyere Project is located within the land on which the Yilka (WAD297/2008) and Sullivan Edwards (WAD498/2011) native title claim area was determined by the Federal Court on 27 September 2017. The common law of Australia recognises a form of Native Title which reflects the entitlement of indigenous people, in accordance with their laws or customs, to enjoy their traditional lands. The GCBNTA allows the Gruyere JV to operate on the relevant lands for which Native Title has been determined with certain obligations and restrictions.

Cosmo Newberry is a small indigenous community located approximately 100 kilometres by road west of the Gruyere Project area. The community is managed through its corporate body, CNAC, incorporated under the Aboriginal Councils and Associations Act 1976 in 1991. In 1994 the community made the decision to become affiliated with Ngaanyatjarra Council.

The Gruyere JV values the relationship which has been established with the traditional owners of the Land on which the Gruyere JV projects are located and has formed good working relations with the Yilka people and a developing understanding of their cultural heritage.

The Gruyere JV is committed to maintaining a long-term partnership with the Yilka people to ensure Gruyere JV projects can bring a range of benefits to the traditional owners including direct and indirect employment.

The Gruyere JV recognises the positive impacts that mining operations such as the Gruyere Project can bring to remote communities, including possible business opportunities and economic benefits through rates, charges and community investment.

Golden Highway Mineral Resource

The Golden Highway[5] comprises Mineral Resources at Attila, Orleans, Argos, Montagne, and Alaric (Figure 3). Gold Road conducted work on the Orleans, Argos and Montagne Deposits during 2018, including pre-feasibility level drilling. Gold Road has not completed any updates to the geological interpretation or modelled inventory at the Attila and Alaric Deposits since the December 2017 Mineral Resource and Ore Reserve Update.

Gold Road has revised the existing Golden Highway Mineral Resource estimates following application of updated modifying factors to open pit optimisations. The updated modifying factors include consideration of cost estimates based on current Gruyere Project planning assumptions.

The December 2018 Mineral Resource on the Golden Highway stands at **14.72 million tonnes at 1.47 g/t Au for a total of 695,100 ounces** (Table 3), representing an increase of 99,300 ounces since 2017.

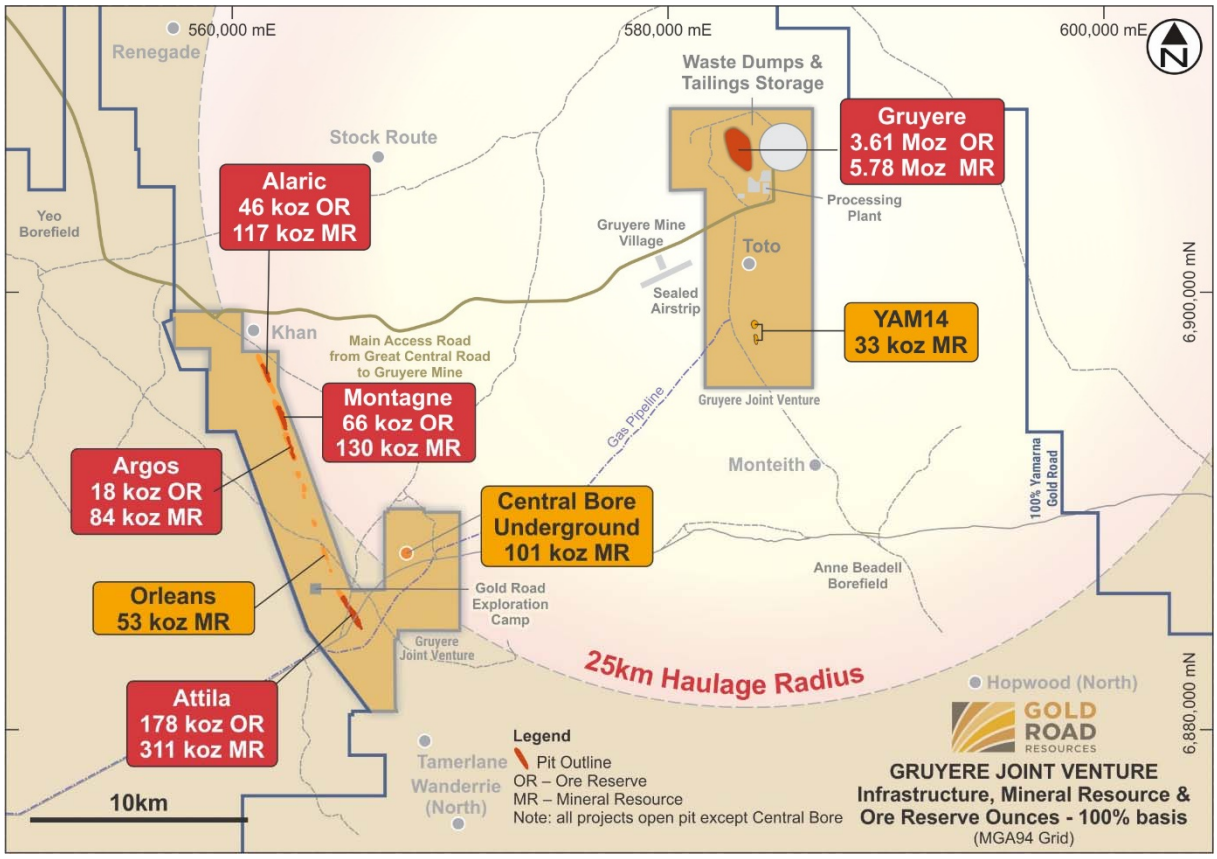


Figure 3: *Location of the Golden Highway Deposits – Attila, Orleans, Argos, Montagne and Alaric with reference to Gruyere*

[5] Previously known as the Attila – Alaric Trend

Table 3: Summary comparison of the December 2018 and December 2017 Golden Highway Mineral Resource

	Mineral Resource - December 2018			Mineral Resource - December 2017			Change %		
Project Name / Category	**Tonnes (t)**	**Grade (g/t Au)**	**Contained Metal (oz)**	**Tonnes (t)**	**Grade (g/t Au)**	**Contained Metal (oz)**	**Tonnes (t)**	**Grade (g/t Au)**	**Contained Metal (oz)**
Attila Total	**5,954,800**	**1.62**	**310,900**	**5,577,600**	**1.65**	**295,800**	**7%**	**-2%**	**5%**
Measured	289,000	1.99	18,500	289,000	1.99	18,500	0%	0%	0%
Indicated	5,237,500	1.61	270,400	4,994,900	1.63	261,100	5%	-1%	4%
Inferred	428,300	1.60	22,100	293,700	1.71	16,200	46%	-6%	36%
Alaric Total	**2,378,400**	**1.53**	**117,200**	**1,849,000**	**1.57**	**93,300**	**29%**	**-2%**	**26%**
Measured	-	-	-	-	-	-	0%	0%	0%
Indicated	1,537,100	1.70	84,200	1,199,100	1.74	67,000	28%	-2%	26%
Inferred	841,300	1.22	33,000	649,900	1.26	26,300	29%	-3%	25%
Montagne Total	**3,211,900**	**1.26**	**130,100**	**2,970,700**	**1.34**	**128,400**	**8%**	**-6%**	**1%**
Measured	-	-	-	-	-	-	0%	0%	0%
Indicated	3,137,100	1.27	127,600	683,500	1.53	33,700	359%	-17%	279%
Inferred	74,800	1.03	2,500	2,287,200	1.29	94,700	-97%	-20%	-97%
Argos Total	**2,165,000**	**1.20**	**83,800**	**1,923,000**	**1.27**	**78,300**	**13%**	**-5%**	**7%**
Measured	-	-	-	-	-	-	0%	0%	0%
Indicated	1,191,100	1.26	48,400	-	-	-	100%	100%	100%
Inferred	973,900	1.13	35,400	1,923,000	1.27	78,300	-49%	-11%	-55%
Orleans Total	**1,005,600**	**1.64**	**53,100**	**-**	**-**	**-**	**100%**	**100%**	**100%**
Measured	-	-	-	-	-	-	0%	0%	0%
Indicated	-	-	-	-	-	-	0%	0%	0%
Inferred	1,005,600	1.64	53,100	-	-	-	100%	100%	100%
Golden Highway Total	**14,715,700**	**1.47**	**695,100**	**12,320,300**	**1.50**	**595,800**	**19%**	**-2%**	**17%**
Measured	**289,000**	**1.99**	**18,500**	**289,000**	**1.99**	**18,500**	0%	0%	0%
Indicated	**11,102,800**	**1.49**	**530,600**	**6,877,500**	**1.64**	**361,800**	61%	-9%	47%
Measured and Indicated	**11,391,800**	**1.50**	**549,100**	**7,166,500**	**1.65**	**380,300**	**59%**	**-9%**	**44%**
Inferred	**3,323,900**	**1.37**	**146,100**	**5,153,800**	**1.30**	**215,500**	-36%	5%	-32%

Notes:

- *All Mineral Resources are completed in accordance with the JORC Code 2012 Edition*
- *All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding*
- *Mineral Resources are inclusive of Ore Reserves*
- *The Gruyere JV is a 50:50 joint venture between Gold Road and Gruyere Mining Company Pty Ltd, a wholly owned Australian subsidiary of Gold Fields Limited. Figures are reported on a 100% basis unless otherwise specified*
- *The Golden Highway Mineral Resources are reported at a cut-off grade of 0.50 g/t Au and constrained within a $1,850 per ounce optimised pit shell*
- *All Open Pit Mineral Resources are constrained within a $1,850/oz optimised pit shell derived from mining, processing and geotechnical parameters from ongoing PFS and operational studies*
- *All dollar amounts are in Australian dollars unless otherwise stated*

Mineral Resource Variance

Drilling as part of PFS completed at the Argos and Montagne Deposits during 2018 improved the understanding of the mineralisation controls adding greater confidence to the geological and mineralisation continuity. This is reflected by an increase to the Indicated resource at Montagne of 93,900 ounces and at Argos of 48,400 ounces. The total Montagne and Argos Mineral Resources increased moderately by 1% and 7% respectively.

Several stratigraphic holes completed at Orleans (previously known as Attila North) in 2017 contributed to an improved understanding of geology and mineralisation in the deposit area. Updated modelling and estimation completed in 2018 resulted in the addition of 53,100 ounces of gold to the Golden Highway Mineral Resource.

The Mineral Resource estimate for Attila and Alaric has been revised based on updated modifying factors applied during the optimisation process which take into consideration cost estimates based on the Gruyere 2018 Business Plan. This revision resulted in a Mineral Resource increase of 5% (+15,100 ounces) at Attila and 26% (+23,900 ounces) for Alaric. The underlying geological models did not change.

Golden Highway Geology

The Golden Highway is located on the western side of the Yamarna Greenstone Belt within the Archaean Yilgarn Craton. Most of the greenstone sequence is obscured by a veneer of Quaternary sand and Cainozoic channel sediments.

Mapping of the limited outcrop, logging of drill holes, and interpretation of the aeromagnetic, gravity and seismic data, indicate that the Yamarna Greenstone Belt comprises an upright, highly deformed and metamorphosed greenstone sequence up to 12 kilometres in thickness that can be subdivided into several narrow and elongate units. The metamorphic, structural and alteration overprint makes identification of the original rock types difficult, the mineralised sequence comprises mixed mafic volcanics (basalts, dolerites and gabbros), interflow sediments (including chert, black shale and BIF) and intermediate tuffs and intrusives.

The western side of the Yamarna Greenstone Belt is dominated by a strong, pervasive north-northwest trending and steeply dipping foliation. The aeromagnetic images highlight the attenuated 'train track' nature of the rock units and structures. Mineralisation along the Golden Highway appears to be localised in areas where interpreted cross faulting increases the structural complexity of the otherwise uniform strike orientation.

Golden Highway Project History

Gold was first discovered on the Yamarna Greenstone Belt in the early 1980's and the first Mineral Resource completed in 1994 on the Attila Project. Subsequent exploration focussed on this mineralised trend of highly sheared mafic and intermediate volcanics and sediments parallel to the Yamarna Shear Zone. Mineralisation has been traced over 50 kilometres in strike along the Yamarna Shear. The Attila and Alaric Mineral Resources were updated to comply with JORC Code 2012 Edition standards in 2015. Following positive economic evaluation of both the Attila and Alaric Deposits, further drilling was completed during 2016 and 2017 and the Maiden Ore Reserves were declared. The Argos and Montagne Mineral Resources were updated to comply with JORC Code 2012 Edition standards in 2017, with significant drilling undertaken in 2018 to complete a PFS and declare Maiden Ore Reserves. Drilling completed in late 2017 at Orleans resulted in an updated Mineral Resource to comply with JORC Code 2012 Edition standards in 2018.

Golden Highway Deposit Geology

Geology and Geological Interpretation

Host rocks to gold mineralisation at the Golden Highway are dominated by a sequence of mafic and felsic volcanics, intrusives and sediments, with localised doleritic units and occasional shales and tuffs. The sequence strikes north-northwest and dips steeply to the east. The sequence is metamorphosed to upper greenschist – lower amphibolite facies.

Gold mineralisation is hosted within north-northwest striking, steeply east dipping shear zones. High-grade mineralisation occurs as 3 to 5 metre-wide zones proximal to the core of the shear zones which have demonstrated strike continuity.

Mineralisation within the sheared package has been modelled at a 0.2 g/t Au to 0.3 g/t Au cut-off, depending on deposit, and including up to 2 metres of internal waste. Internal high-grade zones utilise a 0.5 g/t Au cut-off. Internal high-grade zones are associated with greater intensity of alteration, increased presence of sulphides, and a greater density of fine quartz veining. The low-grade sheared package exhibits a lower intensity of similar alteration and lesser veining.

Regolith and Weathering

The transported cover sequence at the Golden Highway is considered minimal. Weathering ranges in depth from 10 to 40 metres. The regolith profiles along the Golden Highway are considered stripped with saprolite thickness of less than 10 metres, and the upper saprolite zone generally absent. In general, the upper 8 to 10 metres of the weathered profile of all deposits is depleted of gold due to leaching.

Gold Mineralisation

Gold mineralisation occurs parallel to the local foliation which is considered part of, or a splay off, the Yamarna Shear Zone, and generally localises in the more mafic parts of a sequence of intermediate volcanics and sediments. Mineralisation is associated with early amphibole-albite-biotite-sericite-quartz-garnet-carbonate alteration. The principal sulphide is pyrite, with rare disseminated arsenopyrite and pyrrhotite also observed. A later stage haematite-quartz alteration is interpreted to be associated with oxidised fluids introduced by late stage northeast trending faults which cut the stratigraphy of the Golden Highway.

Individual mineralised zones are generally narrow with strong continuity along strike and down-dip. High-grade intervals show increased variability and shorter range in continuity observed in the geostatistical analysis. Mineralisation domain wireframes were generated using the identified cut-off grades and minimum selection width criteria of 2 metres down hole. Interpretation of structural data provided average dip and strike of mineralised domains, which was incorporated into individual mineralisation models. Figures 4 to 8 illustrate in longitudinal projection mineralised intersections and the Mineral Resource and Ore Reserve outlines of each of the Golden Highway Deposits. Figures 9 to 11 illustrate geology, mineralisation, drill collars, and Mineral Resource and Ore Reserve outlines, where appropriate, of the deposits at Argos, Montagne and Orleans, which are material contributors to this statement.

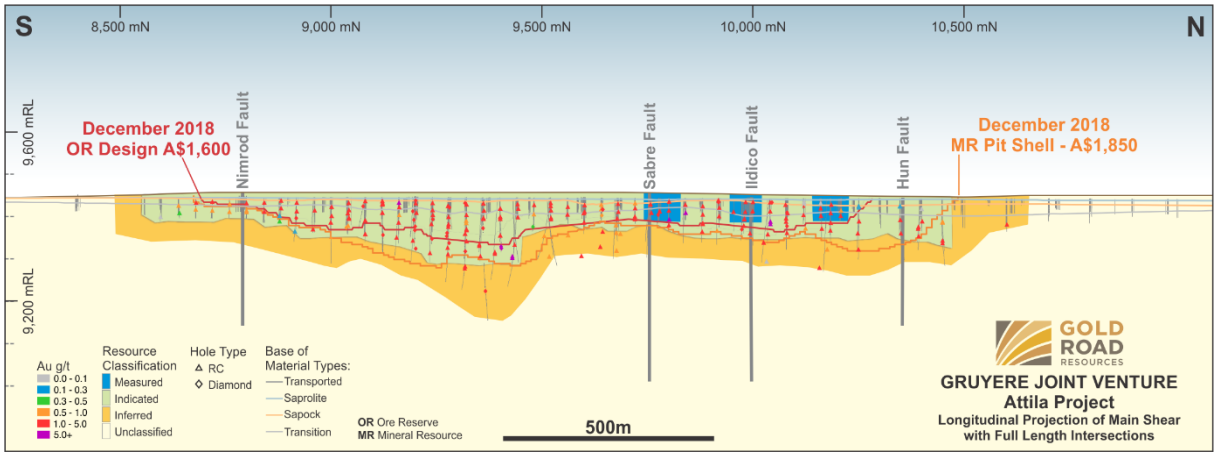


Figure 4: *Attila Longitudinal Projection of Main Shear with full length intersections*

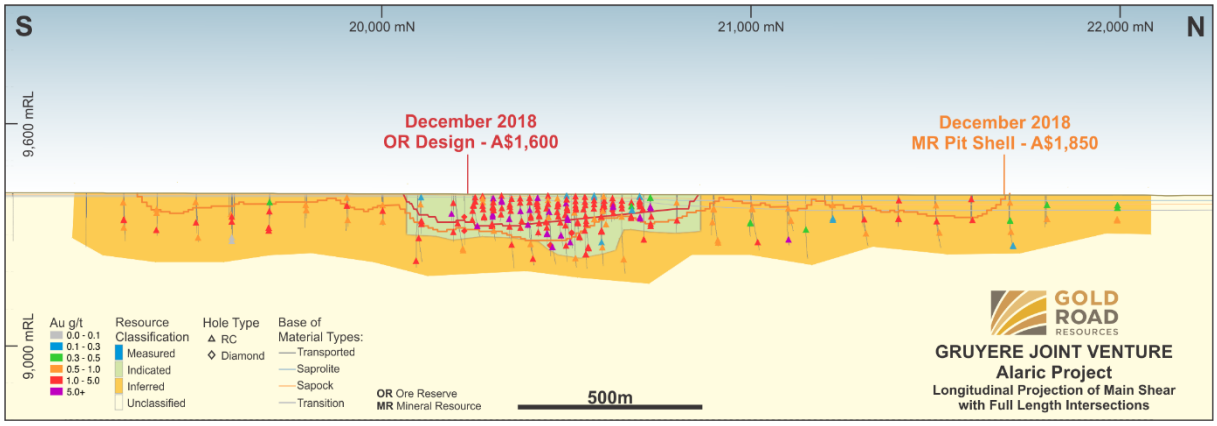


Figure 5*: Alaric Longitudinal Projection of Main Shear full length intersections*

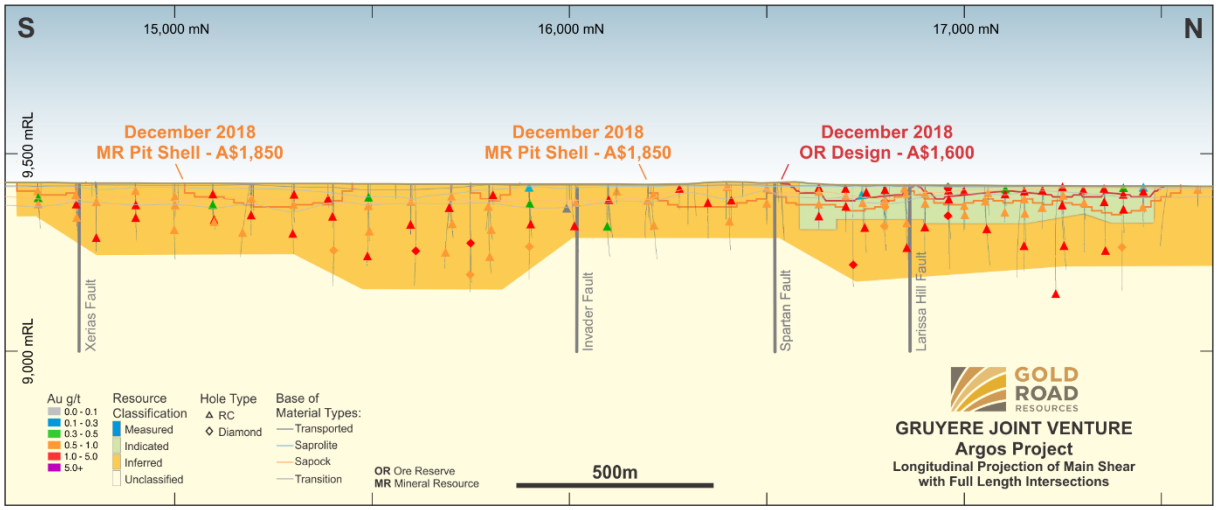


Figure 6: *Argos Longitudinal Projection of Main Shear with full length intersections*

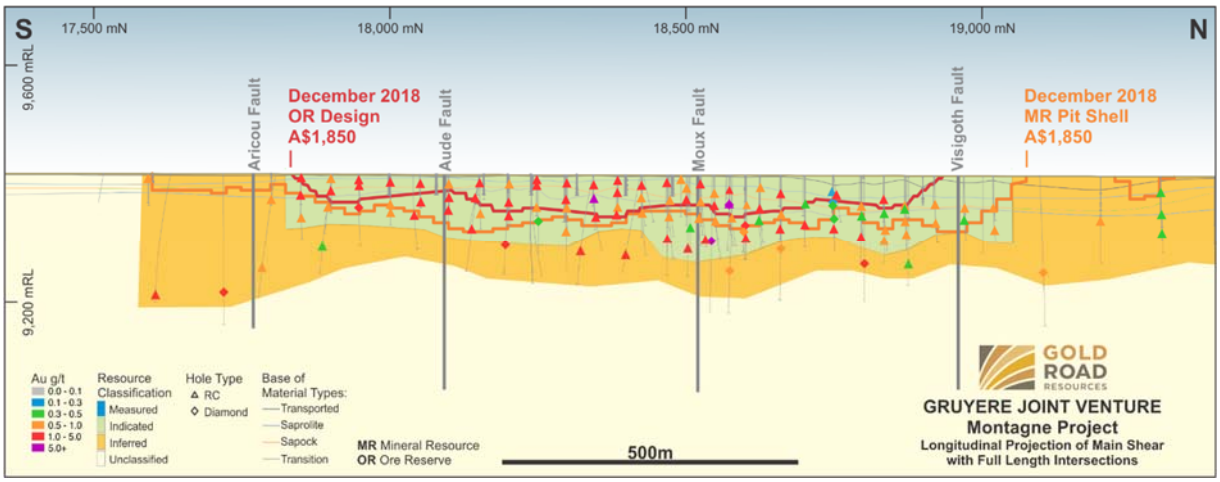


***Figure 5**: Montagne Longitudinal Projection of Main Shear with full length intersections*

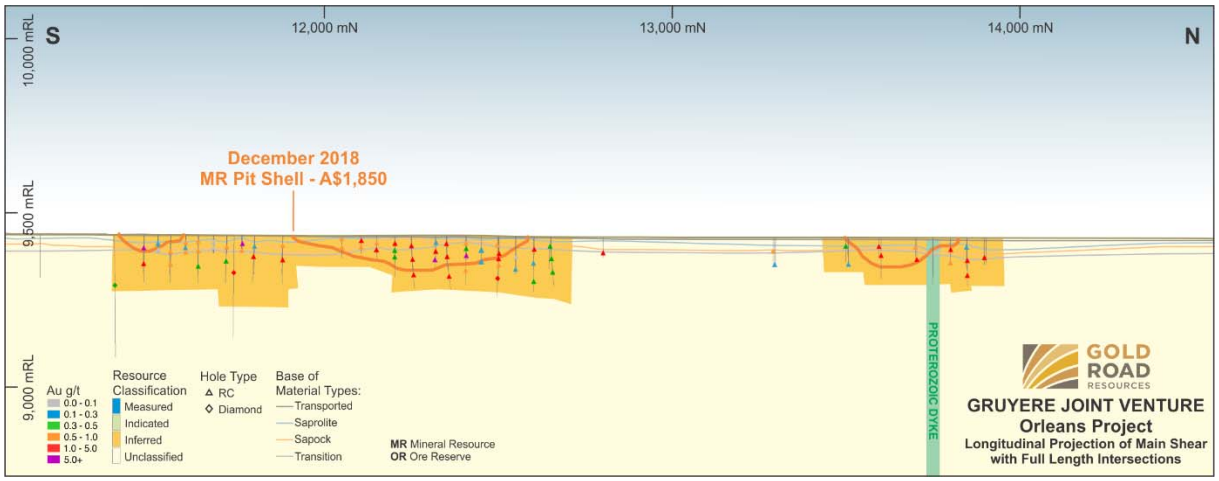


***Figure 6**: Orleans Longitudinal Projection of Main Shear with full length intersections*

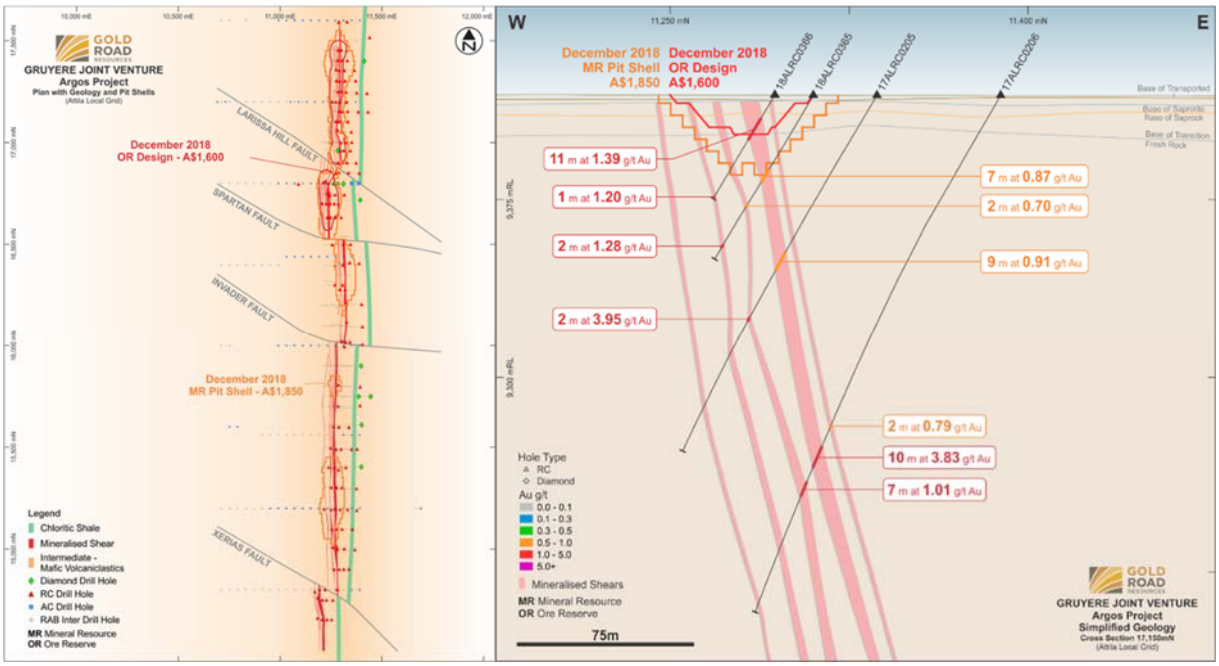


***Figure 9**: Argos Plan and Cross section 17,150 mN*

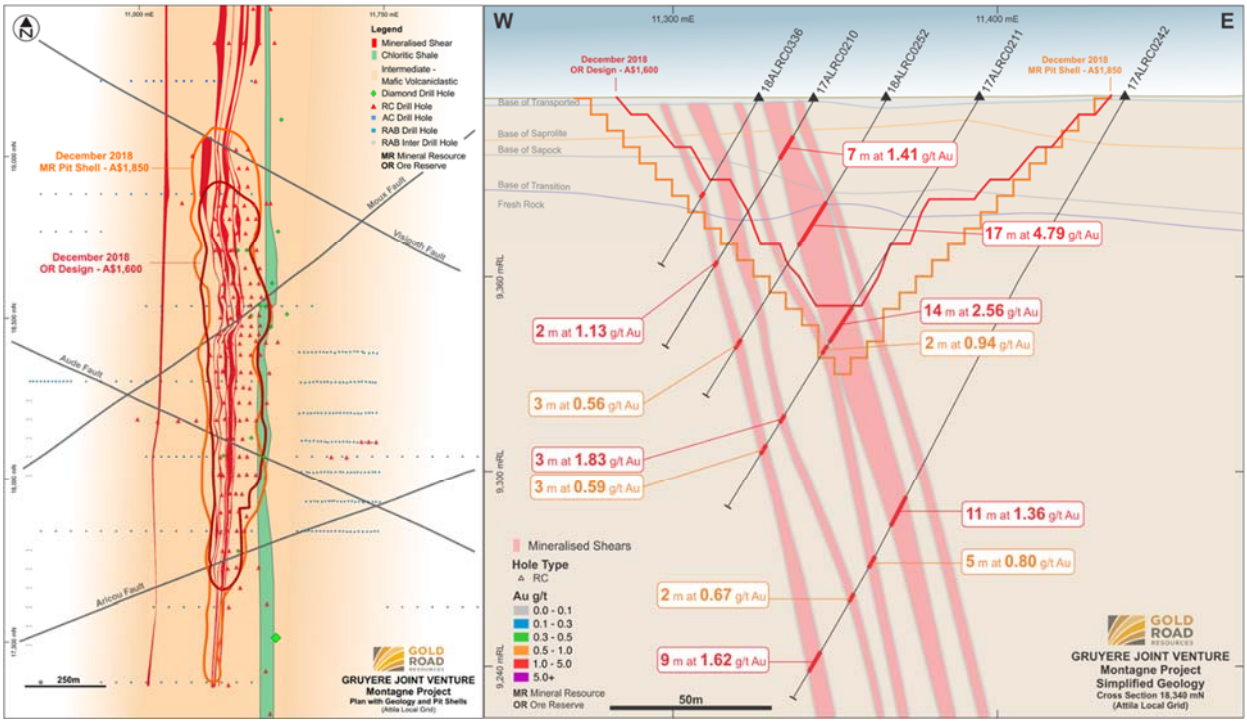


Figure 10: *Montagne Plan and Cross Section 18,340 mN*

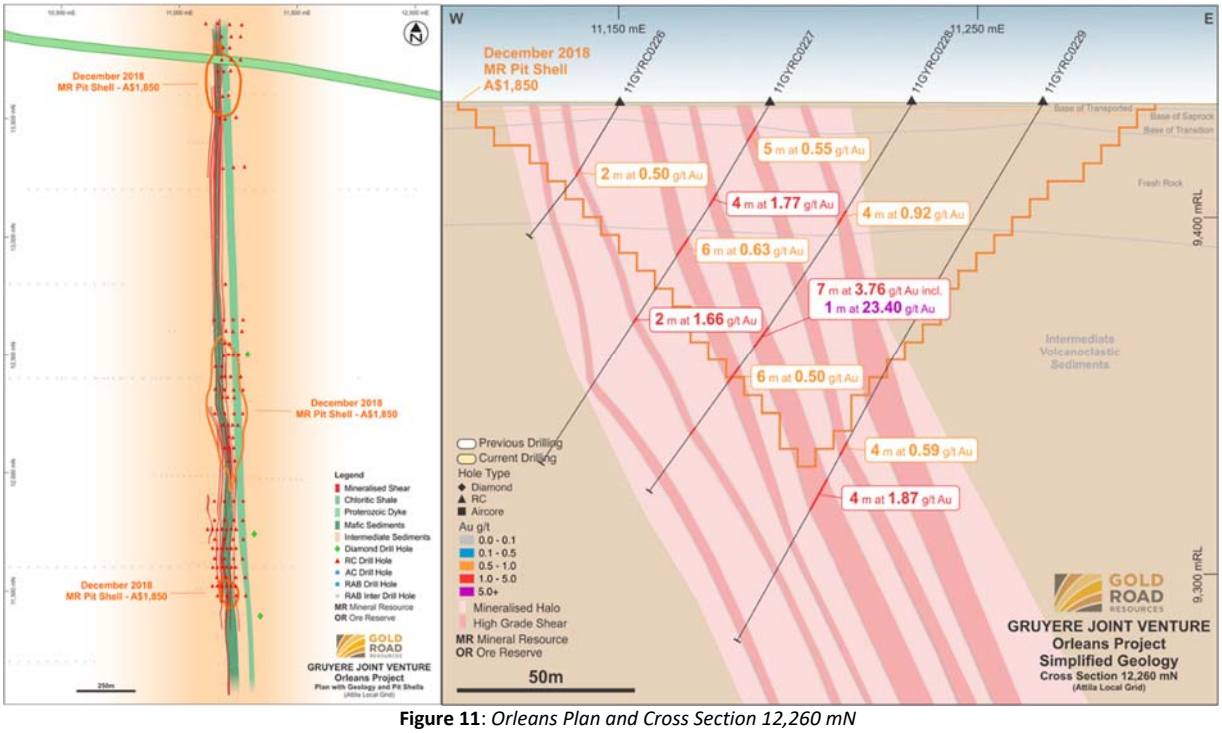


Figure 11: *Orleans Plan and Cross Section 12,260 mN*

Drilling Techniques, Sampling and Sub-sampling Techniques, and Sample Analysis

Sampling along the Golden Highway has been carried out using a combination of RC and diamond drilling. Drilling was completed between 1994 and 2018 and was undertaken by several different companies, with approximately 46% of the informing assay data collected by Gold Road. The orientation of the drilling is approximately perpendicular to the regional dip and strike of the targeted mineralisation and a local grid is utilised for both drilling and modelling.

Drill core is cut in half by a diamond saw and half core samples collected to geological contacts, at an average length of one metre, and submitted for assay analysis. One metre RC drill samples are channelled through a cone splitter, and an average 2 to 3 kilogram sample is collected in a calico bag that is submitted for assay analysis. Gold Road has protocols in place to ensure sample quality is kept to high standards. At the assay laboratory all samples are fully pulverised to -75 µm (90% passing 75 µm), to produce a 50 gram charge for Fire Assay with either AAS or ICPOES finish.

Mineral Resource Model

The Mineral Resource models for Attila and Alaric are unchanged from the models published in May[6] and July[7] 2017 respectively. Updated modifying factors were utilised in the optimisation to constrain the Mineral Resource which resulted in the moderate increase reported.

The Mineral Resource models for Argos and Montagne have been updated with further information derived from PFS level drilling completed during 2018. This drilling included infill and up-dip drill holes that have enabled a refinement of near surface mineralisation domains.

The Mineral Resource model for Orleans incorporates several stratigraphic diamond holes drilled in late 2017. This drilling, enabled refinement of the interpretation of the mineralisation domains applied in the 2018 Mineral Resource estimate coupled with historic data, allowed for development of a robust geological interpretation.

Estimation Methodology

Wireframes of regolith boundaries, lithology and mineralisation were constructed for each deposit individually utilising a cross sectional interval selection method that was validated in other orientations. The wireframes were applied as hard boundaries for the grade estimation. Appropriate top cuts are applied per domain to limit the effect of extreme gold grade values. Bulk density values are applied according to material type (weathering) and are based on diamond core measurements taken locally and regionally.

The geological block models are created by filling interpreted mineralisation wireframes with appropriately sub-celled parent cells (Table 4). Assay data was selected within the wireframes and composited to one metre lengths, except for Montagne which is composited to two metre lengths. Top-cuts are applied to the grade population by domain based on statistical analysis. Estimation is completed by domain using Ordinary Kriging methods with optimised search neighbourhoods aligned with the interpreted mineralisation trend. Validation steps included comparison of input assay data to the output model grade estimate to ensure minimal bias.

Table 4: Parent and sub-cell sizes for the Golden Highway block models

Deposit	Parent Cells	Minimum Sub cell
Attila	5m X by 25m Y by 5m Z	1m X by 5m Y by 0.5m Z
Orleans	5m X by 25m Y by 5m Z	1m X by 5m Y by 1m Z
Argos	5m X by 25m Y by 5m Z	1m X by 5m Y by 1m Z
Montagne	5m X by 25m Y by 10m Z	1m X by 5m Y by 1m Z
Alaric	5m X by 25m Y by 5m Z	1m X by 5m Y by 0.5m Z

[6] ASX announcement dated 25 May 2017
[7] ASX announcement dated 24 July 2017

Criteria Used for Classification

The 2018 Golden Highway Mineral Resource is constrained by Whittle optimised pit shells that consider all available mineralisation in the geological model with at least an Inferred level of confidence. Several factors have been used in combination to derive the Mineral Resource classification categories for mineralisation:

- **Drill hole spacing:** classification is influenced by the data spacing (Table 5)
- **Geological continuity:** Golden Highway geological continuity is high, the position and width of mineralised lodes is predictable and repeatable
- **Grade continuity:** the continuity of moderate to high-grade mineralisation is less reliable than the geology, in less well drilled areas the data density is such that continuity can only be assumed
- **Estimation quality parameters:** derived from the Ordinary Kriging process and assessed using Kriging Neighbourhood Analysis methods provide a guide to the quality of the estimate

Mineral Resource Estimate

The Golden Highway operating strategy assumes conventional open pit mining methods utilising a contract mining fleet appropriately scaled to the size of the deposits. Ore will be stockpiled at the mine and subsequently transported to the Gruyere processing plant (under construction) via road-train. Key parameters used in estimating the Golden Highway Mineral Resources include:

- Mineralisation constrained within an optimised pit shell using a $1,850 per ounce gold price is considered to determine the portion of the total mineralised inventory that has a reasonable prospect of eventual economic extraction
- Only Measured, Indicated and Inferred resource categories of mineralisation within the optimised pit shell have been reported as Mineral Resource
- The cut-off grade used for reporting the Mineral Resource contained within the shell is 0.50 g/t Au
- No allowance for dilution or mining recovery has been made
- Mining, metallurgical and geotechnical parameters established during the PFS
- Processing costs in the optimisation were established during ongoing operational studies.

Table 5: Drill hole spacing by Mineral Resource Classification category, Golden Highway Deposits

Inventory Classification					
Domain	**Criteria**	**Measured**	**Indicated**	**Inferred**	**Unclassified**
Attila	**Target Spacing**	Require grade control spacing	20m X by 40m Y	40m X by 80m Y	
	Actual Spacing	20m X by 20m Y only on D5500 and D5600 and their internal HG	20m X to 40m Y	50m X by 100m Y	"Potential" beyond Inferred to limits of geological model.
	Boundary Extension		50m along strike 30m down dip	40m along strike 40m down dip	
Orleans	**Target Spacing**	Require grade control spacing	25m X by 50m Y	50m X by 100m Y	
	Actual Spacing			50m X by 100m Y	"Potential" beyond Inferred to limits of geological model.
	Boundary Extension			50m along strike 25m down dip	
Argos	**Target Spacing**	Require grade control spacing	25mX by 50m Y	40m X by 80m Y	
	Actual Spacing		25m X by 50m Y	50m X by 100m Y	"Potential" beyond Inferred to limits of geological model.
	Boundary Extension		25m along strike 25m down dip	50m along strike 25m down dip	
Montagne	**Target Spacing**	Require grade control spacing	25m X by 50m Y	50m X by 100m Y	
	Actual Spacing		25m X by 25m Y to 25m X by 50m Y	50m X by 100m Y	"Potential" beyond Inferred to limits of geological model.
	Boundary Extension		25m along strike ~25m down dip from last drill hole	50m along strike ~50m down dip from last drill hole or 50m from indicated boundary	
Alaric	**Target Spacing**	Require grade control spacing	20m X by 20m Y	40m X by 80m Y	
	Actual Spacing		10m X by 20m Y to 20m X by 20m Y to 20m X to 40m Y	50m X by 100m Y	"Potential" beyond Inferred to limits of geological model.
	Boundary Extension		50m along strike 30m down dip	40m along strike 40m down dip	

Golden Highway Ore Reserve

Highlights

The total Golden Highway Ore Reserve stands at **6.54 million tonnes at 1.46 g/t containing 308,800 ounces** of gold.

During 2018 a PFS considering the Golden Highway Deposits (Attila, Argos, Montagne and Alaric) was completed to determine the viability of an open pit mining operation. The PFS confirms that open pit mining on the Golden Highway is both technically and economically feasible. The Golden Highway pits could be mined simultaneously and sequentially as satellite operations, producing a supplementary ore source for the Gruyere processing plant which off-sets operational constraints as the Gruyere pit enters a cut-back stage. This presents an opportunity for unlocking potential through provision of additional higher grade, softer oxide ore feed to the Gruyere processing plant offering potential to increase throughput and gold production.

Life of mine analyses indicate the Gruyere Project NPV is maximised with production from the Golden Highway commencing in 2024.

Golden Highway Ore Reserve

The Golden Highway Ore Reserve is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition). The Mineral Resource is converted to Ore Reserve in consideration of the level of confidence in the Mineral Resource estimates and considers appropriate modifying factors. Mineral Resource estimates are reported inclusive of those Mineral Resources converted to Ore Reserves. The Proved Ore Reserve estimate is based on Mineral Resource classified as Measured. The Probable Ore Reserve estimate is based on Mineral Resource classified as Indicated. Table 6 presents a summary of the Golden Highway Ore Reserves on a 100% Project basis at a $1,600 per ounce gold price in comparison to the December 2017 Golden Highway Ore Reserves.

Table 6: Golden Highway Ore Reserve

	Ore Reserve - December 2018			Previous Ore Reserve - December 2017			Change %		
Project Name / Category	**Tonnes (Mt)**	**Grade (g/t Au)**	**Contained Metal (oz)**	**Tonnes (Mt)**	**Grade (g/t Au)**	**Contained Metal (oz)**	**Tonnes (Mt)**	**Grade (g/t Au)**	**Contained Metal (oz)**
Attila Total	3.61	1.54	0.18	3.21	1.55	0.16	12%	-1%	11%
Alaric Total	0.99	1.44	0.05	0.38	1.49	0.02	162%	-3%	154%
Montagne Total	1.50	1.37	0.07	-	-	-	100%	100%	100%
Argos Total	0.44	1.26	0.02	-	-	-	100%	100%	100%
Golden Highway Total	**6.54**	**1.46**	**0.31**	**3.59**	**1.55**	**0.18**	**82%**	**-5%**	**73%**

Golden Highway Mining Parameters

Mining methods proposed at the Golden Highway assume contract open pit mining utilising 200 tonne class excavators and 120 class excavators matched with 140 tonne rigid body dump trucks. The current Golden Highway Ore Reserve supports a mine life of 50 months.

Key mining parameters considered in the Golden Highway Ore Reserve estimate include:

- Mining costs derived from a budget estimate supplied by a mining contractor
- Mining dilution and ore loss modelled by applying a 0.5 metre dilution skin
- Mining dilution ranges between 9% and 20% depending on ore geometry
- Ore loss ranges between 3% and 12% depending on ore geometry
- Overall wall slopes and pit design criteria established during PFS

- Cut-off grade ranges between 0.53 g/t and 0.66 g/t considering:
  - Gold Price $1,600 per ounce
  - Metallurgical recovery
  - Surface haulage costs
  - Ore processing costs
  - General and Administration costs
  - Royalties.

Open Pit Optimisation

The open pit optimisations were undertaken utilising the Dassault Systemes (Geovia) Whittle implementation of the Lerchs-Grossman algorithm to determine optimal pit limits. Mining, processing and administration costs and metallurgical recovery information were used in the pit optimisation process to produce a series of nested pit shells each representing the optimal mining limits at a given gold price. The shells selected as guidance for pit designs were the shells that generated the maximum cash flow at $1,600 per ounce.

Golden Highway Pit Designs

Pit design criteria consists of an initial 10 metre batter height with subsequent batter heights of 20 metres with berm widths of either 5 metres or 6 metres. Batter slope angles were generally 50^{o} in oxide material and 60^{o} – 70^{o} in transitional and fresh. Ramp widths were 25 metres wide for dual lane and 14 metres wide for single lane. Minimum mining width applied was 15 metres with a 5-metre deep “goodbye cut” at the base of pits and on some of the ramps.

Final pit designs for the Golden Highway pits are shown in Figures 12 to 15.

Mining Schedule

Total material movement schedules are based on productivity estimates to determine the optimum amount of material that can be mined in a specified period.

The Golden Highway pits were scheduled using Maptek Evolution™ scheduling software. Due to the size of the pits, and their status as satellite deposits to the Gruyere Project, they were not staged, and no cut-off grade optimisation was undertaken. A simple breakeven cut-off grade was used to classify ore for the mining schedule. Relatively narrow mining widths means bench turnover is the limiting factor in development of the Golden Highway pits. The schedule also determined the optimal timing for introduction of ore from the Golden Highway into the Gruyere processing plant.

A maximum processing throughput rate of 1.8 Mtpa was set to correspond to the maximum mining rate of 12 Mtpa total material moved. Golden Highway ore will be processed through the Gruyere processing plant as supplemental feed, and therefore the processing throughput rate is not as important as the mining rate in determining project scheduling parameters.

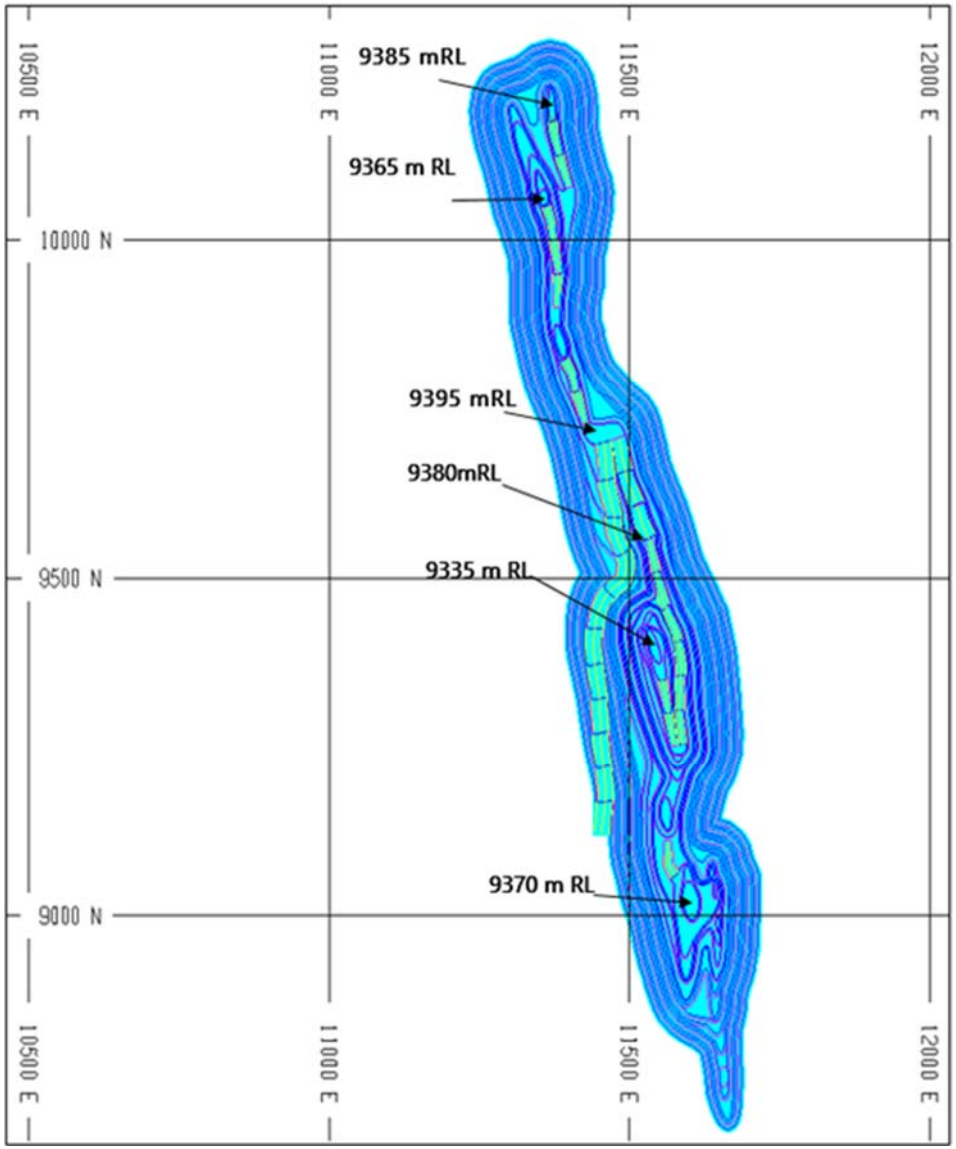


Figure 12: *Attila Final Pit Design*

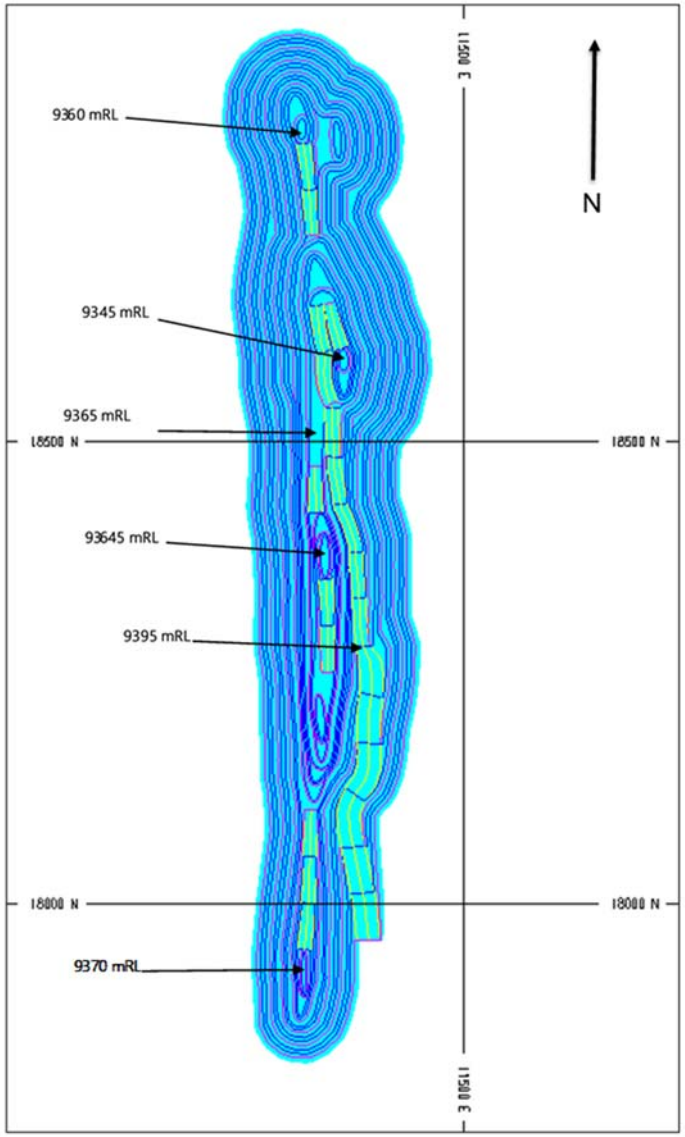


Figure 13: *Montagne Final Pit Design*

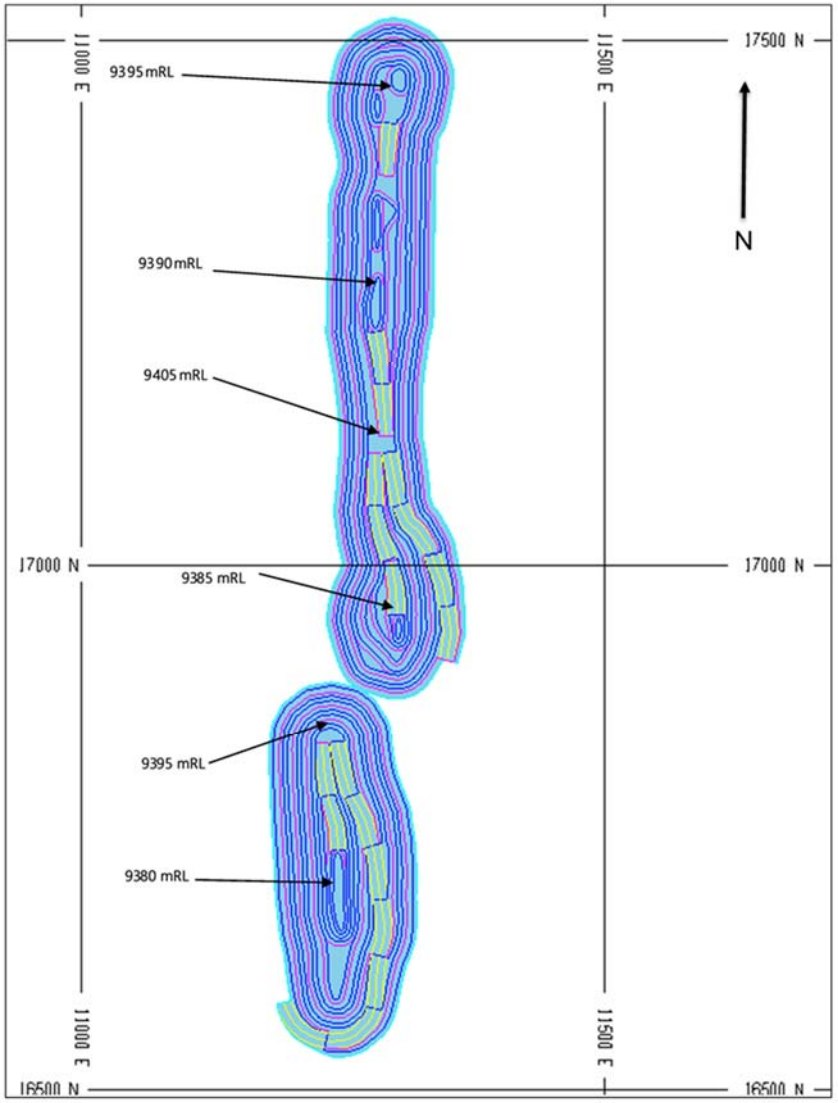


Figure 14: *Argos Final Pit Design*

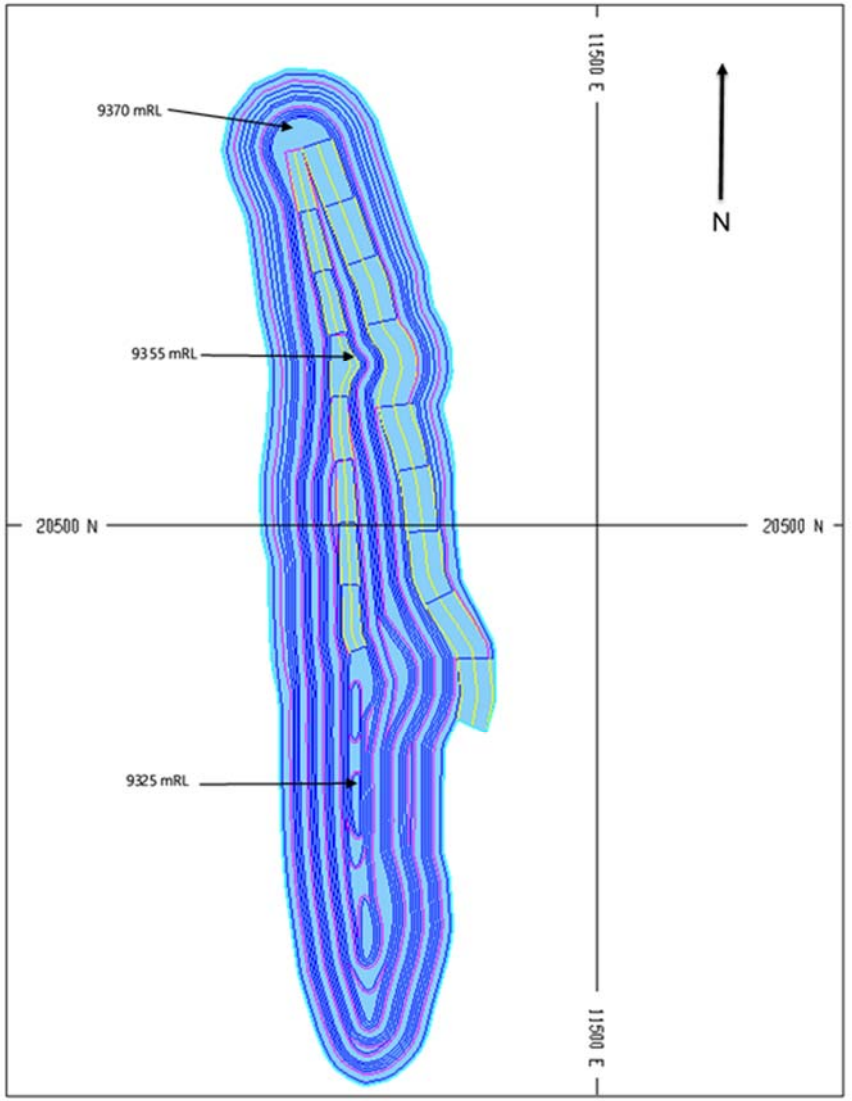


Figure 15: *Alaric Final Pit Design*

Mine Operations and Management

Mining activities will be completed by a mining contractor with technical and managerial direction provided by the Gruyere JV. The mining contractor will provide conventional open pit mining services utilising truck and excavator, with the drill and blast function provided via a small fleet of percussion drills and blasting using bulk explosives media.

A 200-tonne class excavator and 120-tonne class excavator in backhoe configuration will load blasted material mined on 2.5 metre flitches into 140-tonne rigid dump trucks. Ore will be stockpiled on a local ROM pad adjacent to the pit and subsequently transported to the Gruyere processing plant in side tipping road-trains. Material will be stockpiled at Gruyere and rehandled to the Gruyere crusher as required.

The workforce will be FIFO and accommodated at the Gruyere Village. A CASA certified sealed airstrip has been built adjacent to the Gruyere Village which has been operational for over 12 months.

Mining Infrastructure

Infrastructure requirements at the Golden Highway will be minimal as the projects will be operated as satellite operations to the Gruyere Project and as such will utilise as much of the established infrastructure as possible. Site based requirements will be limited to demountable office buildings housing contractor administrative staff and technical services personnel. Minor maintenance facilities will be constructed as temporary demountable "igloo" style workshops.

ROM pads to stock-pile ore, waste rock dumps, and contractor laydown areas will be established adjacent to the pit crests.

Mine Closure Plan

The Gruyere JV aims to prevent or minimise long-term environmental impacts and to create a self-sustaining natural ecosystem or alternate land use following mine closure.

Reclamation and rehabilitation will be undertaken during and after mining activities to ensure adverse environmental or other impacts are minimised. Closure strategies will be developed, based on statutory guidelines, as part of the planning stages of the projects.

Mineral Processing

Processing and Metallurgy

Processing will be via an 8.2 to 8.5 Mtpa (depending on ore type) SABC comminution circuit with gravity and CIL gold recovery at the Gruyere processing plant. Ore will be stockpiled on local ROM pads at the Golden Highway ahead of haulage by road-train to the Gruyere processing plant.

Key metallurgical parameters for the Golden Highway:

- Recovery ranging between 98% and 74% depending on ore type
- Design grind size 125µm
- No deleterious elements

Tailings Disposal

Tailings from processing Golden Highway ore will be disposed of in the Gruyere Tailings Storage Facility.

Approvals

Mining Lease

The Golden Highway projects are located on granted mining tenements and the Gruyere JV is the holder of all tenements required for the Golden Highway projects.

Native Title

Gold Road entered into the **GCBNTA** in May 2016 with the Yilka People and CNAC over their respective claim areas following community consultation and negotiation meetings. As part of the formation of Gruyere JV, Gold Road assigned 50% of its rights under the GCBNTA to Gruyere Mining Company Pty Ltd, a member of the Gold Fields Limited group, and Gruyere Mining Company Pty Ltd agreed to assume 50% of the obligations under the GCBNTA. This agreement covers all the Golden Highway tenements.

The GCBNTA includes obligations on the Gruyere JV regarding heritage and the conduct of heritage surveys, pursuant to a Cultural Heritage Management Plan.

Project Infrastructure

Planned infrastructure is situated within granted Mining Leases. The Gruyere gas pipeline lies within a Miscellaneous Licence infrastructure corridor adjacent to Attila. The White Cliffs Road currently runs through the proposed Attila pit footprint and approximately 6.5 kilometres of road will require re-routing along the pipeline corridor.

Environmental

Flora and Fauna surveys have previously been completed over the Golden Highway project area and indicate no significant issues. These surveys will need to be re-visited ahead of obtaining environmental permits and approvals.

Capital Costs

Capital cost requirements are minimal with only minor infrastructure needed as the Golden Highway projects will be operated as a satellite operation to the Gruyere Project and as such will utilise as much of the infrastructure established as possible. Total capital costs are estimated at approximately $6 million which allows for contractor mobilisation, site establishment, and for the White Cliffs Road re-alignment around the Attila pit.

Operating Costs

Operating costs have been determined on the following basis:

- All mining equipment will be supplied by the mining contractor
- Mining operating costs have been derived from a budget estimate supplied by a mining contractor with technical services supplied by Gruyere JV employees
- Mine design and production schedules were prepared by competent mining engineers
- Process operating costs were estimated in the Gruyere 2018 Business Plan
- General and Administration costs were estimated in the Gruyere 2018 Business Plan
- Budget pricing from local and international suppliers
- Operating costs assume a FIFO scenario with various rosters on site

Royalties

An allowance has been made for all royalties, including an allowance of 2.5% of revenue for royalties payable to the Government of Western Australia and appropriate allowance for other royalties payable to private parties.

Environment and Community

Environment

As the Golden Highway project progresses to Feasibility Study, further flora and fauna surveys will be required. Preliminary hydrogeological investigations have been completed including pump testing from bores established within the pit boundaries. Expected water inflows are estimated as relatively minor. Further hydrogeological surveys will continue as the project progresses to Feasibility Study.

Community

The Golden Highway projects are located approximately 150 kilometres east of Laverton within the land on which the Yilka (WAD297/2008) and Sullivan Edwards (WAD498/2011) native title claim area was determined by the Federal Court on 27 September 2017. The common law of Australia recognises a form of Native Title which reflects the entitlement of indigenous people, in accordance with their laws or customs, to enjoy their traditional lands. The GCBNTA allows the Gruyere JV to operate on the relevant lands for which Native Title has been determined with certain obligations and restrictions.

Cosmo Newberry is a small indigenous community located approximately 75 kilometre west of the Golden Highway project area. The community is managed through its corporate body, CNAC, incorporated under the Aboriginal Councils and Associations Act 1976 in 1991. In 1994 the community made the decision to become affiliated with Ngaanyatjarra Council.

The Gruyere JV values the relationship which has been established with the traditional owners of the Land on which the projects are located and has formed good working relations with the Yilka people and a developing understanding of their cultural heritage.

The Gruyere JV is committed to maintaining a long term partnership with the Yilka people to ensure Gruyere JV projects can bring a range of benefits to the traditional owners including direct and indirect employment.

The Gruyere JV recognises the positive impacts that mining operations such as the Golden Highway can bring to remote communities, including possible business opportunities and economic benefits through rates, charges and community investment.

YAM14 Mineral Resource

The Mineral Resource at the YAM14 Deposit is unchanged from December 2017. The Mineral Resource is constrained within a $1,850 per ounce optimised pit shell and quoted at a 0.4 g/t Au cut-off (Figure 16).

This Mineral Resource totals **853,500 tonnes at 1.21 g/t Au for a total of 33,300 ounces** of gold (Table 7). A total of 31% of material within the optimised pit shell is classified as Indicated and 70% of material is classified as oxide.

Table 7: Summary of the December 2018 YAM14 Mineral Resource

	Mineral Resource - December 2018			Mineral Resource - December 2017			Change %		
Project Name / Category	**Tonnes (t)**	**Grade (g/t Au)**	**Contained Metal (oz)**	**Tonnes (t)**	**Grade (g/t Au)**	**Contained Metal (oz)**	**Tonnes (t)**	**Grade (g/t Au)**	**Contained Metal (oz)**
YAM14 Total	**853,500**	**1.21**	**33,300**	**866,200**	**1.21**	**33,700**	**-1%**	**0%**	**-1%**
Measured	-	-	-	-	-	-	0%	0%	0%
Indicated	227,400	1.38	10,100	234,000	1.37	10,300	-3%	0%	-2%
Measured + Indicated	**227,400**	**1.38**	**10,100**	**234,000**	**1.37**	**10,300**	**-3%**	**1%**	**-2%**
Inferred	626,100	1.15	23,200	632,200	1.15	23,400	-1%	0%	-1%

Notes:

- *All Mineral Resources are completed in compliance with the JORC Code 2012 Edition*
- *The Gruyere JV is a 50:50 joint venture between Gold Road and Gruyere Mining Company Pty Ltd a wholly owned Australian subsidiary of Gold Fields Ltd. Figures are reported on a 100% basis unless otherwise specified*
- *The Maiden Mineral Resource is reported at a cut-off grade of 0.40 g/t Au and constrained within a $1,850 per ounce optimised pit shell*
- *All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding*
- *All dollar amounts are in Australian dollars unless otherwise stated*

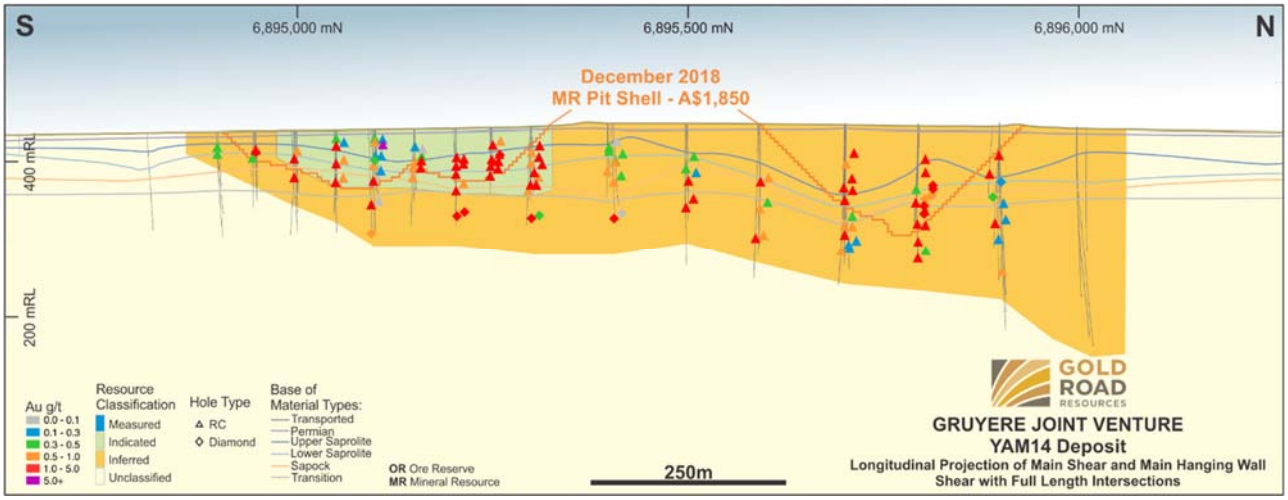


Figure 16: *YAM14 Longitudinal Projection of the main shear and hanging wall shear (with off-set) with full length intersections*

Central Bore Mineral Resource

Mineral Resource Variance

Gold Road completed a new Central Bore Underground Mineral Resource, in accordance with the JORC Code 2012 Edition. The December 2018 Mineral Resource is constrained within mineable stope optimisation shapes with a minimum mining width of 1.5 metres with a minimum grade of 3.50 g/t Au and based on a substantially more detailed geological interpretation than the previous Mineral Resource.

Gold Road removed the Central Bore Mineral Resource in December 2017 as, at the time, the cut-off grade was deemed too low for potential economic underground extraction, and geological interpretations lacked refinement or detail. The December 2018 Mineral Resource totals **241,500 tonnes at 13.05 g/t Au for 101,300 ounces** of gold (Table 8). Material within the December 2018 Mineral Resource mineable stope optimisation is classified as Inferred (100%).

Table 8: Summary of the December 2018 Central Bore Mineral Resource

	Mineral Resource - December 2018			Mineral Resource - December 2017			Change %		
Project Name / Category	**Tonnes (t)**	**Grade (g/t Au)**	**Contained Metal (oz)**	**Tonnes (t)**	**Grade (g/t Au)**	**Contained Metal (oz)**	**Tonnes (t)**	**Grade (g/t Au)**	**Contained Metal (oz)**
Central Bore Total	**241,500**	**13.05**	**101,300**	**-**	**-**	**-**	**100%**	**100%**	**100%**
Measured	-	-	-	-	-	-	0%	0%	0%
Indicated	-	-	-	-	-	-	0%	0%	0%
Measured + Indicated	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**0%**	**0%**
Inferred	241,500	13.05	101,300	-	-	-	100%	100%	100%

Notes:

- *All Mineral Resources are completed in accordance with the JORC Code 2012 Edition*
- *The Gruyere JV is a 50:50 joint venture between Gold Road and Gruyere Mining Company Pty Ltd a wholly owned Australian subsidiary of Gold Fields Ltd. Figures are reported on a 100% basis unless otherwise specified*
- *The 2018 Mineral Resource is reported constrained within mineable stope optimisation shapes with a minimum mining width of 1.5 metres and meeting a minimum grade of 3.50 g/t Au reflective of a $1,850/oz gold price.*
- *All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding*
- *All dollar amounts are in Australian dollars unless otherwise stated*

Central Bore Geology

The Central Bore Deposit is located in the central part of the Yamarna Greenstone Belt approximately 3 kilometres east of the Golden Highway Projects. The majority of the greenstone sequence is obscured by a thin veneer of Quaternary sands. The local geology of the Central Bore area comprises sub-vertical volcanics and sediments, including crystal tuffs and felsic to intermediate volcanic/volcaniclastics that trend north-northwest.

Central Bore Project History

The Central Bore Deposit was initially discovered in 1994 by Kilkenny Gold NL following up a 52 ppb soil gold anomaly. Limited follow up RAB drilling intercepted gold mineralisation with best intercepts of 1 metre at 16.7 g/t Au and 4 metres at 1.3 g/t Au in holes BBRB26 and BBRB49 respectively. In 2009 Gold Road commenced further RC and RAB drilling.

Various Mineral Resource estimations have been completed on the Central Bore Deposit by Ravensgate Mining Industry Consultants between 2010 and 2013. Detailed geological interpretation, estimation and underground assessment of the Central Bore Deposit during 2018 has allowed for application of 'Mineable Shape Optimiser' (**MSO**) software, allowing economic constraints to be applied to the reported Mineral Resource.

Central Bore Deposit Geology

Geology, Gold Mineralisation and Geological Interpretation

Host rocks to gold mineralisation at Central Bore are dominated by highly-strained intercalated tuffs and feldspar phyric sediments of predominantly dacitic composition. Graded bedding on decimetre to metre scale can be observed in the sediments which are intercalated with more coherent feldspar phyric crystal tuffs or volcanic flows. A Proterozoic dyke transects the deposit to the south of the main mineralised shoot (Imperial). The sequence is metamorphosed to middle to upper greenschist facies grade (Figures 17 and 18).

Gold mineralisation is hosted within a continuous north striking (Attila local grid), sub-vertical to steep west dipping shear zone. Very high-grade mineralisation (25 to >200 g/t Au) is associated with a narrow carbonate vein (20 to 50 cm wide) central to the shear. Accessory minerals include molybdenite, pyrite and pyrrhotite. A proximal halo of carbonate-chlorite-biotite±albite±sericite alteration is present in the hanging wall and footwall to the mineralised shear.

The Central Bore shear zone has been delineated over 1,000 metres in strike length. The high-grade core is modelled to the width of the vein in diamond core, or the first 1 metre of a mineralised interval in RC chip samples. Low grade mineralisation adjacent to the vein comprises a proximal halo approximately 3 to 5 metres wide. The bulk of the gold inventory is contained within the high-grade Imperial Shoot which is controlled by a subtle strike change (< 5°) and steep plunge. The Imperial Shoot has a maximum 100 metres strike length and has a currently defined 700 metre dip extent, it remains open at depth.

Regolith and Weathering

Weathering at Central Bore is shallow with fresh rock typically encountered between 40 to 50 metres below surface. The weathering profile deepens sharply around the sulphide bearing mineralised zone with weathering to an approximate 80 metre depth. The regolith profile is stripped, with material above the lower saprolite absent. A thin veneer (0.1 to 0.5 metres) of transported material covers the deposit and Archean sub-crop common.

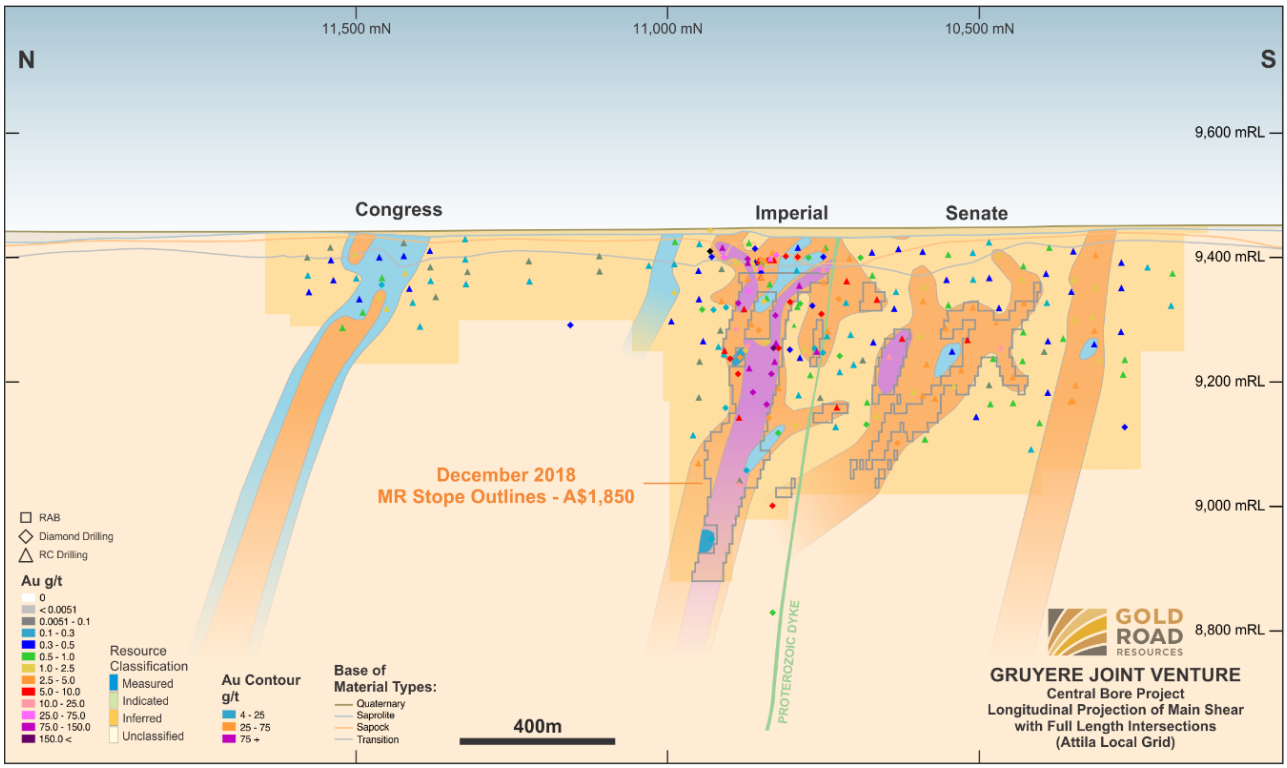


Figure 17: *Central Bore longitudinal projection of main shear with full length intersections and gold grade contours, showing outline of potential stope shapes (grey) defining Mineral Resource*

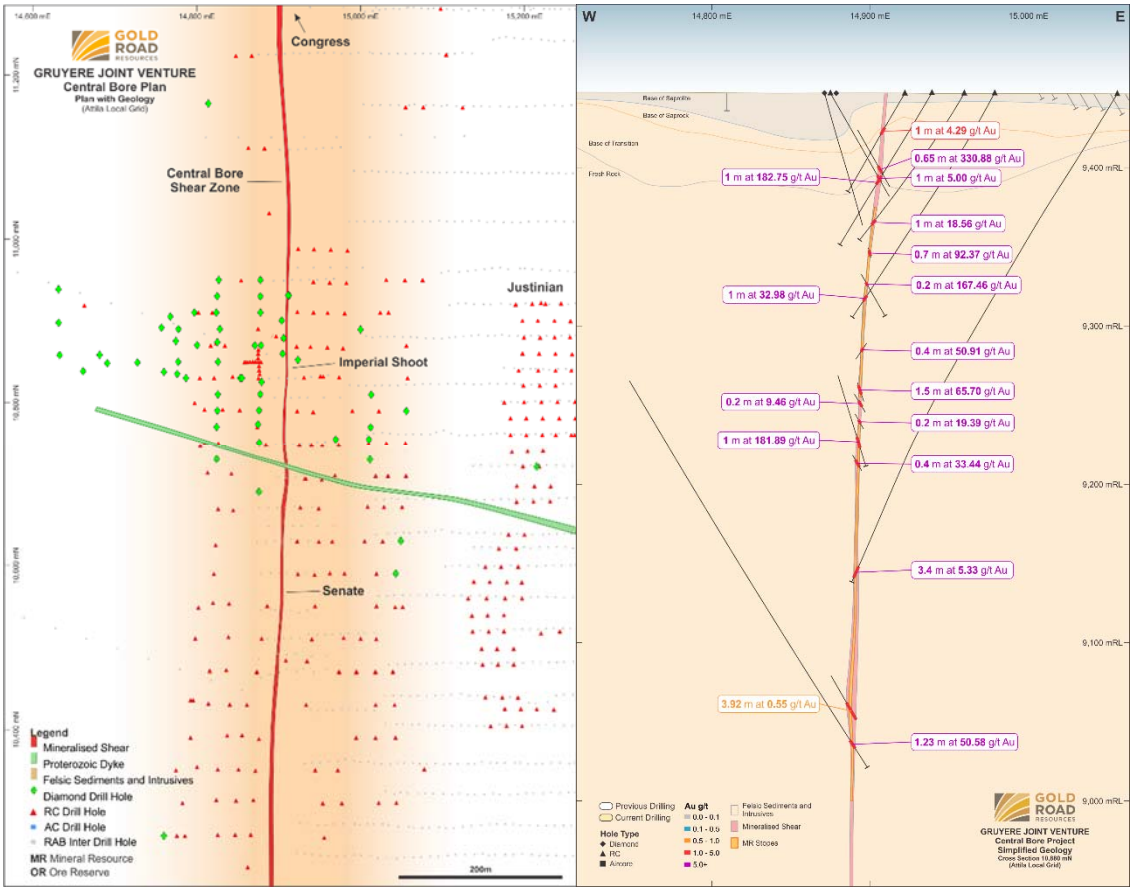


Figure 18: *Central Bore Plan and Cross Section 10,880 mN*

Drilling Techniques, Sampling and Sub-sampling Techniques, and Sample Analysis

Sampling has been carried out using a combination of RC and diamond drilling. A small number of RAB holes used in the estimate are outside the Mineral Resource boundary and do not influence the reported inventory. Drilling completed between 2009 and 2017 was undertaken by several different drilling contractors. The orientation of the mineralisation is approximately vertical, and drilling is oriented either east or west at 60 to 70° dip. A local grid (Attila Grid) is utilised for both drilling and modelling.

Drill core is cut by diamond saw and core samples collected to geological contacts to an average length of 1 metre, and a minimum length of 20 centimetres, and submitted for gold analysis by assay. One metre RC drill samples are channelled through a splitter, and an average 2 to 3 kilogram sample is collected in a calico bag that is submitted for assay analysis. Gold Road has protocols in place to ensure sample quality is kept to high standards. At the assay laboratory all samples are fully pulverised to -75 µm (90% passing 75 µm), to produce a 50 gram charge for Fire Assay with either AAS or ICPOES finish.

Mineral Resource Model

Several geological models and Mineral Resource estimations have been completed since mineralisation was first discovered at Central Bore. This includes models completed by Ravensgate Mining Industry Consultants between 2010 and 2013, and several iterations of interpretation and estimation completed by Gold Road. The model used in the development of this updated Mineral Resource considers a shear vein style of mineralisation, continuous along strike and dip, which is subdivided into zones of higher and lower grade based on geology and contours of an accumulation of grade and thickness.

High-grade mineralisation has been modelled as the width of the vein in diamond core, or the first 1 metre of a mineralised interval in RC. The surrounding halo encompasses lower grade mineralisation and is defined by a 0.3 g/t Au cut-off and can include 1 to 2 metres of internal waste. Domains are constructed from cross-sectional definition of mineralised intervals, with sub-domains interpreted on a longitudinal projection. A steep plunge to the orientation of mineralisation is noted in grade contours and geostatistical (variography) analysis.

Estimation Methodology

Wireframes of regolith boundaries, lithology and mineralisation were constructed utilising a cross-sectional interval selection method that was validated in other orientations. Sub-domains based on geology and contours of grade and thickness interpreted in long section were applied to the wireframes to delineate higher grade domains. The domains were applied as semi-soft boundaries in the grade estimation. Bulk density values are applied according to material type (weathering) and are based on diamond core measurements taken locally and regionally.

The geological block model was created by filling interpreted mineralisation wireframes with appropriately sub-celled 10 metres X (east-west) by 5 metres Y (north-south) by 10 metres Z (vertical) parent cells. Due to the narrow nature of the mineralisation wireframe, the width of the blocks in X (east-west) was set to fill the wireframe entirely, with no sub-celling. Assay data was selected within the wireframes, to a 1 metre composite length or the thickness of the vein intersection. Appropriate top-cuts were applied based on domain and grade statistics and range from 50 to 700 g/t Au for high and very high grade domains. Estimation by domain was completed using Ordinary Kriging methods with optimised search neighbourhoods aligned with the interpreted mineralisation trend. High-grade domains utilised a one way soft boundary in estimation, this allows the neighbouring low-grade domain to reduce the influence of high-grades. Low-grade domains were estimated with a hard boundary. Validation steps included comparison of input assay data to the output model grade estimate to ensure minimal bias.

Criteria Used for Classification

The December 2018 Mineral Resource Update is constrained by MSO wireframes that considers all available mineralisation in the geological model with at least an Inferred level of confidence. Several factors have been used in combination to derive the Mineral Resource classification categories for mineralisation:

- **Drill hole spacing:** classification is influenced by the data spacing, as indicated in Table 9
- **Geological continuity:** Geological continuity is high, the position and width of mineralised lodes is predictable
- **Grade continuity:** At low grades mineralisation continuity is high, at higher grades the grade continuity is reasonable and reflects the shoot controls
- **Estimation quality parameters.** Derived from the Ordinary Kriging process and assessed using Kriging Neighbourhood Analysis methods provide a guide to the quality of the estimate
- No Measured Resource has been classified considering the criteria defined.

Table 9: Drill hole spacing by Mineral Resource Classification category, Central Bore Deposit

Inventory Classification					
Domain	**Criteria**	**Measured**	**Indicated**	**Inferred**	**Unclassified**
All mineralised	**Target Spacing**			50 m X by 100 m Y	
	Actual Spacing			10 m X by 10 m Y to 25 m X by 25 m Y to 50 m x to 50 m Y to 100 m Y	"Potential" beyond Inferred to limits of geological model.
	Boundary Extension			50 m along strike	
				25m down dip from last drill hole	

Detailed analysis using geostatistics and spatial variance (variography) indicate the Central Bore mineralisation exhibits a moderately low nugget with reasonable grade continuity down dip. The current drill spacing is sufficient to support the resource classification.

Mineral Resource Estimate

The operating strategy assumes mining will be underground utilising narrow, long hole open stoping methods with 15.0 metre level access horizons and processing via the Gruyere processing plant. MSO software was utilised to constrain the Mineral Resource to determine the portion of mineralisation with reasonable prospects for eventual economic extraction. Optimal mining shapes were based on a 1.5 metre minimum mining width, 5 metre minimum strike length, and an appropriately costed cut-off grade of 3.5 g/t Au at a $1,850 per ounce gold price. Oxide mineralisation was excluded from the MSO process as it was considered this would be incompatible with underground mining processes. The reported Mineral Resource is diluted to 1.5 metre width.

Ore extracted from Central Bore will be processed at the neighbouring Gruyere process plant. Metallurgical test work completed at Central Bore indicates that gold liberation from ore is relatively straightforward through standard milling physical and chemical processes with good recovery ranging between 93.7% and 97.2% from 5 samples tested. The recovery applied to calculate the cut-off grade constraining the Mineral Resource is 92%.

Processing costs are based on Gruyere process plant operating costs projected from the Gruyere 2018 Business Plan and include costs to cover mine to mill haulage of approximately 25 kilometres (including re-handle), and allowances for administration costs and sustaining capital.

Appendix 2 – Previous ASX Announcements

YAM14 Mineral Resource

Date	Announcement Title	Significance
21/02/2018	Maiden Declarations Add to Yamarna Ore Reserves and Mineral Resources	Reserve and Resource Update
26/09/2017	Latest Drilling Results Add Value to the Gruyere Gold Project	Drill Results
27/06/2017	Yamarna Exploration Update: Significant Intersections Returned Across the Tenement Package	Drill Results
17/01/2017	Acceleration of Exploration at Yamarna in 2017 – Budgeting up to A$22 Million Spend	Exploration Update & Drill Results
10/10/2016	Initial Resource Drilling Completed at Yam14	Drill Results
21/06/2016	First Diamond Holes Drilled at Yam14 Prospect Confirm High-Grade Gold Mineralisation	Drill Results
04/11/2013	Assays from Resampling Confirm Discoveries at Dorothy Hills	Drill Results
14/10/2013	Breakthrough Gold Discoveries Confirmed at Dorothy Hills	Drill Results
17/09/2013	RAB Intersects Second Gold Mineralised Zone at Dorothy Hills	Drill Results
09/09/2013	Drilling Intercepts Gold Mineralisation – Sth Dorothy Hills	Drill Results
26/08/2013	RAB Drilling identifies Second Gold Anomaly at Dorothy Hills	Drill Results
02/07/2013	Auger Drilling Over Redox Target Identifies 2km Gold Anomaly	Drill Results

Central Bore Mineral Resource

Date	Announcement Title	Significance
21/02/2018	Maiden Declarations Add to Yamarna Ore Reserves and Mineral Resources	Removal of Mineral Resource
16/01/2017	Yamarna Resource and Reserve Update January 2017	Mineral Resource Estimate Table
16/09/2015	Gruyere Resource Increases to 5.62 Million Ounces; Yamarna Mineral Resource Fully JORC 2012 Compliant	Mineral Resource Estimate Table
18/02/2013	Eight Hole Drill Program Completed at Central Bore	Drill Results
4/02/2013	Drill Hits Reinforce Continuity of Central Bore High Grade	Drill Results
24/01/2013	Viability Confirmed for 100ktpa Plant for Central Bore	Mine viability Confirmed
14/01/2013	219g/t Gold From Central Bore Deep Drilling	Drill Results
9/01/2013	Central Bore Gold Mineralisation Continues at Depth	Drill Results
23/10/2012	Continuity of High-Grade Gold at Depth	Drill Results
22/10/2012	Infill Drilling Completed, Extension Drilling Commenced	Drill Results
9/10/2012	High Grade Drilling Results at Central Bore Strengthens Mining Plan	Drill Results
26/09/2012	Scoping Study Confirms Economic Viability	Scoping Study
20/03/2012	High Grade Results at Central Bore North and Attila Trend	Drill Results
10/02/2012	Central Bore – Updated Resource and Scoping Study	Resource Update
12/09/2011	High Grades at Central Bore and Resource Drilling at Attila	Drill Results
1/08/2011	Drilling Establishes Justinian as a Parallel Gold Trend	Drill Results
06/07/2011	High grade gold intercepts at Central Bore and Justinian	Drill Results
20/06/2011	Deepest Drill Hole at Central Bore Delivers High Grade	Drill Results
5/04/2011	New Gold Anomalies Identified and Drilling Recommenced	2004 JORC Resource Table
18/03/2011	Central Bore Maiden Resource	Maiden Resource
1/03/2011	Exceptional Mineralisation at Central Bore (32 oz/t)	Drill Results
22/02/2011	Abundant Visible Gold in Central Bore Diamond Holes	Drill Results
18/01/2011	High Grade Results at Central Bore Continues	Drill Results
13/01/2011	Visible Gold in First Central Bore Diamond Hole	Drill Results
16/12/2010	More Gold Intercepts at Central Bore	Drill Results
10/11/2010	High Grade Gold Assays Continue at Central Bore	Drill Results
1/11/2010	RC Drilling Update	Drill Results
25/10/2010	Bonanza Grade Gold Assays	Drill Results
14/10/2010	RC Drilling Intercepts Visible Gold at Central Bore	Drill Results
11/10/2010	Central Bore Gold Trend Continues to Expand	Drill Results
28/09/2010	Excellent Gold Recoveries from Gravity Separation Testwork	Recovery Rates Update
21/09/2010	Central Bore Au Discovery Expanding to North, South and East	Drill Results
14/09/2010	New Discovery Identified at Central Bore East	Drill Results
27/07/2010	Final Central Bore Assays Confirm Extent of Gold Mineralisation	Drill Results
13/07/2010	Central Bore Drilling Confirms Fourth High-Grade Shoot	Drill Results
12/07/2010	Excellent Gold Recoveries from Central Bore Test Work	Recovery Rates Update
5/07/2010	Central Bore Gold Mineralisation Extended to 800m Strike	Drill Results
15/06/2010	High Grade Intersections Extend Central Bore Mineralisation	Drill Results
11/06/2010	Visible Gold Panned in Central Bore South Drilling	Drill Results
25/05/2010	Assays Enhance High Grade Gold Discovery at Central Bore	Drill Results
10/05/2010	Bonanza Grade of 404g/t Gold Intercepted at Central Bore	Drill Results
17/11/2009	Stage 2 Drilling at Central Bore Confirms High Grade Gold	Drill Results

Date	Announcement Title	Significance
15/10/2009	New Results Enhance Central Bore High Grade Discovery	Drill Results
7/10/2009	High Grade Gold Discovery at Central Bore	Discovery Results
13/08/2009	Yamarna Drilling and Metallurgical Testing Results	Drill Results

Golden Highway Mineral Resource and Ore Reserve

Date	Announcement Title	Significance
20/09/2018	Yamarna Exploration Update – 20 September 2018	Drill Results
9/07/2018	Yamarna Exploration Update – July 2018	Drill Results
21/02/2018	Maiden Declarations Add to Yamarna Ore Reserves and Mineral Resources	Reserve and Resource Update
19/12/2017	Yamarna Exploration Update: High-Grade Bedrock Success and New Anomalies Defined	Drill Results
26/09/2017	Latest Drilling Results Add Value to the Gruyere Gold Project	Drill Results
24/07/2017	Alaric Mineral Resource Doubled	Resource Update
27/06/2017	Yamarna Exploration Update: Significant Intersections Returned Across the Tenement Package	Drill Results
25/05/2017	Attila Open Pit Resource Increases by 100,000 Ounces - Addendum	Resource Update post JV
16/01/2017	Yamarna Resource and Reserve Update	Resource Update post JV
15/11/2016	Attila Growth Potential: Drilling Extends Mineralisation	Drill results
17/10/2016	High Grade Extensions Confirmed at Alaric	Drill results
16/09/2015	Gruyere Resource Increases to 5.62 Million Ounces; Yamarna Mineral Resource Fully JORC 2012 Compliant	Resource Announcement
26/08/2017	Latest Drilling Results Add Value to the Gruyere Gold Project	Drill Results

Gruyere Announcements and Published Papers

Date	Announcement Title	Significance
21/02/2018	Maiden Declarations Add to Yamarna Ore Reserves and Mineral Resources	Reserve and Resource Update
26/09/2017	Latest Drilling Results Add Value to the Gruyere Gold Project	Drill Results
22/02/2017	Drilling Campaign Marks Start of A$30M Greenfields Exploration Spend in 2017	Exploration Update
16/01/2017	Yamarna Resource and Reserve Update	Resource Update post JV
2017	Osbourne, J P, Levett, J, Donaldson, J S, Berg, R, Davys, C, Prentice, K, Tullberg, D, Lubieniecki, L Z, Tunjic J A, Bath, A B, and Libby, J W, 2017, Gruyere Gold Deposit, Yamarna, in *Australian Ore Deposits* (ed: G N Phillips), pp 291-298 (The Australasian Institute of Mining and Metallurgy: Melbourne)	Published Paper
14/09/2016	Gruyere High-Grade Zone Confirmed At Depth	Drill results
1/08/2016	Gruyere Feasibility Study Update	Study Update
22/04/2016	Gruyere Resource Increases to 6.2 Million Ounces Including 0.5 Million Ounces Measured	Resource Update
08/02/2016	Gold Road Pre-Feasibility Study Information Booklet	Information booklet
08/02/2016	Gruyere Pre-Feasibility Study Confirms Long Life Gold Mine 3.2 Moz Maiden Ore Reserve	Reserve Announcement
27/01/2016	Yamarna Exploration Update: Regional Success Continues	Drill results
17/11/2015	The Gruyere gold deposit, Yamarna Greenstone Belt, Western Australia – *in Conference proceedings, Case histories of discovery, NewGenGold 2015*	Published Paper
16/09/2015	Gruyere Resource Increases to 5.62 Million Ounces; Yamarna Mineral Resource Fully JORC 2012 Compliant	Resource Announcement
07/09/2015	Gruyere gold mineralisation confirmed to more than 1km depth	Drill results
10/08/2015	Gruyere Porphyry Intersected 1100m Below Surface	Drill results
03/08/2015	Gruyere PFS - Stage 1 Completed	Study results
24/06/2015	Gruyere drilling confirms higher grade continuity at depth	Drill results
28/05/2015	Gruyere Resource Grows to 5.51m Ounces Gold	Resource Announcement
26/05/2015	Key Appointments to Bolster Gruyere Project PFS	
25/05/2015	Gruyere Resource and PFS Drilling Completed	Drill results
07/05/2015	Further Metallurgical Testwork Success at Gruyere	Metallurgical test results
28/01/2015	Audio Broadcast - Completes Gruyere Scoping Study	
27/01/2015	Gruyere Scoping Study a Robust Long Life Gold Project	Scoping Study results
21/01/2015	Audio Broadcast - Gruyere	
20/01/2015	Best Intersection Ever Extends Gruyere Mineralisation	Drill results
16/12/2014	Exploration update -Sun River -Wanderrie, Gruyere & Toto	Drill results
04/08/2014	3.84 Million Ounce Gruyere Maiden Gold Resource	Resource Announcement
30/07/2014	Gruyere Resource Drill Out - Final Assays Received	Drill results
28/07/2014	Gruyere Assays Confirm Continuity Along Strike and at Depth	Drill results
07/07/2014	Results of Deep Diamond holes at Gruyere	Drill results
03/07/2014	Results of Gruyere Metallurgical Testwork	Metallurgical test results
25/06/2014	New Geochemical Anomaly Identified South of Gruyere Deposit	Regional exploration
23/06/2014	Gruyere Resource Drilling Completed	Drilling update

Date	Announcement Title	Significance
12/05/2014	Gruyere Drilling Confirms High Grade Trend in Northern Zone	Drill results
07/05/2014	Gruyere Drilling Confirms Model and High Grade Controls	Drill results
05/05/2014	Gruyere Metallurgical Testing Delivers High Recoveries	Metallurgical test results
18/03/2014	Broad Higher Grade Intercepts in Gruyere RC Drilling	Drill results
17/03/2014	Gruyere Diamond Drilling Doubles Depth of Mineralisation	Drill results
13/03/2014	Gruyere Drilling Confirms Northern High Grade Gold at Depth	Drill results
24/02/2014	High Grade Gold Intersection From Gruyere Prospect - amended	Drill results
24/02/2014	High Grade Gold Intersection From Gruyere Prospect	Drill results
19/02/2014	Continuous Gold Mineralisation Intersected to 250 metres	Drill results
17/02/2014	Drilling shows strike potential - Gruyere expanded to 2,600m	Drill results
03/02/2014	Exceptional Metallurgical Test Results from Gruyere Prospect	Metallurgical test results
14/01/2014	Consistent mineralisation in large gold system at Gruyere	Drill results
23/12/2013	Thick High Grade Mineralisation Extends Gruyere to 1.6km	Drill results
02/12/2013	Continuity of Mineralisation Confirmed at Gruyere Prospect	Drill results
18/11/2013	Gruyere Discovery Doubles in Size at Dorothy Hills Trend	Drill results
04/11/2013	Assays from Resampling Confirm Discoveries at Dorothy Hills	Drill results – Re-assays
14/10/2013	Breakthrough Gold Discoveries Confirmed at Dorothy Hills	Discovery Drill results
17/09/2013	RAB Intersects Second Gold Mineralised Zone at Dorothy Hills	Initial anomalism
26/08/2013	RAB Drilling identifies Second Gold Anomaly at Dorothy Hills	Initial anomalism

Appendix 3

GRUYERE

JORC CODE 2012 EDITION TABLE 1 – SECTIONS 1 TO 4

Section 1 Sampling Techniques and Data

Note: Details for drilling data used in the Gruyere Mineral Resource include all available drilling between 2013 and 2017. Results from previous drill programs has been reported in ASX announcements released between 14 October 2013 and 11 February 2019.

(Criteria in this section apply to all succeeding sections.)

Criteria and JORC Code explanation	Commentary
Sampling techniques *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The sampling has been carried out using a combination of Reverse Circulation (**RC**) and diamond drilling (**DDH**). RC drill samples are collected through a rig-mounted cone splitter designed to capture a one metre sample with optimum 2-3kg sample weight. Drill core is logged geologically and marked up for assay at approximate one metre intervals based on geological observation. Drill core is cut in half by a diamond saw and half core samples submitted for assay analysis. Detailed descriptions of drilling orientation relative to deposit geometries, and full sample nature and quality are given below.
Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.	Sampling was carried out under Gold Road's protocols and QAQC procedures as per industry best practice. See further details below.
Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	RC holes were drilled with a 5.25 inch face-sampling bit, 1 m samples were collected through a cyclone and cone splitter to produce a 2-3 kg sample. All holes with reported assays from RC drilling are from the original 1 m samples collected from the splitter except for 1% of RC samples, which were four-metre composite samples collected through logged waste zones. The 4 m composite samples were produced by spear sampling of the combined composite length. The samples were collected in large plastic bags at the drill rig and deposited into separate numbered calico bags for sample despatch. Assays generated by the 4 m composite sampling were not applied to the Mineral Resource Estimation. Diamond drilling was completed using an HQ or NQ drill bit for all holes. Core is cut in half for sampling, with a half core sample sent for assay at measured intervals. Both RC and diamond samples were fully pulverised at the laboratory to -75 um to produce a 50 g charge for Fire Assay with an AAS finish up until May 2014 and ICPES finish post this date.
Drilling techniques *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	RC drilling rigs were used to collect the RC samples. The face-sampling RC bit has a diameter of 5.25 inches (13.3 cm). Diamond drilling rigs operated by Terra Drilling Pty Ltd and DDH1 collected the diamond core as NQ or HQ size. Some of the diamond holes used RC pre-collars to drill through barren hanging-wall zones to specified depth, followed by diamond coring at NQ size from the end of the pre-collar to the end of hole. This ensured diamond core recovery through the mineralised zones within the Gruyere Porphyry. Core is oriented using downhole Reflex surveying tools, with orientation marks provided after each drill run.

Criteria and JORC Code explanation	Commentary
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.*	Most RC samples were dry. Ground water egress occurred in some holes at variable depths between 100 and 400 m. Drill operators ensured that water was lifted from the face of the hole at each rod change to ensure that water did not interfere with drilling and that all samples were collected dry. When water was not able to be isolated from the sample stream the drill hole was stopped and drilling was completed with a diamond tail. RC recoveries were visually estimated, and recoveries were recorded in the log as a percentage. Recovery of the samples was good, generally estimated to be close to 100%, except for some sample loss at the top of the hole. All diamond core collected is dry. Drill operators measure core recoveries for every drill run completed using a 3 m core barrel. The core recovered is physically measured by tape measure and the length recovered is recorded for every 3 m "run". Core recovery is calculated as a percentage recovery. Close to 100% recoveries were achieved for most of the diamond drilling completed at Gruyere.
Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC face sampling bits and dust suppression were used to minimise sample loss. Drilling air pressure lifted the water column above the bottom of the hole to ensure dry sampling. RC samples were collected through a cyclone and rotary cone splitter. The rejects were deposited in a large plastic bag and retained for potential future use. The sample required for assay is collected directly into a calico sample bag at a designed 2 - 3 kg sample mass which is optimal for whole-of-sample pulverisation at the assay laboratory. Diamond drilling results in uncontaminated fresh core samples which are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling.
Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Except for a small sample population (<5%) all RC samples were collected dry. The minority wet samples were reported as slightly damp to the end of the hole. Apart from the upper portions of the holes which drilled through the sand dune cover, there is no evidence of excessive loss of material and at this stage no information is available regarding possible bias due to sample loss. There is no significant loss of material reported in any of the diamond core.
Logging *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	All chips and drill core have been geologically logged by Gold Road geologists, applying the Gold Road logging scheme, which provides data to a level of detail adequate to support Mineral Resource Estimation activities. Approximately 30% of holes have been surveyed using downhole optical (OTV) and/or acoustic (ATV) televiewer tools which provide additional information suitable for geotechnical and specific geological studies. A full set (49,425 to 50,950 mN) of 25 m spaced manually interpreted cross-sections were geo-referenced and used to guide digital construction of material type wireframes. A weathering profile guide was developed as part of the process to document the features and provide a guide for further logging and open pit mapping. An alteration assemblage guide was developed to document the features that control gold mineralisation and provide a guide for further logging and open pit mapping. Nine specific geotechnical diamond holes were drilled to support the PFS and a further 12 drilled to support the FS. The holes were designed and logged in geotechnical detail by Dempers & Seymour Pty Ltd Geotechnical Mining Consultants. Collaboration between the geological and geotechnical groups has resulted in refinement of the geological interpretation, particularly the understanding of significant faults and shear zones. Metallurgical composite samples selected over the life of the project have been based on the detailed logging information, gold grades and geological interpretation.
Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging of drill core records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples, along with structural information from oriented drill core. All samples are stored in core trays. All core is photographed in the trays, with individual photographs taken of each tray both dry, and wet; all photos are uploaded to and stored on the Gold Road server database.
The total length and percentage of the relevant intersections logged	All RC and diamond holes were logged in full.

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Sub-sampling techniques and sample preparation
If core, whether cut or sawn and whether quarter, half or all core taken.</td><td>Core samples were cut in half using an automated Corewise diamond saw. Half core samples were collected for assay, and the remaining half core samples are stored in the core trays.</td></tr>
<tr><td>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</td><td>One metre RC drill samples are collected via a cone-splitter, installed directly below a rig mounted cyclone, and an average 2-3 kg sample is collected in an unnumbered calico bag, and positioned on top of the plastic bag. >95% of samples were collected dry (dry to slightly damp).
Four-metre composite samples were created by spear sampling of the total 1 metre samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. Several RC holes utilised 4 metre composite samples for waste intervals. If composite samples returned anomalous gold values, the intervals were resampled as one metre samples by collecting the sample produced from the rotary cone-splitter. No 4 m sample assays were used in this Mineral Resource Estimate.</td></tr>
<tr><td>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</td><td>Samples were prepared at the Intertek laboratory in Kalgoorlie. Samples were dried, and the whole sample (both RC and DDH) was pulverised to 80% passing 75 um, and a sub-sample of approx. 200 g was retained. A nominal 50 g was used for the analysis. The procedure is better than industry standard for this type of sample as most labs split the 2-3 kg prior to pulverising.</td></tr>
<tr><td>Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.</td><td>A duplicate RC field sample is taken from the cone splitter at the same time as the primary sample a rate of approximately 1 in 40 samples. A twinned half core sample is taken at a frequency of 1 in 40 samples, with one half representing the primary result and the second half representing a twinned result.
At the laboratory, regular laboratory-generated repeats and check samples are assayed, along with laboratory insertion of its own standards and blanks.</td></tr>
<tr><td>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</td><td>Duplicate samples were collected at a frequency of 1 in 40 for all drill holes.
RC duplicate samples are collected directly from the rig-mounted cone splitter.
Core twinned samples utilise the second half of core after cutting.</td></tr>
<tr><td>Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>Sample sizes are considered appropriate to give an indication of mineralisation given the particle size and the preference to keep the sample weight below a targeted 3 kg mass which is the optimal weight to ensure the requisite grind size in the LM5 sample mills used by Intertek in sample preparation.</td></tr>
<tr><td>Quality of assay data and laboratory tests
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</td><td>Samples were analysed at the Intertek laboratory in Perth. Fire Assay with either AAS or ICPES finish for gold is appropriate for the Gruyere material and mineralisation. ICPES provides improved quality compared to AAS and all fire assay protocols for Gold Road samples were changed to this finish during May 2014.
<table>
<tr><th>Analysis Type</th><th>Total</th></tr>
<tr><td>Fire Assay, flame AAS finish.</td><td>17,371</td></tr>
<tr><td>Fire Assay. Finish by ICP-OES</td><td>48,504</td></tr>
<tr><td>Fire Assay 50g, AAS finish.</td><td>195</td></tr>
<tr><td>Fire Assay. Finish by ICP-MS</td><td>137</td></tr>
<tr><td>Leachwell Accelerated Cyanide Leach, finish by unspecified AAS.</td><td>493</td></tr>
<tr><td>Leachwell Accelerated Cyanide Leach, finish by ICP-MS.</td><td>183</td></tr>
<tr><td>Distilled Water Leach, ICP-MS finish.</td><td>41</td></tr>
<tr><td>No method recorded</td><td>82</td></tr>
</table></td></tr>
<tr><td>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</td><td>Calibration of the hand-held XRF tools is applied at start-up. XRF results are only used for indicative assessment of lithogeochemistry and alteration to aid logging and subsequent interpretation.
Downhole survey of rock property information for selected holes reported has been completed. ABIMS is the contractor which compiled this work. This involved downhole surveying using a variety of tools with real time data capture and validation. The tools were calibrated on a regular basis. This data was partially used to help establish the specific gravity (SG) data for the Resource Model.</td></tr>
</table>

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>The Gold Road protocol for RC programs is for Field Standards (Certified Reference Materials) and Blanks to be inserted at a rate of 3 Standards and 3 Blanks per 100 samples. RC Field Duplicates and DDH Field Twins are generally inserted at a rate of approximately 1 in 40. Regular DDH Field Twin sampling was stopped in 2017. Samples are processed at Intertek laboratories, where regular assay Repeats, Laboratory Standards, Checks and Blanks are inserted and analysed in addition to the blind Gold Road QAQC samples.
Results of the Field and Laboratory QAQC assays were checked on assay receipt using QAQCR software. All assays passed QAQC protocols, showing acceptable levels of contamination or sample bias, including diamond half core v. half core Field Twins.

<table>
<tr><th>Assay and QAQC Numbers</th><th>RC</th><th>DDH</th></tr>
<tr><td>Total Sample Submission</td><td>47,208</td><td>25,897</td></tr>
<tr><td>Assays</td><td>43,085</td><td>24,341</td></tr>
<tr><td>Field Blanks</td><td>1,482</td><td>778</td></tr>
<tr><td>Field Standards</td><td>1,481</td><td>778</td></tr>
<tr><td>Field Duplicates</td><td>1,160</td><td>671</td></tr>
<tr><td>Laboratory Checks</td><td>2,204</td><td>1,340</td></tr>
<tr><td>Umpire Checks</td><td>-</td><td>-</td></tr>
</table>

Previous QAQC reports and audits were completed and reported by Mr David Tullberg (Grassroots Data Services Pty Ltd at time of audit, and a GOR employee since 2014), Dr Paul Sauter (in-house consultant Sauter Geological Services Pty Ltd) and by Alex Mennie (Maxwell) responsible for the latest GC program under management of the Gruyere Joint Venture (GJV) company.</td></tr>
<tr><td>Verification of sampling and assaying
The verification of significant intersections by either independent or alternative company personnel.</td><td>Significant results were compiled by the Database Manager and reported for release by the Exploration Manager/Executive Director. Data was routinely checked by the Senior Exploration and Project Geologist, Principal Resource Geologist or Consulting Geologists during drilling programs.
All results, except for the 25 by 25 m and 12.5 m spaced RC data, which is considered operational, have been reported in previous ASX announcements. This data has however been verified by both Gold Road and GJV geologists.</td></tr>
<tr><td>The use of twinned holes.</td><td>Three twin RC holes were completed, and data analysed in the reported resource, with their collars being less than 5 m distant from the parent collar.
14GYRC0026A (twin pair with hole 13GYRC0026)
14GYRC0033A (twin pair with hole 14GYRC0033)
14GYRC0060A (twin pair with hole 13GYRC0060)
Two twin RC vs DDH sub-parallel holes were completed and data analysed in the reported resource, with their collars being less than 10 m distant from the parent collar.
13GYDD0003 (twin pair with hole 13GYRC0027)
13GYDD0002 (twin pair with hole 13GYRC0049)
One diamond pair (14GYDD0012A and 14GYDD0012B) provide a twin data set over a length of 120 m at a spacing of less than less than 4 m apart. This twinned data provided accurate data for validating the nugget effect at Gruyere.
As part of the Maiden Mineral Resource reported in August 2014 a detailed drill program was completed which included several holes on an approximate 12.5 by 12.5 m to 25 by 25 m drill spacing. The data derived from this drilling and the recent 12.5 to 25 by 25 m spaced RC grade control drilling was used to confirm short scale mineralisation continuity and refine statistical and geostatistical relationships in the data which are useful in resource estimation.</td></tr>
<tr><td>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</td><td>All field logging is carried out on Tough books using LogChief data capture software. Logging data is submitted electronically to the Database Geologist in the Perth office. Assay files are received electronically from the Laboratory. All data is stored in a Datashed/SQL database system and maintained by the Gold Road Database Manager.</td></tr>
<tr><td>Discuss any adjustment to assay data.</td><td>No assay data was adjusted. The laboratory's primary Au field is the one used for plotting and resource purposes. No averaging is employed.</td></tr>
</table>

Criteria and JORC Code explanation	Commentary
Location of data points *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	The drill hole locations were initially picked up by handheld GPS, with an accuracy of 5 m in northing and easting. All holes were later picked using DGPS to a level of accuracy of 1 cm in elevation and position. For angled drill holes, the drill rig mast is set up using a clinometer, and rigs aligned by surveyed positions and/or compass. Drillers use an electronic single-shot camera to take dip and azimuth readings inside the stainless-steel rods, at 50 m intervals, prior to August 2014, and 30 m interval, post August 2014. Downhole directional surveying using north-seeking gyroscopic tool was completed on site and live (down drill rod string) or after the rod string had been removed from the hole. Most diamond drill holes were surveyed live whereas most RC holes were surveyed upon exiting the hole.
Specification of the grid system used.	A local grid (Gruyere Grid) was established by contract surveying group Land Surveys. The purpose of the local grid is to have an accurate and practical co-ordinate system along strike of the deposit. A high-density survey control network and an accurate transformation between Gruyere Grid and MGA94-51 has been established. All ongoing studies, geological, resource and mining activities are now conducted in Gruyere Grid.
Quality and adequacy of topographic control.	An Aerial Lidar and Imagery Survey was completed January 2016 by Trans Wonderland Holdings as part of the ongoing FS covering 2,558 km^2 over the project area. One-metre contours from this survey were used to construct a new topography surface to constrain the resource model. The survey showed good agreement with the existing DGPS drill hole collar data. All drill holes used in the resource grade estimate have a final collars survey by DGPS which are has a 1 cm elevation accuracy.
Data spacing and distribution *Data spacing for reporting of Exploration Results.*	In the upper leached portion of the deposit, the drill spacing is at 25m section interval and 12.5m on section. In the portion below the leached zone to a depth of up to approximately 100m the spacing is at 25m section and 25m on section, while below this to a maximum depth of 450m the section interval increases to 100m with 50m on section spacing. Finally, below this to a depth of 600m the spacing on section increases to 100m while maintaining the 100m section spacing. Drill spacing in relation to Resource Classification is discussed further in Section 3 below.
Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Spacing of the reported drill holes is sufficient to demonstrate the geological and grade continuity of the deposit and is appropriate for resource estimation procedures. Detailed description of the relationship between drill spacing and Resource classification is provided in Section 3 below.
Whether sample compositing has been applied.	Samples have been composited to 1m intervals for estimation. This is to ensure no bias related to volume variance. 1m represents the most common primary sample interval.
Orientation of data in relation to geological structure *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Drill sections are oriented west to east (270° to 090° Gruyere Grid) with the majority of holes oriented approximately perpendicular to dip and strike at -60° to 270°, 14 holes in this orientation are shallow to dip and four are steep to dip. A small component of drilling has been drilled in a northward orientation, five of these are deep diamond drill holes drilled along the strike of the deposit (-60 towards 010°) to specifically test along strike continuity. Twenty-six holes are drilled to the northeast and east, and six are drilled to the south. The table below details the drilling orientation by drill type.
If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Detailed structural logging of diamond drill core identified important quartz veins sets with an approximate shallow dip to the east. Drilling angled at either -60 to the east or west does not introduce any directional bias given the current understanding of the structural orientations and the dip and strike of mineralisation.
Sample security *The measures taken to ensure sample security.*	For all RC drilling and diamond drilling pre-numbered calico sample bags were collected in plastic bags (five calico bags per single plastic bag), sealed, and transported by company transport to the Intertek laboratory in Kalgoorlie. Prepared pulps were then despatched by Intertek to its laboratory in Perth for assaying.
Audits or reviews *The results of any audits or reviews of sampling techniques and data.*	Sampling and assaying techniques are industry-standard. Internal and Consultant reviews of QAQC have been completed and documented. Company laboratory audits have been complete at the Intertek laboratory in Perth. No independent laboratory or sample audits have been completed.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria and JORC Code explanation	Commentary
Mineral tenement and land tenure status *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Mineral Resource is situated within tenement M38/1267, which is owned by the Gruyere JV a 50:50 joint venture between Gold Road and Gold Fields. The tenement is located on the Yamarna Pastoral Lease, which is owned and managed by Gold Road. Tenement M38/1267 is located on tenements granted in respect of land in which non-exclusive native title has been determined to exist and to be held by a group of native title holders which includes the persons on whose behalf the Yilka (WAD297/2008) and Sullivan Edwards (WAD498/2011) native title claims were brought. The determination was made by the Federal Court on 27 September 2017. The native title holders are required to nominate a body corporate to act as trustee of, or as their agent in future dealings relating to, their native title. Exploration activities in the specified "Gruyere and Central Bore Project Areas" within the Pastoral Lease are conducted in accordance with the 2016 "Gruyere and Central Bore Native Title Agreement" between Gold Road, the Yilka native title claim group and Cosmo Newberry Aboriginal Corporation. Exploration activities within the balance of the Pastoral Lease are conducted in accordance with the 2004 "Yamarna Pastoral Lease Heritage Protection Agreement" between Gold Road and Harvey Murray (the applicant in relation to the Yilka native title claim).
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing with the Western Australia Department of Mines, Infrastructure, Resource and Safety.
Exploration done by other parties *Acknowledgment and appraisal of exploration by other parties.*	No previous exploration has been completed on this prospect by other parties.
Geology *Deposit type, geological setting and style of mineralisation.*	The Gruyere Deposit comprises a narrow to wide porphyry intrusive dyke (Gruyere Porphyry – a Quartz Monzonite) which is between 35 and 190 m in width and which strikes over a current known length of 2,200 m. The Gruyere Porphyry dips steeply (65-80 degrees) to the east. A sequence of intermediate to mafic volcaniclastic rocks defines the stratigraphy to the west of the intrusive and intermediate to mafic volcanics and a tholeiitic basalt unit occur to the east. Mineralisation is confined ubiquitously to the Gruyere Porphyry and is associated with pervasive overprinting albite-sericite-chlorite-pyrite (±pyrhhotite±arsenopyrite) alteration which has obliterated the primary texture of the rock. Minor fine quartz-carbonate veining occurs throughout. Pyrite is the primary sulphide mineral and some visible gold has been observed in logged diamond drill core. The Gruyere Deposit is situated at the north end of the regional camp-scale South Dorothy Hills Target identified by Gold Road during its regional targeting campaign completed in early 2013. The Gruyere Deposit comprises coincident structural and geochemical targets within a major regional-scale structural corridor associated with the Dorothy Hills Shear Zone. This zone occurs within the Dorothy Hills Greenstone Belt at Yamarna in the eastern part of the Archaean Yilgarn Craton. The Dorothy Hills Greenstone is the most easterly known occurrence of outcropping to sub-cropping greenstone in the Yilgarn province of Western Australia.
Drill hole Information *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ▪ *easting and northing of the drill hole collar* ▪ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ▪ *dip and azimuth of the hole* ▪ *down hole length and interception depth* ▪ *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	All relevant RC and Diamond holes included in the reported resource estimation have been previously reported in AXS announcements, listed in Appendix 2. The 25 by 25 m and 12.5 m spaced RC data has not been reported in detail as it is considered operational.
Data aggregation methods *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	No top cuts have been applied to the reporting of the assay results. Intersections lengths and grades are reported as down-hole length-weighted averages of grades above a cut-off and may include 1 to 2 m of grades below that cut-off. Cut-offs of 0.1, 0.3, 0.5, 1.0 and/or 5.0 g/t Au are used depending on the drill type and results.

Criteria and JORC Code explanation	Commentary
Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Reported drill hole intersections at a cut-off include 1 to 2 m of grades below the reported cut-off. Geologically selected intervals are used in more advanced stage projects. They are selected to honour interpreted thickness and grade from the currently established geological interpretation of mineralisation and may include varying grade lengths below the cut-off.
The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used.
Relationship between mineralisation widths and intercept lengths *These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Mineralisation is hosted within a steep east-dipping, N-S striking porphyry. The porphyry is mineralised almost ubiquitously at greater than 0.3 g/t Au and is characterised by pervasive sub-vertical shear fabrics and sericite-chlorite-biotite-albite alteration with accessory sulphides dominated by pyrite-pyrrhotite-arsenopyrite. Higher grade zones occur in alteration packages characterised by albite-pyrrhotite-arsenopyrite alteration and quartz and quartz-carbonate veining. These vein packages dip at approximately -45^0 to the SSE, with strike extents of over 100 m. The general drill direction of 60^0 to 270^0 is approximately perpendicular to the main alteration packages and is a suitable drilling direction to avoid directional biases.
Diagrams *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to Figures and Tables in the body of this and previous ASX announcements.
Balanced reporting *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All drill assay results (except for the previously mentioned 25 by 25 m and 12.5 m RC grade control drill holes) used in this estimation of this resource have been published in previous ASX releases.
Other substantive exploration data *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	In addition to the drilling activity, several geophysical surveys have been conducted, some in collaboration with Gold Fields, on the Gruyere JV tenements. These surveys aim to identify the geophysical signatures of known mineralisation styles to aid further targeting and potentially directly detect mineralisation along the Golden Highway and Gruyere-YAM14 Trends. Other exploration activities have included re-processing of aeromagnetic and gravity data with Fathom Geophysics over the entire Yamarna Belt to allow more detailed interpretation of geology and further target definition. A new belt scale geological interpretation and stratigraphic column has been completed in conjunction Concept to Discovery consulting.
Further work *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Possible extensions at depth will be tested in a strategic manner.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria and JORC Code explanation	Commentary
Database integrity *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Geological metadata is stored centrally in a relational SQL database with a Datashed front end. Gold Road employs a Database Manager who is responsible for the integrity and efficient use of the system. Only the Database Manager or their Data Entry Clerk has permission to modify the data. The Gruyere JV mining company has employed Maxwell Geoservices to manage the integrity of the database for the GJV tenement which is derived from the greater Gold Road database. It has been thoroughly checked by both GJV and Gold Road for consistency. Both databases employ identical Datashed front ends. Sampling and geological logging data is collected in the field using LogChief software and uploaded digitally. The software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Sampling data is sent to, and received from, the assay laboratory in digital format. Drill hole collars are picked up by differential GPS (DGPS) and delivered to the database in digital format. Down hole surveys are delivered to the database in digital format. The Mineral Resource estimate only uses Gold Road RC and DDH assay data. There is no historical data.
Data validation procedures used.	DataShed software has validation procedures that include constraints, library tables, triggers and stored procedures. Data that does not pass validation tests must be corrected before upload. The LogChief software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Geological logging data is checked visually in three dimensions against the existing data and geological interpretation. Assay data must pass laboratory QAQC before database upload. Gold Road utilises QAQR software to further analyse QAQC data, and batches which do not meet pass criteria are requested to be re-assayed. Sample grades are checked visually in three dimensions against the logged geology and geological interpretation. Drill hole collar pickups are checked against planned and/or actual collar locations. A hierarchical system is used to identify the most reliable down hole survey data. Drill hole traces are checked visually in three dimensions. The project geologist and resource geologist are responsible for interpreting the down hole surveys to produce accurate drill hole traces.
Site Visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.*	Justin Osborne is Gold Road's Executive Director of Exploration & Growth and Gold Road's overall Competent Person. He conducts regular site visits and was on site extensively from discovery and throughout the resource development stage of the Gruyere Project. John Donaldson is one of the Competent Persons and is Gold Road's Geology Manager. He conducts regular site visits and is responsible for all geological aspects of the project. Mr Donaldson was on site extensively throughout the resource development stage of the Gruyere Project. Jane Levett is the second Competent Person and is Gold Road's Principal Resource Geologist. She conducts regular specific site visits to focus on understanding the geology as it is revealed in the drilling data. Communication with the site geologists is key to ensuring the latest geological interpretations are incorporated into the resource models. All Competent Persons contribute to the continuous improvement of sampling and logging practices and procedures. Mark Roux is one of Gold Fields Limited's Competent Persons and has conducted site visits to view the diamond drill core and RC chips and project site. He confirmed the geological interpretation visually.

Criteria and JORC Code explanation	Commentary
Geological interpretation *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The predominance of diamond drilling at Gruyere has allowed a robust geological interpretation to be developed, tested and refined over time. Early establishment of lithology and alteration coding and detailed structural logging has given insight into geological and grade trends that have been confirmed with geostatistical analysis, (including variography). Other sources of data (see next commentary) have also added confidence to the geological interpretation. The type and thickness of host lithology and main hangingwall mafic dyke is predictable. Other non-mineralised mafic and intermediate dykes are less predictable. The footwall and hangingwall lithologies are less well known due to the focus of drilling on mineralised units. However, the hangingwall lithologies are understood better as holes are collared on this side of the deposit. Results from the EIS hole (ASX announcement dated 8 September 2015) have improved the understanding of hangingwall lithologies and this will improve with further study. Continued drilling has shown that the approximate tenor and thickness of mineralisation is also predictable, but to a lesser degree than the geology. Results from the 25 by 25 m and 12.5 m RC grade control drilling data have confirmed the geological interpretation and mineralisation model. As the deposit has good grade and geological continuity, which has been confirmed by grade control drilling, the Competent Persons regard the confidence in the geological interpretation as high.
Nature of the data used and of any assumptions made.	All available data has been used to help build the geological interpretation. This includes geological logging data (lithology and structure), gold assay data (RC and DDH), portable XRF multi-element data (Niton and laboratory), geophysics (airborne magnetics and gravity), down hole Televiewer data (optical images and structural measurements, specific gravity, resistivity and natural gamma) and mineral mapping and multi-element data from research conducted in partnership with the CSIRO. An assumption regarding some gold remobilisation has been made at the more deeply weathered northern end of the deposit where a small flat lying gold dispersion blanket has been interpreted near the saprolite/ saprock boundary. This is believed to represent dispersion of gold due to weathering processes. Justification for this interpretation lies in the lack of visual control to the mineralisation and its position in the weathering profile.
The effect, if any, of alternative interpretations on Mineral Resource estimation.	A model constrained only by lithology (Gruyere Porphyry) was run to compare against the implicitly (and lithologically) constrained at 0.3 g/t model (actual model). Results showed that at 0 g/t cut-off the estimate of ounces was within 2%, and, as expected the lithologically constrained model had higher tonnage at lower grade. At 0.5 g/t, grade is 10% less and ounces are 7% less, and at 1.0 g/t grade is 1% less and ounces are 19% less in the lithologically constrained model. In previous updates, one other potential mineralised trend, keeping all other constraints constant, was been modelled and showed little effect on the global estimate of volume. Recent work was done on the sensitivity of interpretation of the leached mineralisation. The model was previously modelled with a flat orientation, but the geology supports a steeper mineralisation. Comparison at a global scale showed no material difference between the results.

Criteria and JORC Code explanation	Commentary
The use of geology in guiding and controlling Mineral Resource estimation.	Regionally the deposit is hosted in an Archaean basin to the East of the crustal scale Yamarna Shear Zone. The Gruyere Deposit is located on an inflection of the NW (MGA) striking Dorothy Hills Shear Zone which transects the basin. The Dorothy Hills Shear Zone is the first order control into which the host Gruyere Porphyry has intruded. The bulk of the mineralisation has been constrained to the host intrusive below the base of Quaternary and Cainozoic cover. Several NNE dipping cross-cutting arcuate and linear faults have been interpreted from airborne magnetics, the distribution of lithology and diamond core intersections of faults. The Alpenhorn Fault and the Northern Fault have been used to constrain the distribution of mineralisation. 1. Mineralisation within the leached zone has been interpreted as steeply orientated and modelled by a defined interval selection. Most of this material has been grade control drilled and the criteria used to determine the interval selected has been based upon a combination of logged lithology supported by grade continuity. In addition, intervals were selected applying the following general economic criteria: • a minimum 3m compositing to >0.3 g/t Au • the inclusion of up to 2m internal waste (Au<0.15 g/t) 2. Mineralisation within the intrusive host below the leached zone has been implicitly modelled to the mineralisation trends discussed below at a constraining 0.3 g/t cut-off. The cut-off was established using two lines of reasoning: a. Previous work plotted all the assay data internal to the host rock was plotted on a log probability plot; a value of 0.3 g/t was recognised as an inflection point subdividing the non-mineralised and mineralised populations. This is further supported through a reduction in the CV in the unconstrained case from 1.0 to 0.9 in the constrained case i.e. a reduction in stationarity supporting the domaining. b. 0.3 g/t corresponds to the approximate grade cut-off between barren to very weakly mineralised hematite-magnetite alteration and weak to strongly mineralised albite-sericite-carbonate ± pyrite, pyrrhotite, arsenopyrite alteration. Six mineralisation Domains have been modelled; Primary (South), Primary (North), Weathered (leached), Dispersion Blanket, SW Porphyry and background mineralisation (within host). 1. The Primary Domain (North) corresponds to mineralisation hosted in fresh, transitional and saprock Gruyere Porphyry north of the north fault. The tenor of the gold mineralisation increases in this north region supported by elevated Arsenic values and reduced Rb. The mineralisation trend is along strike and steeply down dip and supported by geological observations of alteration, sulphide. The strike and dip components for this Domain are supported by modelled variography. 2. The Primary Domain (South) corresponds to mineralisation hosted in fresh, transitional and saprock Gruyere Porphyry south of the north fault. The mineralisation trend is along strike and steeply down dip and supported by geological observations of alteration, sulphide, together with the following structural observations from diamond core: • The along strike component corresponds to the main foliation within the intrusive host. • The steep down dip component corresponds to a strong down-dip lineation parallel to the axes of tight to isoclinal folds of the pre-existing foliation within the intrusive host. The strike and dip components for this Domain are supported by modelled variography. 3. A secondary Domain corresponds to mineralisation hosted in deeply weathered (leached saprolite) Gruyere Porphyry. The mineralisation trend is steep, reflecting the underlying primary mineralisation with the weathering processes associated with a leaching event. Domain are supported by modelled variography. 4. A minor third Domain corresponds to a flat lying, 4 to 5 m thick, gold dispersion blanket interpreted near the saprolite boundary and hosted within hangingwall and footwall lithologies. 5. Background mineralisation – very weakly mineralised Gruyere Porphyry. 6. Mineralisation within the adjacent SW Porphyry. Limited drilling has identified mineralisation associated with an adjacent porphyry intrusion. This domain has been linearly estimated and is unclassified.
The factors affecting continuity both of grade and geology.	Apart from the controls discussed previously, one narrow (1 to 5 m wide), steeply dipping non-mineralised internal mafic dyke has been modelled as barren within the intrusive host.

Criteria and JORC Code explanation	Commentary
	Other narrow (generally less than 1 m wide) mafic and intermediate intrusives/ dykes occur but have very short scale continuity and insignificant to the scale of mineralisation.
Dimensions *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Length along strike: 1,800 m Horizontal Width: 7 to 190 m with an average of 90 m. The vertical depth of Mineral Resource from surface to the upper limit is 2 m and to the lower limit is 600 m. The Mineral Resource has been constrained by an optimised Whittle shell that only considers Measured, Indicated and Inferred mineralisation in the geological model. The optimisation utilises realistic mining, geotechnical and processing parameters from the latest information available from the ongoing operational planning process. The gold price used was A$1,850/oz. Only Measured, Indicated and Inferred categories within this shell have been reported as Mineral Resource. Mineralisation in the geology model outside the shell has not been reported.
The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Software used: Datashed – frontend to SQL database Mapinfo – geophysics and regional geology Stereonet – compilation and interpretation of diamond structural data. Core Profiler – compilation of downhole photographs in core trays for geo-referencing in 3D software. Leapfrog Geo – Drill hole validation, material type, lithology, alteration and faulting wireframes, domaining and mineralisation wireframes, geophysics and regional geology Snowden Supervisor - Geostatistics, variography, declustering, kriging neighbourhood analysis (KNA), validation Datamine Studio RM – Drill hole validation, cross-section, plan and long-section plotting, block modelling, block model validation, classification, and reporting. Isatis – grade estimation and Geostatistics Grade Estimation – Ordinary Kriging (Leached Domain and SW Porphyry) and Localisation of a Conditional Simulation technique (Primary Domains): The Gold grade within the GC drilled portion is estimated using Ordinary Kriging. The drill density is at sufficient spacing that this technique is considered appropriate to inform a local estimate. The SW porphyry is informed by a relatively small data set and grade estimate applied broad assumptions related to the more informed Gruyere Porphyry mineralisation. Given the level of uncertainty, an Ordinary Kriging estimate was produced, and all the material is unclassified. Outside of the SW Porphyry and GC drilling, the gold grade is estimated using a conditional simulation approach. 50 realisations are produced at 2m node spacing and then sampled to represent planned Grade control drilling. Thereafter 50 ordinary kriged estimates are generated for each SMU block (5mE x12.5mN x5mRL) which inform the Grade distribution of larger Panels (25mE x25mN x 20mRL). Finally, by applying a background grade distribution, a final single SMU grade is localised and used for reporting. This process addresses two areas; firstly, it produces a recoverable resource estimate **AND** applies an information effect associated with the final GC spacing.

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>Block model and estimation parameters:
Treatment of extreme grade values are necessary for two reasons. For the linear estimated portions, they serve the traditional role of limiting the impact of extreme high grades to the overall estimate. For the conditional simulation portion, they serve as limiting a potential bias when modelling the Gaussian anamorphosis function. These top-cuts produced for these purposes are slightly different but are in both cases applied to 1 m composite selected within mineralisation wireframes.
The Ordinary Kriging top-cut selection is a combination of interrogating disintegration points on the histogram and the cumulative distribution plots.
Primary North –20 g/t top-cut
Primary South – 40 g/t top-cut
Weathered Leached –22 g/t top-cut
Dispersion Blanket – Not top-cut
Background –Not top-cut
SW Porphyry - 4g/t top-cut
The Gaussian Anamorphosis top-cut selection is focussed on reducing the impact of extreme outliers to ensure no bias is introduced during the transformation and back transformation a combination of interrogating disintegration points on the histogram and the cumulative distribution plots.
Primary North –20 g/t top-cut
Primary South – Not top-cut
Weathered Leached –25 g/t top-cut
Dispersion Blanket – Not top-cut
Background –Not top-cut
Model rotation – none required – local Gruyere Grid used.
Outside of the linear estimated domains, the Gruyere model applies a localisation of a conditional simulation technique. The broad process is briefed below:
• A discrete Gaussian model (Gaussian anamorphosis) is applied to transform the data into Gaussian space.
• This transformed data is using to produce 50 simulations at node support using Isatis. Thereafter the points are sampled at proposed GC support.
• The “produced” drill holes are ordinary kriged to produce 50 estimates at SMU support
• The SMU realisation results are reblocked into panels to produce the grade (Q), tonnage (T) and metal (M) against a set of cut-off grades.
• The Panel QTM outputs are localised into SMU support applying a background index ranking to determine final spatial position.
• Maximum distance of extrapolation from data points – 50 m from sample data to Inferred boundary
Domain boundary conditions – Hard boundaries are applied at all domain boundaries.</td></tr>
<tr><td>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</td><td>Several internal models and numerous public models were produced prior to the publication of this Mineral Resource. These were used to plan drilling programs, manage performance and expectation and test geological interpretation on an ongoing basis during and after the various drilling campaigns.
Analysis shows that this model has performed well globally and locally against the previously released model. Comparison done after the inclusion of the new grade control drilling showed a 2% global difference to the previous model for the same spatial region. The 2018 global resource model is <2% globally different the 2017 model showing robust comparison.</td></tr>
<tr><td>The assumptions made regarding recovery of by-products.
Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</td><td>There are no economic by-products.
No deleterious elements of significance have been determined from metallurgical test work and mineralogical investigations. Waste rock characterisation work has been completed and all waste types and tailings are non-acid forming and have limited metal leachate potential.</td></tr>
<tr><td>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</td><td>Panel and SMU sizes per Domain:
<table><tr><th>Domain</th><th>SMU</th><th>Panel</th></tr><tr><td>Leached</td><td>5mN x 12.5mE x 5mRL</td><td>N/A (linear estimate)</td></tr><tr><td>Primary North</td><td>5mN x 12.5mE x 5mRL</td><td>25mN x 25mE x 20mRL</td></tr><tr><td>Primary South</td><td>5mN x 12.5mE x 5mRL</td><td>25mN x 25mE x 20mRL</td></tr><tr><td>Dispersion blanket</td><td>5mN x 12.5mE x 5mRL</td><td>25mN x 25mE x 20mRL</td></tr><tr><td>Background mineralisation</td><td>5mN x 12.5mE x 5mRL</td><td>25mN x 25mE x 20mRL</td></tr></table>Sample spacing discussed below.</td></tr>
<tr><td>Any assumptions behind modelling of selective mining units.</td><td>The selective mining unit (SMU) of 5 m X by 12.5 m Y by 5 m Z was chosen as it corresponds well with currently selected mining equipment and mining flitch sizes.</td></tr>
</table>

Criteria and JORC Code explanation	Commentary
Any assumptions about correlation between variables.	No correlation between variables was analysed or made.
Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation was used at all stages to control the estimation. If Geostatistics, variography and/or visual checks of the model were difficult to interpret then the geological interpretation was questioned and refined.
Discussion of basis for using or not using grade cutting or capping.	Top-cuts were used in the estimate as this is the most appropriate way to control outliers when estimating block grades from assay data.
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The following validation checks were performed: ▪ Reproduction of the input variogram model against the point simulation output. ▪ Comparison of the point simulations against the point anamorphosis model. ▪ Comparison of the GC support corrected model against the GC support realisations and the final localised model. ▪ On-screen visual inspection comparison of drill hole composite grade to block grade estimates. ▪ Mean data grade against block grade by domain ▪ 'Swath plot' moving window grade comparisons of composites compared to estimated block grades by domain. All validation checks gave suitable results. There has been no mining so no reconciliation data available.
Moisture *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Average bulk density values have been modified by a moisture percentage so that dry tonnage is reported. These are: overburden and saprolite 5%, saprock 3%, transition 2% and fresh 1%.
Cut-off parameters *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The cut-off grades used for reporting is 0.30 g/t Au. This is considered a reasonable cut-off based upon mining and processing parameters and input costs and is the practical cut-off to be applied during mining to discriminate waste from ore.
Mining factors or assumptions *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The mining method assumed is conventional open pit with a contract mining fleet appropriately scaled to the size of the deposit. The de facto minimum mining width is a function of cell size (5 m X by 12.5 m Y by 5 m Z). Dilution and mining recovery assumptions are accounted for in the Mineral Resource estimate by the Recoverable Resource techniques used. See Material Information Summaries section for the summary input parameters to the Whittle optimisation process.
Metallurgical factors or assumptions *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	A single stage primary crush, Semi Autogenous Grinding and Ball Milling with Pebble Crushing (**SABC**) comminution circuit followed by a conventional gravity and carbon in leach (**CIL**) process is proposed. This process is considered appropriate for the Gruyere ore, which has been classified as free-milling. The designed metallurgical process is commonly used in the Australian and international gold mining industry and is a well-tested technology. Metallurgical recovery is applied to the resource model by material type and grind size (106µm, 125µm and 150µm) according to test work values for weathered material and grade recovery curves for fresh rock. 106µm was selected for input to optimisation. No recovery factors are applied to the Mineral Resource numbers themselves. Significant comminution, extraction, and materials handling testing has been carried out on over 4,500 kg of half-core diamond drilling core samples (NQ core diameter = 47.6mm). The testing has been carried out on saprolite (oxide), saprock, transitional and fresh ore types which were selected to represent different grade ranges along the strike length of the deposit and to a depth of around 410 m. For the fresh rock samples, 62 composites representing four major mineralised zones (South, Central, North and High Grade North) were subjected to gold extractive test work by gravity separation and direct cyanidation of gravity tails. In total, 183 individual gravity-leach tests were completed at various grind size P80 ranging from 106 µm to 150 µm. Gravity gold recoveries are estimated at 35%. Estimated plant gold recovery ranges from 87% to 96% depending on head grade, plant throughput, grind size and ore type and are summarised in the table below.

Criteria and JORC Code explanation	Commentary
	<table><tr><th rowspan="2">Material Type</th><th colspan="4">Metallurgical Recovery at P80</th></tr><tr><th>106 µm</th><th>125 µm</th><th>150 µm</th><th>Comments</th></tr><tr><td>Saprolite (oxide)</td><td>94%</td><td>93%</td><td>92%</td><td></td></tr><tr><td>Saprock</td><td>94%</td><td>93%</td><td>92%</td><td></td></tr><tr><td>Transition</td><td>93%</td><td>92%</td><td>91%</td><td></td></tr><tr><td>Fresh</td><td>2.6130 x ln head grade (g/t) + 92.199 %</td><td>3.1818 x ln of head grade (g/t) + 90.362 %</td><td>3.3997 x ln of head grade (g/t) + 88.929 %</td><td>capped at 96%</td></tr></table> No deleterious elements of significance have been determined from metallurgical test work and mineralogical investigations.
Environmental factors or assumptions *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Surface waste dumps and infrastructure (e.g. tailings dam) will be used to store waste material from open pit mining. Conventional storage facilities will be used for the process plant tailings. Test work has been completed for potential acid mine drainage material types. Results show that all material types are non-acid forming and are unlikely to require any special treatment. Baseline environmental studies of flora, vegetation, vertebrate fauna, short-range endemic invertebrates and subterranean fauna are completed.
Bulk density *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density has been determined using 2 main methods and cross checked with data from recent metallurgical test work: 1. DDH drilling – weight in air / weight in water – measurements every 1 m in weathered every 10 m in fresh rock, using approximate 0.1 m core lengths. 2. RC drilling – downhole rock property surveys completed by ABIMS Pty Ltd which provide a density measurement every 0.1 m downhole. The physical measurements derived from the air/water method were compared to the down hole tool measurements and metallurgical test work. Good correlation was observed between methods for saprolite, saprock and transitional. The down-hole tool values for fresh rock did not match the other two methods and so were set aside. The SG values were reviewed for this resource update. The saprolite host rock value was increase from 1.85 to 2.00 with minimal impact on the estimation. Other host rock values remained unchanged.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Vacuum sealed bags were used where required to account for void spaces in the core. Bulk density has been applied by lithology and weathering type.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Data was coded by method, lithology (including mineralisation and cover) and weathering type. The three methods were compared and found to be in agreement except for the down hole tools values for fresh rock. Averages were derived both by lithology and weathering type. Assumptions for moisture percentages were made and accounted for in the final value used for bulk density.
Classification *The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource has been constrained within an optimised Whittle pit shell. Blocks in the geological model within that shell have been classified as Measured, Indicated or Inferred. Several factors have been used in combination to aid the classification; ▪ Drill hole spacing: ▪ Level of geological continuity ▪ Level of grade continuity. This process is unchanged from the all previous model estimates
Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	All relevant factors have been taken into account in the classification of the Mineral Resource.
Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Person's view of the deposit.

Criteria and JORC Code explanation	Commentary
Audits or reviews *The results of any audits or reviews of Mineral Resource estimates.*	The Mineral Resource estimate has been reviewed internally by Gold Fields Competent Persons and reviewed by Gold Road Competent Persons. No significant issues were found identified. An internal geological peer review by the Executive Director, Exploration manager and/or geological team, and handover meetings with the development and operational teams were held and documented at appropriate times. An informal internal peer review, as part of a board briefing, was conducted with the Non-executive Directors on the Gold Road board, who are also geologists, for the previous Mineral Resource estimate. The latest QAQC report related to the GC drilling was completed by Maxwell Geoservices and reviewed by both Gold Fields and Gold Road geologists. No fatal issues where found. Previous QAQC reports were completed by Dr Paul Sauter (internal consultant – Sauter Geological Services Pty Ltd) and Mr Dave Tullberg (Grassroots Data Services Pty Ltd). These relate to data collected during the previous releases. All results were acceptable with recommendations including further umpire laboratory testing and changing the blanks to a more appropriate material.
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	Variances to the tonnage, grade and metal of the Mineral Resource estimate are expected with further definition drilling. It is the opinion of the Competent Persons that these variances will not significantly affect economic extraction of the deposit. Performance of the most recent Grade Control drilling against the previous estimate within the common volume show no material global differences, supporting the CP position regarding the robustness and expected future model reconciliation variance. In addition, the Indicated and measured category in comparison to the previous estimate above a cut-off of 0.3g/t (economic cut-off) is minimal at -1% for tonnes, +2% on grade and +2% ounces. This supports variances reported for previous estimates. The variance in the inferred is in line with expected variances of lower confidence material and is a result of the new domaining strategy discussed in earlier portions of table 1.
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	Confidence in the Mineral Resource estimate is such that the Measured portions of the model will provide adequate accuracy for ore block design, monthly mill reconciliation and short to medium term scheduling. The Indicated and Inferred portions provide adequate accuracy for global resource evaluation and for more detailed evaluation at a large scale.
These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No previous mining.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria including JORC Code (2012) explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Mineral Resource estimate for the Gruyere Deposit which formed the basis of this Ore Reserve estimate was compiled by the Gold Fields Competent Person(s) utilising relevant data. This Mineral Resource is described in detail in sections 1 to 3 of this Table. The Mineral Resources are reported inclusive of the Ore Reserve
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	The Competent Person has undertaken site visits.
Study status *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The Ore Reserve estimate is the result of a detailed Business Plan (**BP**) compiled post Feasibility Study (**FS**) and completed by a team consisting of Gruyere JV personnel and independent external consultants. The proposed mine plan is technically achievable. All technical proposals made for the operational phase involve the application of conventional technology which is widely utilised in the goldfields of Western Australia. Financial modelling completed as part of the BP shows that the project is economically viable under current assumptions. Material Modifying Factors (mining, processing, infrastructure, environmental, legal, social and commercial) have been considered during the Ore Reserve estimation process.
Cut-off parameters *The basis of the cut-off grade(s) or quality parameters applied.*	Variable economic cut-off grades have been applied in estimating the Ore Reserve. Cut-off grade is calculated in consideration of the following parameters: • Gold price • Operating costs • Process recovery • Transport and refining costs • General and administrative cost • Royalty costs.
Mining factors or assumptions *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.*	Gruyere will be mined by open pit mining methods utilising conventional mining equipment. Final pit and interim stage designs were completed as part of the BP. The final pit design is the basis of the Ore Reserve estimate. The selected mining method, design and extraction sequence are tailored to suit orebody characteristics, minimise dilution and ore loss, defer waste movement and capital expenditure, utilise proposed process plant capacity and expedite free cash generation in a safe and environmentally sustainable manner. The selected mining method, design and extraction sequence are tailored to suit orebody characteristics, minimise dilution and ore loss, defer waste movement and capital expenditure, utilise proposed process plant capacity and expedite free cash generation in a safe and environmentally sustainable manner. Mining operating and capital costs were estimated as part of the BP and referenced against contractor tender submissions.

Criteria including JORC Code (2012) explanation	Commentary
The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	Geotechnical modelling has been completed by an external consultant on the basis of field logging and laboratory testing of selected dedicated diamond drill core samples. The recommended geotechnical design parameters assume dry slopes on the basis of adequate dewatering ahead of mining. Eleven geotechnical domains were identified: • Domain West 1: a. Weathered material: batter heights of 10m, batter angles of 50° - 55° and berm widths of 5m b. Fresh material: batter heights of 20m, batter angles of 60° - 75° and berm widths of 9m. • Domain West 2AN: a. Weathered material: batter heights of 10m, batter angles of 55° - 60° and berm widths of 5m b. Fresh material: batter heights of 20m, batter angles of 70° - 80° and berm widths of 6m. • Domain West 2B: a. Weathered material: batter heights of 10m, batter angles of 55° - 60° and berm widths of 5m b. Fresh material: batter heights of 20m, batter angles of 60° - 80° and berm widths of 12m. • Domain West 2AS: a. Weathered material: batter heights of 10m, batter angles of 55° - 60° and berm widths of 5m b. Fresh material: batter heights of 20m, batter angles of 60° - 80° and berm widths of 6m. • Domain West 3, East 4: a. Weathered material: batter heights of 10m, batter angles of 55° - 60° and berm widths of 5m b. Fresh material: batter heights of 20m, batter angles of 60° - 80° and berm widths of 9m. • Domain West 4: a. Weathered material: batter heights of 10m, batter angles of 50° - 55° and berm widths of 5m b. Fresh material: batter heights of 20m, batter angles of 60° - 80° and berm widths of 8m. • Domain East 1: a. Weathered material: batter heights of 10m, batter angles of 50° - 55° and berm widths of 5m b. Fresh material: batter heights of 20m, batter angles of 60° - 80° and berm widths of 9m. • Domain East 2: a. Weathered material: batter heights of 10m, batter angles of 55° - 60° and berm widths of 5m b. Fresh material: batter heights of 20m, batter angles of 60° - 80° and berm widths of 8m. • Domain East 3: a. Weathered material: batter heights of 10m, batter angles of 55° and berm widths of 5m b. Fresh material: batter heights of 20m, batter angles of 60° - 80° and berm widths of 11m. • Domain East 5: a. Weathered material: batter heights of 10m, batter angles of 55° and berm widths of 5m b. Fresh material: batter heights of 20m, batter angles of 55° and berm widths of 6m.
The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate).	A separate hydrogeological report was prepared by independent consultants which considered the infrastructure required to effectively dewater the open pit and pit slopes. This study was supported by the development of test bores and field test pumping analysis.

Criteria including JORC Code (2012) explanation	Commentary
The mining dilution factors used. *The mining recovery factors used* *Any minimum mining widths used* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion* *The infrastructure requirements of the selected mining methods*	Mining dilution and recovery modifying factors were simulated by modelling to a Selective Mining Unit (SMU) then applying a 0.5m dilution to the adjacent SMU to each SMU, which represents expected incurred dilution during mining. A configuration of 5 mE x 12.5 mN x 5 mRL with a 0.5 m dilution skin was applied which represents the capability of the selected mining fleet. The modelling supports the following results: • Mining tonnage dilution factor of 4% • Mining grade dilution of 5% • Mining recovery factor of 99% (gold loss of 1%) These values reflect the fact that Gruyere is a relatively simple continuous orebody with individual ore block designs of hundreds of metres along strike and 20 to 50 m wide. The mining schedule is based on supplying throughput rates to a processing plant with a capacity of 8.2 Mtpa ore material and the capability to treat up to 8.5 Mtpa. The mining schedule is based on realistic mining productivity and equipment utilisation estimates and also considered the vertical rate of mining development. Inferred Mineral Resources were considered as waste during the pit optimisation and production scheduling process. Waste material from mining activities will be disposed of as follows: • Topsoil will be disposed of at designated stockpiles for application in on-going rehabilitation activities • Some waste rock will be utilised to construct the Run of Mine (**ROM**) pad • Some waste rock will be utilised to construct on-going TSF lifts Excess waste rock will be disposed of at designated waste rock dumps.
Metallurgical factors or assumptions *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	A processing flowsheet, materials balance, water balance, equipment identification, mechanical and electrical layouts were all developed to FS standard. A SABC comminution circuit followed by a conventional gravity and CIL process is proposed. This process is considered appropriate for the Gruyere ore, which is classified as free-milling. The proposed metallurgical process is commonly used in the Australian and international gold mining industry and is considered to be well-tested and proven technology. Significant comminution, extraction, and materials handling testing has been carried out on approximately 2,000 kg of half-NQ (NQ core diameter = 47.6 mm) diamond drilling core samples, and 480kg of RC chip samples. This has been carried out on oxide, saprock, transitional, and fresh ore types which were obtained across the Gruyere Deposit (South to North) and to a depth of approximately 300 m. Estimated plant gold recovery ranges from 87% to 95% depending on head grade, plant throughput, grind size and ore type. Significant comminution, extraction, and materials handling testing has been carried out on material selected from approximately 2,000 kg of half-NQ core. No deleterious elements of significance have been determined from metallurgical test work and mineralogy investigations.
Environmental *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Baseline environmental studies of flora, vegetation, vertebrate fauna, short-range endemic invertebrates and subterranean fauna are all completed. Environmental approvals for all aspects of the development of the project are in place. Waste rock and tailings characterisation work has been completed and all waste types and tailings are non-acid forming and have limited metal leachate potential. Waste rock and tailings storage locations have been selected based on suitable geographical characteristics and proximity to the pit and plant.
Infrastructure	

Criteria including JORC Code (2012) explanation	Commentary
The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.	The project site is within economic distances of existing infrastructure of the Eastern Goldfields region. Services and consumable supplies will be delivered by existing roads from Laverton some 150 km to the west. A gas supply lateral from the Eastern Goldfields Pipeline has been constructed from Laverton to site to supply gas to a purpose built gas-fired power station. The workforce will be Fly In-Fly Out (FIFO) and based at a camp on site during rostered days on. A sealed on-site airstrip has been constructed as part of the project. A borefield has been constructed within the 65 km of tested aquifer at the Yeo and Anne Beadell palaeochannels, and will serve as the primary source of water for the project. In addition to the tested palaeochannel length, approximately 100 km of palaeochannel is available for potential development on tenements with granted miscellaneous water search licences.
Costs *The derivation of, or assumptions made, regarding projected capital costs in the study.* *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* *The allowances made for royalties payable, both Government and private.*	The project is currently under construction and capital estimates are based on currently executed construction contracts. All mining equipment required for the project will be supplied by a mining contractor. Mine development costs were developed from currently executed contracts including: • Contract mining • Mobilisation of mining equipment and personnel from Perth • Earthworks quantities determined from detailed site inspections by a competent civil engineer and geological modelling • Mine dewatering requirements developed from FS level hydrogeological modelling • A mining schedule developed as part of the BP • A contingency allowance on capital cost items calculated to reflect the relevant level of confidence in the estimate • Budget pricing from local and international suppliers Contingency allowances are calculated on a line by line basis relevant to the source and confidence in market rates Operating costs assume a FIFO scenario with various rosters on site. Mining operating costs have been estimated in the BP with reference to a currently executed mining contract with technical services supplied by Gruyere JV employees. Mine design and scheduling was prepared by competent mining engineers. Process and infrastructure operating costs have been estimated by GR Engineering Services on the assumption that: • A conventional SABC circuit will be utilised to treat ore at a rate of 8.2 Mtpa of ore with the capability to treat up to 8.5 Mtpa. • Comminution grind sizes will be in the range of 106µm to 150µm for all material types • Power will be generated on site utilising gas delivered by pipeline • The process plant will be operated by Gruyere JV employees. • The operating cost estimate is considered to be appropriate for the current market in the eastern goldfields of WA. • No allowance is made for deleterious elements since test work to date on ore from Gruyere has not shown the presence of deleterious elements. • Capital and Operating Costs are estimated in 2018 Australian dollars. • Gold bullion transportation charges are derived on the basis of a quote provided by a leading industry bullion shipment organisation. • Treatment and refining charges are estimated on the basis of a quote from a leading Perth Gold Refinery. • An allowance has been made for all royalties, including an allowance of 2.5% of revenue for royalties payable to the Western Australian State Government and an allowance for other royalties payable to private parties (these royalties being commercially sensitive and covered by confidentiality).
Revenue factors *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	The mined ore head grades are estimated utilising industry accepted geostatistical techniques with the application of relevant mining modifying factors. Gold price has been determined by agreement between Gruyere JV Partners. A Life-of-mine (LOM) gold price forecast of A$1,600/oz (Real 2018) is applied in the financial modelling for the Ore Reserve calculation process. This price forecast was established on the basis of historical A$ gold price trends over the last 5 years.

Criteria including JORC Code (2012) explanation	Commentary
Market assessment • *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	There is a transparent market for the sale of gold.
Economic *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	Discounted cash flow modelling and sensitivity analysis has been completed to evaluate the economic performance of the Ore Reserve. Key value driver inputs into the financial model included: • Gold price at A$1,600/oz based on historical trends over the last 5 years. • Discount rate of 5% as determined by Gruyere JV The Ore Reserve returns a positive NPV under the assumptions detailed herein. The project retains a suitable profit margin against reasonable future commodity price movements.
Social *The status of agreements with key stakeholders and matters leading to social licence to operate.*	A Native Title Mining Agreement has been signed for the Project.
Other *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* *Any identified material naturally occurring risks.* *The status of material legal agreements and marketing arrangements.* *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	No material naturally occurring risks have been identified. No significant species have been identified that would be significantly impacted by the Project in a manner that could not be adequately managed. Mining and gas pipeline construction contracts have been executed. There are reasonable prospects to anticipate that contract terms as assumed in the Ore Reserves estimate will be achieved. Project commissioning is estimated for Q1 2019.
Classification *The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The main basis of classification of Ore Reserves is the underlying Mineral Resource classification. All Proved Ore Reserves are derived from Measured Mineral Resources and all Probable Ore Reserves are derived from Indicated Mineral Resources in accordance with JORC Code (2012) guidelines. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit. No Probable Ore Reserves are derived from Measured Mineral Resources. No inferred Mineral Resource is included in the Ore Reserves. 19% of the Ore Reserve is in the Proved category with the balance being Probable.
Audits or reviews *The results of any audits or reviews of Ore Reserve estimates.*	Metallurgical test-work completed at FS level was reviewed by Gold Road employees and confirmed to be adequate for the FS. Geotechnical input was reviewed by external independent consultants and found to be acceptable for a FS. Open pit designs, production schedules and mining cost models were reviewed Gold Road employees and externally by an independent technical expert. The construction of the process plant and infrastructure is currently under construction project management Capital expenditure is currently under construction project management The BP financial model applied to project valuation was reviewed by Gold Road personnel and externally by an independent technical expert and was considered to be appropriate.

Criteria including JORC Code (2012) explanation	Commentary
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Gruyere BP resulted in a technically robust and economically viable business case. This is deemed to be an appropriate basis for a high level of confidence in the Ore Reserves estimate. In the opinion of the Competent Person, cost assumptions and modifying factors applied in the process of estimating Ore Reserves are reasonable. Gold price and exchange rate assumptions were set out by the Gruyere JV and are subject to market forces and present an area of uncertainty. All relevant legal, environmental and social approvals to operate are granted.

GOLDEN HIGHWAY

Attila

JORC CODE 2012 EDITION TABLE 1 – SECTIONS 1 TO 4

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria and JORC Code explanation	Commentary
Sampling techniques *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The sampling has been carried out using a combination of Reverse Circulation (**RC**) and diamond drilling. Significant RAB and Aircore drilling covers the project area and is used in developing the lithological and mineralisation interpretation. However, this data is not used in the estimate and is not detailed here. Drilling was completed between 1994 and 2016 and was undertaken by several different companies: 367 RC and 42 Diamond holes were drilled angled at -60 degrees to 250 degrees azimuth (MGAn). Two diamond holes were drilled angled at-70 degrees to 077 degrees azimuth (MGAn). Drill core is logged geologically and marked up for assay at approximately 1 metre intervals based on geological observation. Drill core is cut in half by a diamond saw and half core samples submitted for assay analysis. RC chips are logged geologically, and four-metre composite spear samples are submitted for assay. One metre RC split samples are submitted for re-assay if composites return anomalous results. The two diamond holes drilled towards 077 were sampled as slivers as they were drilled specifically for metallurgical test work; these sliver samples are not included in the estimation.
Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.	Between 2010 and 2017 sampling was carried out under Gold Road's protocols and QAQC procedures as per industry best practice. 50% of the holes drilled on Golden Highway were completed by Gold Road. Prior to 2010, sampling was carried out under the relevant company's protocols and procedures and is assumed to be industry standard practice for the time. Specific details for this historical drilling are not readily available.
Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	Details regarding sampling prior to 2010 are not readily available. Sampling under Gold Road's protocols comprises the following: The RC holes were drilled with a 5¼" or 5¾" inch face-sampling bit, 1 m samples collected through a cyclone and riffle splitter, to form a 2-3 kg sample. Four-metre composite samples were created by spear sampling of the total reject of the 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. One-metre sample intervals were submitted for analysis when the composite interval returned anomalous results. A total of 103 (3%) 4 m composite samples were used in the resource estimate where no 1 m samples were available. Diamond drilling was completed using an HQ or NQ drilling bit for all holes. Core is cut in half for sampling, with a half core sample sent for assay at measured lithological/mineralogical intervals. All samples were fully pulverised at the lab to -75 µm, to produce a 50 g charge for Fire Assay with either AAS finish or ICPOES finish.
Drilling techniques *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Available data indicates historical diamond drill hole diameters range in size from PQ to NQ. This drilling was completed by Wallis Drilling, DrillCorp and Sanderson Drilling. Historical RC drill holes were completed by Wallis Drilling using a face sampling bit with a diameter of 5¼" or 3¾". Holes drilled under GOR operations were completed by Terra Drilling and Wallis Drilling (DD – NQ core) and RC completed by Wallis and Raglan drilling using a 5¼" and 5¾" face sampling bit.
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.*	RC recoveries were visually estimated, and recoveries recorded in the log as a percentage. Where data is available recovery of the samples was good, generally estimated to be close to 100%, except for some sample loss at the top of the hole in the Quaternary cover. All diamond core collected is dry. Drill operators measure core recoveries for every drill run completed using a 3 m core barrel. The core recovered is physically measured by tape measure and the length recovered is recorded for every 3 m "run". Core recovery can be calculated as a percentage recovery. Almost 100% recoveries were achieved for diamond drilling.

Criteria and JORC Code explanation	Commentary
Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC face-sample bits and dust suppression were used to minimise sample loss. Drilling pressure airlifted the water column above the bottom of the hole to ensure dry sampling. RC samples are collected through a cyclone and riffle splitter (historical) and static cone splitter for RC after 2010. The rejects are deposited in a large plastic bag and retained for potential future use. The sample required for assay is collected directly into a calico sample bag at a designed 3 to 4 kg sample mass which is optimal for full sample crushing and pulverisation at the assay laboratory. Diamond drilling collects uncontaminated fresh core samples which are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling. Protocols for drilling undertaken prior to 2010 are not readily available.
Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	RC samples were generally dry except for a few samples (<5%) that are reported as slightly damp to end of hole. Apart from for the top of the holes while drilling through the cover, there is no evidence of excessive loss of material, and at this stage no information is available regarding possible bias due to sample loss. There is no significant loss of material reported in any of the Diamond core.
Logging *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource Estimation, mining studies and metallurgical studies.*	All chips and drill core were geologically logged, using the relevant companies logging scheme. These logging codes have been developed over time and the historical codes translated to a scheme similar to the current Gold Road logging scheme in 2007. This provides data to a level of detail adequate to support Mineral Resource Estimation activities. Some holes are logged using hand held NITON XRF to assist in lithogeochemical analysis. From 2016 most fire assay results routinely include pXRF collected at the laboratory and used to validate logging.
Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging of drill core captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples, and structural information from oriented drill core. All samples are stored in core trays. All core is photographed in the core trays, with individual photographs taken of each tray both dry, and wet, and photos uploaded to the Gold Road server database.
The total length and percentage of the relevant intersections logged	All holes were logged in full.
Sub-sampling techniques and sample preparation *If core, whether cut or sawn and whether quarter, half or all core taken.*	Core samples were cut in half and half core samples were collected for assay, with the remaining half core samples stored in the core trays. Two diamond drill holes were sampled as slivers. These holes were drilled for metallurgical test work which has not yet been undertaken.
If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Under Gold Road protocols 1 m RC drill samples are channelled through a cone splitter, and an average 2-3 kg sample is collected in an un-numbered calico bag and positioned on top of the plastic bag. Four-metre composite samples are generated by spear sampling of the four 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. Several RC holes utilised four-metre composite samples for waste intervals. If composite samples returned anomalous gold values, the intervals were resampled as 1 m samples by collecting the sample produced from the riffle splitter. Sampling procedures used prior to 2010 are not readily available.
For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were prepared and analysed at a variety of laboratories. For data prior to 2010 it is assumed the procedures undertaken are industry standard for the time. Post 2010 samples were dried, and the whole sample pulverised to 80% passing 75 µm, and a sub-sample of approx. 200 g retained. A nominal 50 g was used for the fire assay analysis. The procedure is industry standard for this type of sample.
Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.	Details of historical QAQC procedures are not readily available. Reviews of QAQC and assay quality in 2002 (Golder Associates) and 2012 (Maxwell) indicate there are no significant issues with regards to quality of the historical assay data. Concerns regarding historical drilling are mitigated by drilling completed in 2011, 2012 and 2016. A QAQC report has been compiled for the 2016 drilling (Sauter Geological Services) – no significant issues were identified.

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</td><td>Gold Road protocols state duplicate samples are collected at a frequency of 1:40 for all drill holes.
RC duplicate samples are collected directly from the Rig-mounted cone splitter.
Details of historical duplicate sampling are not readily available.</td></tr>
<tr><td>Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>Sample sizes are considered appropriate to give an indication of mineralisation given the particle size and preference to keep the sample weight below 3 kg to ensure requisite grind size in a LM5 sample mill.</td></tr>
<tr><td>Quality of assay data and laboratory tests
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</td><td>Samples were analysed at a variety of laboratories using methodologies that include:

<table><tr><th>Analysis Type</th><th>Total</th></tr><tr><td>Aqua Regia Digest, unspecified AAS finish.</td><td>375</td></tr><tr><td>Aqua Regia Digest, graphite furnace AAS finish.</td><td>269</td></tr><tr><td>Aqua Regia Digest, ICP-MS finish.</td><td>10</td></tr><tr><td>Fire Assay, unspecified AAS finish.</td><td>2,017</td></tr><tr><td>Fire Assay, flame AAS finish.</td><td>154</td></tr><tr><td>Fire Assay. Finish by ICP-OES</td><td>4,147</td></tr><tr><td>Fire Assay with unknown finish.</td><td>3,886</td></tr><tr><td>Unknown Method, unspecified AAS finish.</td><td>1,007</td></tr><tr><td>Unknown Method, Unknown Finish.</td><td>3,458</td></tr><tr><td>No method recorded</td><td>106</td></tr></table>
Laboratories used include:
▪ SGS – Kalgoorlie, Perth and Leonora
▪ Amdel – Perth
▪ Genalysis/Intertek – Perth
It is assumed laboratory procedures were appropriate for the time.</td></tr>
<tr><td>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</td><td>NITON handheld XRF was used on a small number of drill holes. Calibration of the hand-held XRF tools is applied at start-up. XRF results are only used for indicative analysis of lithogeochemistry and alteration and to aid logging and subsequent interpretation. Four acid digest data is also used to assist in lithogeochemical determination; pXRF analysis, conducted at the laboratory, is completed on most holes post 2016 to aid in lithogeochemical determination.</td></tr>
<tr><td>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>Gold Road protocol is for Field Standards (Certified Reference Materials) and Blanks inserted at a rate of 4 Standards and 4 Blanks per 100 samples. Field Duplicates are generally inserted at a rate of approximately 1 in 40. At the laboratory, regular assay Repeats, Laboratory Standards, Checks and Blanks are analysed
For drilling at Attila, the relevant assays and QAQC numbers are as follows:

<table><tr><th>Assay and QAQC Numbers</th><th>RC</th><th>DDH</th></tr><tr><td>Total Sample Submission</td><td>13,533</td><td>2458</td></tr><tr><td>Assays</td><td>13,073</td><td>2356</td></tr><tr><td>Field Blanks</td><td>164</td><td>51</td></tr><tr><td>Field Standards</td><td>174</td><td>51</td></tr><tr><td>Field Duplicates</td><td>122</td><td>1</td></tr><tr><td>Laboratory Checks</td><td>222</td><td>51</td></tr><tr><td>Umpire Checks</td><td>-</td><td>-</td></tr></table>
Historical drilling QAQC has been reviewed by Maxwell (2012) and Golder Associates (2002) and deemed satisfactory and fit for use in Resource Estimation.
Infill drilling completed in 2011, 2012 and 2016-17 by Gold Road has allowed comparative reviews (twinned holes) to be undertaken which have mitigated many concerns with respect to historical data quality.</td></tr>
<tr><td>Verification of sampling and assaying
The verification of significant intersections by either independent or alternative company personnel.</td><td>Significant results are checked by the Principal Resource Geologist, General manager Geology and Executive Director. Additional checks are completed by the Database Manager.</td></tr>
<tr><td>The use of twinned holes.</td><td>A total of five holes (RC and DDH) are drilled within 10 m and are suitable for review as twinned holes. Mineralisation location and tenor is consistent across these areas of close spaced drilling.</td></tr>
<tr><td>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</td><td>All logging data is stored in a Datashed/ SQL database system and maintained by the Gold Road Database Manager.</td></tr>
</table>

Criteria and JORC Code explanation	Commentary
Discuss any adjustment to assay data.	No assay data was adjusted. The laboratory's primary Au field is the one used for plotting and resource purposes. No averaging is employed.
Location of data points *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource Estimation.*	The drill hole locations were initially picked up by handheld GPS, with an accuracy of 5 m in northing and easting. Forty-five holes were later picked using DGPS to a level of accuracy of 1 cm in elevation and position. For angled drill holes, the drill rig mast is set up using a clinometer, and rigs aligned by surveyed positions and/or compass. Drillers use an electronic single-shot camera to take dip and azimuth readings inside the stainless-steel rods, at 50 m intervals, prior to August 2014, and 30 m interval, post August 2014. Downhole directional surveying using north-seeking gyroscopic tool was completed on site and live (down drill rod string) or after the rod string had been removed from the hole. Most diamond drill holes were surveyed live whereas most RC holes were surveyed upon exiting the hole.
Specification of the grid system used.	Grid projection is GDA94, Zone 51.
Quality and adequacy of topographic control.	A discrepancy in RL exists between the 2011 aeromagnetic surveys (used as a topographic surface for other projects in the region), DGPS and handheld GPS (NTv2) data. A topographic surface was generated using LIDAR data collected in December 2015. Drill collars were draped onto this surface creating a more accurate collar RL. A comparison between collars picked up by DGPS and the LIDAR drape have an average error of +/- 0.2m in RL, which is considered acceptable.
Data spacing and distribution *Data spacing for reporting of Exploration Results.*	Drill spacing at surface is approximately 20 mE by 40 mN, and this spacing extends to 40 mE by 100 mN at the margins of the deposit.
Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Spacing of the reported drill holes is sufficient for the geological and grade continuity of the deposit, is appropriate for Resource Estimation procedures and to report Measured, Indicated, and Inferred Resources.
Whether sample compositing has been applied.	251 RC holes out of a total 352 RC holes employed compositing over waste intervals.
Orientation of data in relation to geological structure *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The orientation of the drill lines (250 degrees azimuth) is approximately perpendicular to the regional strike of the targeted mineralisation.
If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drilling angled at -60 to the west does not introduce any directional bias given that structural orientations indicate a steep easterly dip and are normal to the current understanding of the mineralisation.
Sample security *The measures taken to ensure sample security.*	Pre-numbered calico bags are collected in plastic or poly weave bags and transported to the laboratory. Details regarding sample security of drilling prior to 2010 are not readily available.
Audits or reviews *The results of any audits or reviews of sampling techniques and data.*	Sampling and assaying techniques are industry-standard. No specific audits or reviews have been undertaken.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria and JORC Code explanation	Commentary
Mineral tenement and land tenure status *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The RC and diamond exploration drilling was managed by Gold Road, which since November 2016 has formed part of the 50:50 Gruyere JV with Gold Fields. The tenements are located on the Yamarna Pastoral Lease which is owned and managed by Gold Road. M38/435 and M38/436 are located on tenements granted in respect of land in which non-exclusive native title has been determined to exist and to be held by a group of native title holders which includes the persons on whose behalf the Yilka (WAD297/2008) and Sullivan Edwards (WAD498/2011) native title claims were brought. The determination was made by the Federal Court on 27 September 2017. The native title holders are required to nominate a body corporate to act as trustee of, or as their agent in future dealings relating to, their native title. Exploration activities in the specified "Gruyere and Central Bore Project Areas" within the Pastoral Lease are conducted in accordance with the 2016 "Gruyere and Central Bore Native Title Agreement" between Gold Road, the Yilka native title claim group and Cosmo Newberry Aboriginal Corporation. Exploration activities within the balance of the Pastoral Lease are conducted in accordance with the 2004 "Yamarna Pastoral Lease Heritage Protection Agreement" between Gold Road and Harvey Murray (the applicant in relation to the Yilka native title claim).
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area	The tenements are in good standing with the Western Australia Department of Mines, Infrastructure, Resource and Safety.
Exploration done by other parties *Acknowledgment and appraisal of exploration by other parties.*	Exploration has been completed by numerous other parties: ▪ 1990-1994 Metall Mining Australia ▪ 1994-1997 Zanex NL ▪ 1997-2006 Asarco Exploration Company Inc ▪ 2006-2010 Eleckra Mines Limited (renamed Gold Road in 2010) ▪ 2010-November 2016 Gold Road ▪ November 2016 – Present Gold Road and Gold Fields (Gruyere JV) Gold Road understands that previous exploration has been completed to industry standard. A total of 88% of holes in the deposit area are drilled before 2009. A few twin holes have been completed to check location and tenor of mineralisation, not issues were encountered.
Geology *Deposit type, geological setting and style of mineralisation.*	Gold mineralisation at Attila is hosted in a sequence of mafic and felsic volcanic intrusives and sediments on the western margin of the Yamarna Greenstone Belt. The sequence is metamorphosed to amphibolite facies and is strongly foliated, with the sequence striking northwest and dipping steeply to the east. A Felsic volcanoclastic (Gotham Tuff) marker is noted to the east of the sequence. Gold mineralisation is defined by shear zones characterised by laminated quartz-mica-amphibole schist units. High-grade mineralisation occurs as 3 to 5+ m, gently north plunging, or horizontal, shoots. Mineralisation is laterally continuous. Mineralisation has both a lithological and structural control, being contained within the mafic, iron rich units of the sequence with the morphology of high-grade zones appearing to be structurally controlled The deposit forms part of the anomalous structural corridor termed the Golden Highway that has been defined over 17 km in strike.
Drill hole Information *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	All relevant RC and Diamond holes included in the reported resource estimation have been previously reported in AXS announcements, listed in Appendix 2

Criteria and JORC Code explanation	Commentary
Data aggregation methods *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	No weighting or averaging of grades was undertaken.
Data aggregation methods *Relationship between mineralisation widths and intercept lengths*	Grades are reported as down-hole length-weighted average grades across the full width of mineralised domains. The drill angle generates an approximation of the true-width intersection.
Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No new exploration results are reported. Intersections quoted may not match those previously reported as they are selected for Mineral Resource Estimation purposes.
The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used.
These relationships are particularly important in the reporting of Exploration Results. *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Mineralisation is hosted within a steep east dipping, NNW striking package of mafic to felsic intrusive and sedimentary rocks. Mineralisation is hosted in shear zones parallel to stratigraphy. The general drill direction of 60^0 to 250 is approximately perpendicular to the lithological package and is a suitable drilling direction to avoid directional biases.
Diagrams *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to Figures and Tables in the body of text.
Balanced reporting *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.*	All results used in this resource have been published in previous releases; please refer to Appendix 2 for a summary of previous releases.
Other substantive exploration data *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Regional Aeromagnetic and gravity data cover the project area and assist in the geological interpretation; including the strike orientation of the stratigraphy, location of cross-cutting faults and dykes, and general regional geology. Handheld XRF data exists for some drill holes, pXRF conducted at the lab exists for most drill holes post 2016 and assists in lithogeochemical analysis. Initial metallurgical test work indicates no deleterious elements are present and mineralisation is amenable to conventional cyanidation.
Further work *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Mineralisation is not closed off at depth or along strike. Mining optimisation and feasibility studies may drive further drilling requirements.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria and JORC Code explanation	Commentary
Database integrity *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource Estimation purposes.*	Geological metadata is stored centrally in a relational SQL database with a DataShed front end. Gold Road employs a Database Manager who is responsible for the integrity and efficient use of the system. Only the Database Manager or the Data Entry Clerk has permission to modify the data. Sampling and geological logging data is collected in the field using LogChief software and uploaded digitally. The software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Sampling data is sent to, and received from, the assay laboratory digitally. Drill hole collars are picked up by differential GPS and delivered to the database digitally. Down hole surveys are delivered to the database digitally. The Mineral Resource estimate only uses a selection of RC and DDH assay data available; historical data is used, and measures of integrity applied by previous companies are not readily available. Eighteen historic holes are excluded from the estimate due to non-standard sampling through the main part of mineralisation (four-metre composite samples). Two metallurgical test work holes are also excluded as they are sampled by sliver only and oriented down the dip of mineralisation.
Data validation procedures used.	DataShed software has validation procedures that include constraints, library tables, triggers and stored procedures. Data that does not pass validation must be corrected first. The LogChief software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Geological logging data is checked visually in three dimensions against the existing data and geological interpretation. Assay data must pass company QAQC hurdles. Gold Road utilises QAQCR software to further analyse QAQC data, and batches which do not meet criteria are requested to be re-assayed. Sample grades are checked visually in three dimensions against the logged geology and geological interpretation. Drill hole collar pickups are checked against planned and/or actual collar locations. A hierarchical system is used to identify the most reliable down hole survey data. Drill hole traces are checked visually in three dimensions. Data validation procedures of previous companies are not readily available.
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case*	Justin Osborne is Gold Road's Executive Director of Exploration & Growth and a Competent Person. He conducts regular site visits and covers all aspects of the Project. John Donaldson is Gold Road's General Manager Geology and a Competent Person. He has completed specific site visits to focus on understanding the geology of the Golden Highway. Jane Levett is Gold Road's Principal Resource Geologist and a Competent Person and had three specific site visit to focus on understanding the geology of the Golden Highway from field observations, historic diamond core and RC chips.
Geological interpretation *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Diamond drilling allows a robust geological interpretation to be developed. Airborne magnetic and ground IP data gives weight to the broad interpretation and breaks in the continuity of stratigraphy (fault offsets) provide an explanation for strike extents of mineralisation. Type and thickness of host lithology, and mineralisation, is predictable along strike and down dip. As the deposit has good grade and geological continuity the Competent Persons regard the confidence in the geological interpretation as high.
Nature of the data used and of any assumptions made.	All available data has been used to help build the geological interpretation. This includes geological logging data (lithology and structure), portable XRF multi-element data, gold assay data, and IP and airborne magnetic surveys.
The effect, if any, of alternative interpretations on Mineral Resource Estimation.	Modelling of the mineralisation was conducted with reference to the previous resource update, when comparison is made between the current interpretation and one completed in 2015, the differences are a result of refining the geological interpretation with further information.

Criteria and JORC Code explanation	**Commentary**
The use of geology in guiding and controlling Mineral Resource Estimation.	Regionally the deposit is hosted on the western margin of the Yamarna Greenstone Belt. The Attila deposit is located on a flexure of the North West striking Yamarna Shear Zone, a ~1.5 km wide zone of mylonitic mafic and felsic volcanics and sediments. The bulk of the mineralisation is constrained within intermediate volcanoclastics of the Archaean package, below the base of cover. There does not appear to be any mineralisation associated with supergene processes and the mineralised domains are constrained to below a depletion boundary, roughly coincident with the saprolite-saprock boundary. Mineralisation within the sheared package has been modelled at a 0.3 g/t cut-off, including up to 2 m of internal waste. Internal higher grade zones apply a 0.6 g/t cut-off. The values of 0.3 and 0.6 g/t were recognised as inflection points in the drilling data corresponding to the non-mineralised, mineralised, and higher grade populations. Internal higher grade zones correspond to higher intensity alteration, presence of sulphides and a greater density of quartz veining. The lower grade sheared package is similarly altered and veined, but not to the same intensity. Several cross-cutting arcuate and linear faults have been interpreted from the magnetics and distribution of interpreted lithologies. These faults appear to bound different zones of mineralisation and have been used as a control in domaining mineralisation. The trend of the main mineralisation is interpreted to be steeply dipping to the east at 65-75^{o}. Internal to this trend is a gentle plunge to the north associated with the intersection of the Footwall and Main shear zones. The mineralisation trend can be readily observed in areas of closely spaced drilling and easily interpreted in wider spaced areas. Spatial analysis of assay data using variography supports and helps to refine the mineralisation orientations during the interpretive process.
The factors affecting continuity both of grade and geology.	Cross-cutting features interpreted as faults from the aeromagnetic imagery (2011) appear to bound different zones of mineralisation.
Dimensions *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Length along strike: 1,860 m (pit shell constraint) Horizontal Width: 75 m (comprising a series of 5 to 10 m wide mineralised surfaces). Depth from surface to top of Mineral Resource: 5 m. Depth from surface to limit of Mineral Resource: 170 m. The Mineral Resource has been constrained by an optimised Whittle shell that considers all mineralisation in the geological model. The optimisation utilises mining, geotechnical and processing parameters from the Golden Highway Pre-Feasibility Study (this report) and an A$1,850/oz gold price. Only Measured, Indicated and Inferred categories within this shell are reported as Mineral Resource. Mineralisation in the geology model outside the shell is not reported

Criteria and JORC Code explanation	**Commentary**
Estimation and modelling techniques *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Software used: Leapfrog Geo – Drill hole validation, lithology, material type, mineralisation and fault wireframes Datamine Studio RM – Drill hole validation, cross-section, plan and long-section plotting, block modelling, estimation, block model validation, classification, reporting. Snowden Supervisor – Statistics, variography, kriging neighbourhood analysis, block model validation Block model and estimation parameters: Treatment of extreme grade values (top cuts): 5 to 30 g/t Au top-cut applied to one-metre composites selected within mineralisation wireframes. Top cuts were determined by domain through analysis of histograms, log histograms, log probability plots and spatial analysis. Estimation technique: Ordinary Kriging. KNA was undertaken to optimise the search neighbourhood used for the estimation and test the parent block size. The search ellipse and selected samples by block were viewed in three dimensions to verify the parameters. A local grid is used with a rotation 20 degrees west of true north from MGA. Parent block size - 5 m X by 25 m Y by 5 m Z (parent cell estimation with full subset of points). Smallest sub cell – 0.5 m X by 5 m Y by 0.5 m Z (small X dimension is required to fill mineralisation wireframes and a small Z dimension is required to fill to material type boundaries). Discretisation - 3 X by 5 Y by 2 Z (using number of points method). Search ellipse – aligned to mineralisation trend, dimensions range from 55 to 150 m X by 90 to 200 m Y by 20 to 600 m Z depending on mineralisation domain. Number of samples – maximum per drill hole = 5, first search 12 min / 40 max, second search 10 min / 60 max, volume factor 2, third search 5 min / 60 max, volume factor 4. Domain boundary conditions – A hard boundary is applied to most domains. The internal domain to the main shear (D5556) is further subdivided into Domain 5557 and 5558 using 2D SELPER strings in Datamine. The estimation of these domains includes a semi-soft boundary along strike, where samples near the domain boundary from D5556 are used to inform the estimation of D5557 and 5558.
The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The project has previously been estimated and reported using Ordinary Kriging methodologies in 2008, 2012, 2015 and 2017. Prior to 2008, estimates utilised a Multiple Indicator Kriging approach.
The assumptions made regarding recovery of by-products.	No economic by-products.
Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	Initial metallurgical test work indicates no deleterious elements.
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The parent block size of 5 m X by 25 m Y by 5 m Z is approximately one quarter of the average drill spacing of 20 m X by 40 m Y in Indicated and Measured areas.
Any assumptions behind modelling of selective mining units.	The Selective Mining Unit chosen is a function of the Whittle optimisation and parent block size of 5 m X by 12.5 m Y by 5 m Z.
Any assumptions about correlation between variables.	No correlation between variables analysed or made; the resource is gold-only.
Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation was used at all stages to control the estimation. If geostatistics, variography and/or visual checks of the model were difficult to understand then the geological interpretation was questioned and refined.
Discussion of basis for using or not using grade cutting or capping.	Top-cuts were used in the estimate as this is the most appropriate way to control outliers when using Ordinary Kriging.
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation checks performed: ▪ QQ plot of RC vs DDH input grades. ▪ Volume of wireframe vs volume of block model ▪ Sum of gram metres prior to compositing vs sum of gram metres post compositing ▪ Negative gold grade check ▪ Model average grade vs declustered top-cut sample grade by Domain. ▪ Swath plots by Northing and elevation by Domain. ▪ Visual check of drill data vs model data in plan, section and three dimensions. All validation checks gave acceptable results. No mining, therefore no reconciliation data available.

Criteria and JORC Code explanation	Commentary
Moisture *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Bulk density values used are a combination of local and regional data. Average bulk density values are modified by a moisture percentage so that dry tonnages are reported. Percentage reductions were: overburden and saprolite 5%, saprock 3%, transition 2% and fresh 1%.
Cut-off parameters *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The cut-off grade used for reporting is 0.5 g/t and has been determined with due consideration to mining, processing and surface haulage costs, metallurgical recovery, royalties and gold price.
Mining factors or assumptions *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The mining method assumed is a conventional open pit with a contract mining fleet appropriately scaled to the size of the deposit. De facto minimum mining width is a function of optimisation parent cell size (5 m X by 12.5 m Y by 5 m Z). No allowance for dilution or recovery has been made, however a minimum width of 2 m is used in construction of the mineralisation wireframes
Metallurgical factors or assumptions *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	It is assumed Attila ore will be processed at the Gruyere processing plant (under construction) consisting of single stage primary crush, Semi Autogenous Grinding and Ball Milling with Pebble Crushing (SABC) comminution circuit followed by a conventional gravity and carbon in leach (CIL) process is proposed. This process is considered appropriate for Attila ore. The proposed metallurgical process is commonly used in the Australian and international gold mining industry and is considered a well-tested technology. A significant program of metallurgical test-work was undertaken in 2017 resulting in recoveries ranging between 74% and 97% depending on grade and material type. A variable recovery was applied accordingly in the optimisation process depending on ore type.
Environmental factors or assumptions *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Surface waste dumps will be used to store waste material from open pit mining. Tailings will be disposed of in the Gruyere tailings storage facility. Preliminary waste rock classification test work was completed during 2017 and no acid mine drainage material types were identified. If identified in future studies appropriate measures will be used to manage any issues.
Bulk density *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density has been determined using data available from the Golden Highway drilling, and other more detailed bulk density data in the region. Historical data from Attila was collected using the weight in air/ weight density values were modified for fresh mineralised domains, this modification was informed by bulk density values from metallurgical holes drilled down dip in mineralisation and reflects the increased percentage of quartz material in mineralised zones compared to the mafic host rock.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Bulk density is applied by weathering (material) type and domain.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Data was coded by weathering type (material) and domain (mineralisation). Assumptions for moisture percentages were made and accounted for in the final value used for bulk density.

Criteria and JORC Code explanation	**Commentary**
Classification *The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource is constrained within a Whittle shell. Blocks in the geological model above that shell have been classified as Measured, Indicated or Inferred. Several factors have been used in combination to aid the classification; ▪ Drill hole spacing ▪ Measured – 20 m East by 20 m North ▪ Indicated - 20 m East by 40 m North ▪ Inferred – Depth of drilling and 50 m along strike from extent of drilling. Extrapolation 40 m down dip from last drill hole intercept ▪ Geological continuity ▪ Grade continuity ▪ Estimation quality parameters derived from the Ordinary Kriging process
Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	All relevant factors have been taken into account in the classification of the Mineral Resource.
Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Persons' view of the deposit.
Audits or reviews *The results of any audits or reviews of Mineral Resource estimates.*	Internal geological peer reviews were held and documented. An external review of the 2015 estimate was completed by Optiro Pty Ltd. Reviews were completed with appropriate Gold Fields staff as part of the Gruyere JV requirements and considered geology, estimation and inputs to optimisation.
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	Variances to the tonnage, grade and metal of the Mineral Resource estimate are expected with further definition drilling. It is the opinion of the Competent Persons that these variances will not significantly affect economic extraction of the deposit.
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource relates to global tonnage and grade estimates.
These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No previous mining.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria including JORC Code (2012) explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Mineral Resource estimate for the Attila deposit which formed the basis of this Ore Reserve estimate was compiled by the Gold Road Competent Person(s) utilising relevant data. This Mineral Resource is described in detail in sections 1 to 3 of this Table. The Mineral Resources are reported inclusive of the Ore Reserve.
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	The Competent Person has completed several site visits to undertake the following activities: ▪ Site familiarisation and assessment of proposed locations for mining related infrastructure relative to proposed open pit locations. ▪ Inspection of site access, waste dump and ROM locations and site drainage. ▪ Inspection of surface haulage routes to the Gruyere Mill ▪ Inspected selected diamond drill core to gain an understanding of weathering profiles
Study status *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The Attila Ore Reserve estimate is the result of a Pre-Feasibility Study (Golden Highway PFS) completed by Gold Road Resources and external consultants. The project is considered technically achievable and all aspects of operational phases involve the application of conventional technology and mining methods widely utilised in the Western Australian goldfields. Financial modelling shows the project to be economically viable under current assumptions and quoted rates. Material modifying factors such as mining, processing, metallurgical, environmental, legal, social and commercial have been considered during the Ore Reserve estimation process.
Cut-off parameters *The basis of the cut-off grade(s) or quality parameters applied.*	Variable economic cut-off grades have been applied in estimating the Ore Reserve. Cut-off grade is calculated in consideration of the following parameters: ▪ Gold price ▪ Operating costs ▪ Process recovery ▪ Transport and refining costs ▪ General and administrative cost ▪ Royalty costs.
Mining factors or assumptions *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.*	Attila will be mined by open pit mining methods utilising conventional mining equipment. A final pit design was completed as part of the Golden Highway PFS. The final pit design is the basis of the Ore Reserve estimate. The selected mining method, design and extraction sequence are tailored to suit orebody characteristics, minimise dilution and ore loss, utilise proposed process plant capacity and expedite free cash generation in a safe and environmentally sustainable manner. Mining operating and capital costs were established on the basis of an estimate from a reputable mining contractor as part of the Golden Highway PFS.

Criteria including JORC Code (2012) explanation	Commentary
The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	Geotechnical modelling has been completed by an external consultant on the basis of field logging and testing of selected diamond drill core samples. The recommended geotechnical design parameters assume dry slopes on the basis of adequate dewatering ahead of mining. Nine geotechnical domains were identified: ▪ Domain South West: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m. ▪ Domain South East: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6m ▪ Fresh material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m. ▪ Domain West North West: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m. ▪ Domain East North East: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m. ▪ Domain North - North West: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 2 0m, batter angles of 50° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m. ▪ Domain North - North East: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m.
The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate). *The mining dilution factors used.* *The mining recovery factors used.* *Any minimum mining widths used.* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* *The infrastructure requirements of the selected mining methods.*	The resource model was imported from the original Datamine™ format and re-blocked in MineSight™ to produce the mining block model for optimisation and scheduling. The re-blocking process preserved the tonnes and gold content in the ore parcels with grade averaging within the final 5 m by 12.5 m by 5 m mining block size. Edge dilution of 0.5 m was applied as a post process resulting in overall dilution of 14% and ore loss of 3%. A minimum mining width of 5.0 m was applied consistent with ore block dimension. Any Inferred Mineral Resources contained within the pit design has been considered as waste. The proposed mine plan includes waste rock dumps, a ROM pad, mine access road, light and heavy vehicle workshop facilities, technical services and contractor administration facilities.
Metallurgical factors or assumptions *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors*	Ore from Attila will be processed at the Gruyere Mill (under construction). The Gruyere process flowsheet consists of a single stage primary crush, SABC comminution circuit followed by a conventional gravity and CIL process is proposed. This process is considered appropriate for the Attila ore. The proposed metallurgical process is commonly used in the Australian and international gold mining industry and is considered well-tested and proven technology.

Criteria including JORC Code (2012) explanation	Commentary
applied. *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	In 2017, a program of comminution, extraction, and materials handling testing was carried out on 19 diamond drill core composite samples. The test-work was completed on oxide, transitional, and fresh ore types which were obtained across the Attila deposit from depths ranging between 19.9 m and 130 m. Estimated plant gold recovery ranges from 74% to 97% at 125 µm P80 grind size depending on head grade and ore type. A variable metallurgical recovery was applied accordingly in the Golden Highway PFS. The head assay of the samples from the Attila deposit shows low concentrations of deleterious elements such as As, Te, Hg, Sb, organic carbon and base metals. Comminution, extraction, and materials handling testing has also been carried out on material selected from the Attila composite samples to confirm compatibility with the Gruyere mill. N/A
Environmental *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Level 2 Flora and Fauna surveys have previously been completed over the Attila deposit however these will need revisiting ahead of project permitting and development. Waste rock characterisation has been completed and all waste types are non-acid forming and have limited metal leachate potential. Waste rock storage locations have been selected based on suitable geographical characteristics and proximity to the pit. Attila ore is considered potentially acid forming and will be encapsulated within the Gruyere Tailings Storage Facility (TSF).
Infrastructure *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.*	The Attila project site is within economic distances of existing infrastructure of the Eastern Goldfields region. Services and consumable supplies will be delivered by existing roads from Laverton some 150 km to the west. The workforce will be Fly In-Fly Out and accommodated at the Gruyere camp during rostered days on. An on-site sealed airstrip has been built adjacent to the Gruyere camp.
Costs *The derivation of, or assumptions made, regarding projected capital costs in the study.*	All capital estimates are based on contractor budget estimates supplied during 2018. It is assumed that all mining equipment required for the project will be supplied by a mining contractor. Mine development costs were developed from a budget estimate supplied by a reputable mining contractor. The basis of estimate is: ▪ Contract mining ▪ Mobilisation of mining equipment and personnel from Perth ▪ Earthworks quantities determined from indicative site layout ▪ A mining schedule developed on a monthly basis
The methodology used to estimate operating costs. *Allowances made for the content of deleterious elements.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* *The allowances made for royalties payable, both Government and private.*	The operating cost estimate accuracy is +/- 25%. Operating costs assume a FIFO scenario with various rosters on site. Mine operating costs and surface ore haulage costs have been derived from a budget estimate from a reputable mining contractor. The estimate is based on mining of scheduled material movements and mining rates, with technical services supplied by Gruyere JV employees. Mine design and schedules were prepared by competent mining engineers. Process and other operating costs were estimated from the current Gruyere Business Plan estimates on the assumption that: A conventional SABC circuit will be utilised to treat ore at a rate of 8.2 Mtpa for fresh ore with the capability to treat up to 8.8 Mtpa of oxide material Comminution grind sizes will be in the range of 106 µm to 150 µm for all material types Power will be generated on site utilising gas delivered by pipeline The process plant will be operated by Gruyere JV employees. The operating cost estimate is considered to be appropriate for the current market in the eastern goldfields of WA. No allowance is made for deleterious elements All costs are estimated in 2018 Australian dollars. Gold bullion transportation charges are derived on the basis of a quote provided by a leading industry bullion shipment organisation. Treatment and refining charges are derived from current agreement with a leading Perth Gold Refinery. An allowance has been made for all royalties, including an allowance of 2.5% of revenue for royalties payable to the Western Australian State Government and an allowance for other royalties payable to private parties (these royalties being commercially sensitive and covered by confidentiality).

Criteria including JORC Code (2012) explanation	Commentary
Revenue factors *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	The mined ore head grades are estimated utilising industry accepted geostatistical techniques with the application of relevant mining modifying factors. Gold price and exchange rates have been determined from corporate guidance. A Life-of-mine gold price forecast of A$1,600/oz (Real 2018) is applied in the financial modelling for the Ore Reserve calculation process. This price forecast was established by agreement between Gruyere JV partners.
Market assessment *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* *A customer and competitor analysis along with the identification of likely market windows for the product.* *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	There is a transparent market for the sale of gold.
Economic *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	Discounted cash flow modelling and sensitivity analysis has been completed to evaluate the economic performance of the Ore Reserve. Key value driver inputs into the financial model included: ▪ Gold price at A$1,600/oz based on Gold Road corporate guidance ▪ Discount rate of 5% based on Gold Road corporate guidance The Ore Reserve returns a positive NPV based on the assumed commodity price and the Competent Person is satisfied that the project economics that make up the Ore Reserve retains a suitable profit margin against reasonable future commodity price movements.
Social *The status of agreements with key stakeholders and matters leading to social licence to operate.*	A Native Title Mining Agreement has been signed covering the project area.
Other *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* *Any identified material naturally occurring risks.* *The status of material legal agreements and marketing arrangements.* *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	No material naturally occurring risks have been identified. No significant species have been identified that would be significantly impacted by the Project in a manner that could not be adequately managed. There are reasonable prospects to anticipate that contract terms as assumed in the Ore Reserves estimate could be achieved.
Classification *The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The main basis of classification of Ore Reserves is the underlying Mineral Resource classification. All Proved Ore Reserves are derived from Measured Mineral Resources and all Probable Ore Reserves derive from Indicated Mineral Resources in accordance with JORC Code (2012) guidelines. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit. No Probable Ore Reserves are derived from Measured Mineral Resources. No inferred Mineral Resource is included in the Ore Reserves. 10% of the Ore Reserve is in the Proved category with the balance being Probable.
Audits or reviews *The results of any audits or reviews of Ore Reserve estimates.*	The PFS which forms the basis of the Ore Reserve estimate was subjected to various peer reviews: ▪ Metallurgical test-work was peer reviewed by Gold Fields technical personnel ▪ Geotechnical input was peer reviewed Gold Fields technical personnel ▪ Open pit designs, production schedules and mining cost model was subject to mining consultant's internal peer process ▪ Golden Highway PFS was peer reviewed by Gold Road personnel

Criteria including JORC Code (2012) explanation	Commentary
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Golden Highway PFS resulted in a technically robust and economically viable business case. This is deemed to be an appropriate basis for a high level of confidence in the Ore Reserves estimate. In the opinion of the Competent Person, cost assumptions and modifying factors applied in the process of estimating Ore Reserves are reasonable. Gold price and exchange rate assumptions were set out by Gold Road and are subject to market forces and present an area of uncertainty. In the opinion of the Competent Person, there are reasonable prospects to anticipate that all relevant legal, environmental and social approvals to operate will be granted within the project timeframe.

GOLDEN HIGHWAY

Alaric

JORC CODE 2012 EDITION TABLE 1 – SECTIONS 1 TO 4

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria and JORC Code explanation	Commentary
Sampling techniques *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The sampling has been carried out using a combination of Reverse Circulation (RC) and diamond drilling. Significant RAB and Aircore drilling covers the project area and is used in developing the lithological and mineralisation interpretation. However, this data is not used in the estimate and is not detailed here. Drilling was completed between 1994 and 2017 and was undertaken by several different companies: 238 RC and 6 diamond holes were drilled angled at -60 degrees to 250 degrees azimuth (MGAn). Drill core is logged geologically and marked up for assay at approximately 1 m intervals based on geological observation. Drill core is cut in half by a diamond saw and half core samples submitted for assay analysis. RC chips are logged geologically, and 4 m composite spear samples are submitted for assay. One metre RC split samples are submitted for re-assay if composites return anomalous results. One diamond hole was sampled as sliver as it was drilled specifically for metallurgical test work.
Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.	Between 2010 and 2017 sampling was carried out under Gold Road's protocols and QAQC procedures as per industry best practice. 50% of the holes drilled on the Golden Highway were completed by Gold Road. Prior to 2010, sampling was carried out under the relevant company's protocols and procedures and is assumed to be industry standard practice for the time. Specific details for this historical drilling are not readily available.
Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	Details regarding sampling prior to 2010 are not readily available. Sampling under Gold Road's protocols comprises the following: The RC holes were drilled with a 5¼" or 5¾" inch face-sampling bit, 1 m samples collected through a cyclone and cone splitter, to form a 2-3 kg sample. 4 m composite samples were created by spear sampling of the total reject of the 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. 1 m sample intervals were submitted for analysis when the composite interval returned anomalous results. A total of 146 (2%) 4 m composite samples were used in the resource estimate where no 1 m samples were available. Comps were outside the main shear and all low grade. Diamond drilling was completed using an HQ or NQ drilling bit for all holes. Core is cut in half for sampling, with a half core sample sent for assay at measured lithological/mineralogical intervals. All samples were fully pulverised at the lab to -75 µm, to produce a 50 g charge for Fire Assay with either AAS finish or ICPOES finish.
Drilling techniques *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Available data indicates historical diamond drill hole diameters range in size from PQ to NQ. This drilling was completed by Wallis Drilling, DrillCorp and Sanderson Drilling. Historical RC drill holes were completed by Wallis Drilling using a face sampling bit with a diameter of 5¼" or 3¾". Holes drilled under GOR operations were completed by Terra Drilling, Wallis Drilling and DDH1 (DD – NQ core) and RC completed by Wallis and Raglan drilling using a 5¼" and 5¾" face sampling bit.
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.*	RC recoveries were visually estimated, and recoveries recorded in the log as a percentage. Where data is available recovery of the samples was good, generally estimated to be close to 100%, except for some sample loss at the top of the hole in the Quaternary cover. All diamond core collected is dry. Drill operators measure core recoveries for every drill run completed using a 3 m core barrel. The core recovered is physically measured by tape measure and the length recovered is recorded for every 3 m "run". Core recovery can be calculated as a percentage recovery. Almost 100% recoveries were achieved for diamond drilling.

Criteria and JORC Code explanation	Commentary
Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC face-sample bits and dust suppression were used to minimise sample loss. Drilling pressure airlifted the water column above the bottom of the hole to ensure dry sampling. RC samples are collected through a cyclone and riffle splitter (historical) or static cone splitter after 2010. The rejects are deposited in a large plastic bag and retained for potential future use. The sample required for assay is collected directly into a calico sample bag at a designed 3 to 4 kg sample mass which is optimal for full sample crushing and pulverisation at the assay laboratory. Diamond drilling collects uncontaminated fresh core samples which are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling. Protocols for drilling undertaken prior to 2010 are not readily available.
Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	RC samples were generally dry with the exception of a few samples (<5%) that are reported as slightly damp to end of hole. Apart from for the top of the holes while drilling through the cover, there is no evidence of excessive loss of material, and at this stage no information is available regarding possible bias due to sample loss. There is no significant loss of material reported in any of the Diamond core.
Logging *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource Estimation, mining studies and metallurgical studies.*	Logging of diamond hole core records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other features of the samples. All core is photographed in the core trays, with individual photographs taken of each tray both dry and wet. Logging of RC chips records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging codes have been developed over time and the historical codes translated to a scheme similar to the current Gold Road logging scheme in 2007. This provides data to a level of detail adequate to support Mineral Resource Estimation activities. Some holes are logged using hand held NITON XRF to assist in lithogeochemical analysis. From 2016 most fire assay results routinely include pXRF collected at the lab and used to validate logging.
Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging of drill core captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples, and structural information from oriented drill core. All samples are stored in core trays. All core is photographed in the core trays, with individual photographs taken of each tray both dry, and wet, and photos uploaded to the Gold Road server database.
The total length and percentage of the relevant intersections logged	All holes were logged in full.
Sub-sampling techniques and sample preparation *If core, whether cut or sawn and whether quarter, half or all core taken.*	Core samples were cut in half and half core samples were collected for assay, with the remaining half core samples stored in the core trays. One diamond drill hole was sampled as sliver. This hole was drilled for metallurgical test work results of which are pending.
If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Under Gold Road protocols 1 m RC drill samples are channelled through a cone splitter, and an average 2-3 kg sample is collected in an un-numbered calico bag and positioned on top of the plastic bag. Four-metre composite samples are generated by spear sampling of the four 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. A number of RC holes utilised 4 m composite samples for waste intervals. If composite samples returned anomalous gold values, the intervals were resampled as 1 m samples by collecting the sample produced from the riffle splitter. Sampling procedures used prior to 2010 are not readily available.
For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were prepared and analysed at a variety of laboratories. For data prior to 2010 it is assumed the procedures undertaken are industry standard for the time. Post-2010 samples were dried, and the whole sample pulverised to 80% passing 75 µm, and a sub-sample of approx. 200 g retained. A nominal 50 g was used for the fire assay analysis. The procedure is industry standard for this type of sample.

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.</td><td>Details of historical QAQC procedures are not readily available. Reviews of QAQC and assay quality in 2002 (Golder Associates) and 2012 (Maxwell) indicate there are no significant issues with regards to quality of the historical assay data. Concerns regarding historical drilling are mitigated by drilling completed in 2011, 2012 and 2016. A QAQC report has been compiled for the 2016 drilling (Sauter Geological Services) – no significant issues were identified.</td></tr>
<tr><td>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</td><td>Gold Road protocols state duplicate samples are collected at a frequency of 1 in 40 samples for all drill holes.
RC duplicate samples are collected directly from the Rig-mounted cone splitter.
No diamond duplicates were collected. Details of historical duplicate sampling are not readily available.</td></tr>
<tr><td>Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>Sample sizes are considered appropriate to give an indication of mineralisation given the particle size and preference to keep the sample weight below 3 kg to ensure requisite grind size in a LM5 sample mill.</td></tr>
<tr><td>Quality of assay data and laboratory tests
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</td><td>Samples were analysed at a variety of laboratories using methodologies that include:
<table><tr><th>Analysis Type</th><th>Total</th></tr><tr><td>Aqua Regia Digest, unspecified AAS finish.</td><td>2,470</td></tr><tr><td>Fire Assay, unspecified AAS finish.</td><td>6,764</td></tr><tr><td>Fire Assay, flame AAS finish.</td><td>12,227</td></tr><tr><td>Fire Assay, graphite furnace AAS finish.</td><td>185</td></tr><tr><td>Fire Assay. Finish by ICP-OES</td><td>3,613</td></tr><tr><td>Fire Assay. Finish by ICP-MS</td><td>14</td></tr><tr><td>Screen Fire Assay, ICP-OES finish.</td><td>24</td></tr><tr><td>Fire Assay with unknown finish.</td><td>135</td></tr><tr><td>Unknown Method, Unknown Finish.</td><td>962</td></tr><tr><td>No method recorded</td><td></td></tr></table>Laboratories used include:
▪ SGS – Kalgoorlie, Perth and Leonora
▪ Amdel – Perth
▪ Genalysis – Perth
It is assumed laboratory procedures were appropriate for the time.</td></tr>
<tr><td>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</td><td>NITON handheld XRF was used on a small number of drill holes. Calibration of the hand-held XRF tools is applied at start-up. XRF results are only used for indicative analysis of lithogeochemistry and alteration and to aid logging and subsequent interpretation. Four acid digest data is also used to assist in lithogeochemical determination. pXRF analysis, conducted at the lab, is completed on most holes post 2016 to aid in lithogeochemical determination.</td></tr>
<tr><td>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>Gold Road protocol is for Field Standards (Certified Reference Materials) and Blanks inserted at a rate of 4 Standards and 4 Blanks per 100 samples. Field Duplicates are generally inserted at a rate of approximately 1 in 40. At the Lab, regular assay Repeats, Lab Standards, Checks and Blanks are analysed
For drilling at Alaric, the relevant assays and QAQC numbers are as follows:
<table><tr><th>Assay and QAQC Numbers</th><th>RC</th><th>DDH</th></tr><tr><td>Total Sample Submission</td><td>27,451</td><td>936</td></tr><tr><td>Assays</td><td>25,532</td><td>862</td></tr><tr><td>Field Blanks</td><td>653</td><td>37</td></tr><tr><td>Field Standards</td><td>681</td><td>37</td></tr><tr><td>Field Duplicates</td><td>585</td><td>4</td></tr><tr><td>Laboratory Checks</td><td>764</td><td>30</td></tr><tr><td>Umpire Checks</td><td>-</td><td>-</td></tr></table>Historical drilling QAQC has been reviewed by Maxwell (2012) and Golder Associates (2002) and deemed satisfactory and fit for use in Resource Estimation.
Infill drilling completed in 2017 by Gold Road has allowed a comparative review (twinned hole) to be undertaken which has highlighted the highly variable short scale continuity noted in historical data.</td></tr>
<tr><td>Verification of sampling and assaying
The verification of significant intersections by either independent or alternative company personnel.</td><td>Significant results are checked by the Principal Resource Geologist and Executive Director. Additional checks are completed by the Database Manager.</td></tr>
</table>

Criteria and JORC Code explanation	Commentary
The use of twinned holes.	Two holes (RC and diamond) are drilled within 10 m and are suitable for review as twinned holes. Mineralisation location is consistent across the areas of close spaced drilling. Tenor between the twinned holes is variable, highlighting the high variability in short scale continuity of grade.
Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All logging data is stored in a Datashed/SQL database system and maintained by the Gold Road Database Manager.
Discuss any adjustment to assay data.	No assay data was adjusted. The lab's primary Au field is the one used for plotting and resource purposes. No averaging is employed.
Location of data points *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource Estimation.*	The drill hole locations were initially picked up by handheld GPS, with an accuracy of 5 m in northing and easting. Nineteen holes were later picked using DGPS to a level of accuracy of 1 cm in elevation and position. For angled drill holes, the drill rig mast is set up using a clinometer, and rigs aligned by surveyed positions and/or compass. Drillers use an electronic single-shot camera to take dip and azimuth readings inside the stainless steel rods, at 50 m intervals, prior to August 2014, and 30 m interval, post August 2014. Downhole directional surveying using north-seeking gyroscopic tool was completed on site and live (down drill rod string) or after the rod string had been removed from the hole. Most diamond drill holes were surveyed live whereas most RC holes were surveyed upon exiting the hole.
Specification of the grid system used.	A local grid is used at the Golden Highway.
Quality and adequacy of topographic control.	A topographic surface was generated using LIDAR data collected in December 2015.
Data spacing and distribution *Data spacing for reporting of Exploration Results.*	Drill spacing at surface is approximately 20 mE by 20 mN, and this spacing extends to 40 mE by 100 mN at the margins of the deposit.
Whether the data-spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Spacing of the reported drill holes is sufficient for the geological and grade continuity of the deposit, is appropriate for Resource Estimation procedures and to report Indicated, and Inferred Resources.
Whether sample compositing has been applied.	129 RC holes out of a total 286 RC holes employed compositing over waste intervals.
Orientation of data in relation to geological structure *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The orientation of the drill lines (250 degrees azimuth) is approximately perpendicular to the regional strike of the targeted mineralisation.
If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drilling angled at -60 to the west does not introduce any directional bias given that structural orientations indicate a steep easterly dip and are normal to the current understanding of the mineralisation.
Sample security *The measures taken to ensure sample security.*	Pre-numbered calico bags are collected in plastic bags and transported to the laboratory. Details regarding sample security of drilling prior to 2010 are not readily available.
Audits or reviews *The results of any audits or reviews of sampling techniques and data.*	Sampling and assaying techniques are industry-standard. No specific audits or reviews have been undertaken.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria and JORC Code explanation	Commentary
Mineral tenement and land tenure status *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The RC and diamond exploration drilling was managed by Gold Road, which since November 2016 has formed part of the 50:50 Gruyere JV with Gold Fields. The tenement is located on the Yamarna Pastoral Lease, which is owned and managed by Gold Road. Tenement M38/814 is located on tenements granted in respect of land in which non-exclusive native title has been determined to exist and to be held by a group of native title holders which includes the persons on whose behalf the Yilka (WAD297/2008) and Sullivan Edwards (WAD498/2011) native title claims were brought. The determination was made by the Federal Court on 27 September 2017. The native title holders are required to nominate a body corporate to act as trustee of, or as their agent in future dealings relating to, their native title. Exploration activities in the specified "Gruyere and Central Bore Project Areas" within the Pastoral Lease are conducted in accordance with the 2016 "Gruyere and Central Bore Native Title Agreement" between Gold Road, the Yilka native title claim group and Cosmo Newberry Aboriginal Corporation. Exploration activities within the balance of the Pastoral Lease are conducted in accordance with the 2004 "Yamarna Pastoral Lease Heritage Protection Agreement" between Gold Road and Harvey Murray (the applicant in relation to the Yilka native title claim).
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area	The tenement is in good standing with the WA DMP.
Exploration done by other parties *Acknowledgment and appraisal of exploration by other parties.*	Exploration has been completed by numerous other parties: ▪ 1990-1994 Metall Mining Australia ▪ 1994-1997 Zanex NL ▪ 1997-2006 Asarco Exploration Company Inc ▪ 2006-2010 Eleckra Mines Limited (renamed Gold Road in 2010) ▪ 2010-November 2016 Gold Road ▪ November 2016 – Present Gold Road and Gold Fields (Gruyere JV) Gold Road understands that previous exploration has been completed to industry standard. At total 42% of the holes drilled in the deposit area were completed prior to 2009. Some recent holes were drilled to confirm location, tenor and thickness of historic drilling.
Geology *Deposit type, geological setting and style of mineralisation.*	Gold mineralisation at Alaric is hosted in a sequence of mafic and felsic volcanic intrusives and sediments on the western margin of the Yamarna Greenstone Belt. The sequence is metamorphosed to upper-greenschist to lower-amphibolite facies and is strongly foliated, with the sequence striking northwest and dipping steeply to the east. A felsic volcanoclastic (Gotham Tuff) marker is noted to the east of the sequence, while a chrome-rich dolerite is noted to the west of the sequence and is considered an important reducing unit proximal to the main mineralised shear. Gold mineralisation is defined by shear zones characterised by laminated quartz-mica-amphibole schist units. High grade mineralisation occurs as 3-5+ metre, gently north plunging, or horizontal, shoots. Mineralisation is laterally continuous. Mineralisation has both a lithological and structural control, being contained within the mafic, iron rich units of the sequence with the morphology of high grade zones appearing to be structurally controlled The deposit forms part of the anomalous structural corridor termed the Golden Highway that has been defined over 17km in strike.
Drill hole Information *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ▪ *easting and northing of the drill hole collar* ▪ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ▪ *dip and azimuth of the hole* ▪ *down hole length and interception depth* ▪ *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	All relevant RC and Diamond holes included in the reported resource estimation have been previously reported in AXS announcements, listed in Appendix 2

Criteria and JORC Code explanation	Commentary
Data aggregation methods *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	No new exploration results are reported. Intersections quoted may not match those previously reported as they are selected for Resource Estimation purposes.
Relationship between mineralisation widths and intercept lengths *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	No weighting or averaging of grades was undertaken. Grades are reported as down-hole length-weighted average grades across the full width of mineralised domains. The drill angle generates an approximation of the true-width intersection.
The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used.
These relationships are particularly important in the reporting of Exploration Results. *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Mineralisation is hosted within a steep east dipping, NNW striking package of mafic to felsic intrusive and sedimentary rocks. Mineralisation is hosted in shear zones parallel to stratigraphy. The general drill direction of 60^0 to 250 is approximately perpendicular to the lithological package and is a suitable drilling direction to avoid directional biases.
Diagrams *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to Figures and Tables in the body of text.
Balanced reporting *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results used in this resource have been published in previous releases; please refer to Appendix 2 for a summary of previous releases.
Other substantive exploration data *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Local IP and regional Aeromagnetic and gravity data cover the project area and assist in the geological interpretation; including the strike orientation of the stratigraphy, location of cross-cutting faults and dykes, and general regional geology. Handheld XRF data exists for some drill holes, pXRF conducted at the lab exists for most drill holes post 2016 and assists in lithogeochemical analysis. Initial metallurgical testwork indicates no deleterious elements are present and mineralisation is amenable to conventional cyanidation.
Further work *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Mineralisation is not closed off along strike. Mining optimisation and feasibility studies may drive further drilling requirements.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria and JORC Code explanation	Commentary
Database integrity *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource Estimation purposes.*	Geological metadata is stored centrally in a relational SQL database with a DataShed front end. Gold Road employs a Database Manager who is responsible for the integrity and efficient use of the system. Only the Database Manager or the Data Entry Clerk has permission to modify the data. Sampling and geological logging data is collected in the field using LogChief software and uploaded digitally. The software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Sampling data is sent to, and received from, the assay laboratory digitally. Drill hole collars are picked up by differential GPS and delivered to the database digitally. Down hole surveys are delivered to the database digitally. The Mineral Resource estimate only uses a selection of RC and DDH assay data available; historical data is used, and measures of integrity applied by previous companies are not readily available
Data validation procedures used.	DataShed software has validation procedures that include constraints, library tables, triggers and stored procedures. Data that does not pass validation must be corrected first. The LogChief software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Geological logging data is checked visually in three dimensions against the existing data and geological interpretation. Assay data must pass company QAQC hurdles. Gold Road utilises QAQCR software to further analyse QAQC data, and batches which do not meet criteria are requested to be re-assayed. Sample grades are checked visually in three dimensions against the logged geology and geological interpretation. Drill hole collar pickups are checked against planned and/or actual collar locations. A hierarchical system is used to identify the most reliable down hole survey data. Drill hole traces are checked visually in three dimensions. Data validation procedures of previous companies are not readily available.
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case*	Justin Osborne is Gold Road's Executive Director- Exploration and Growth and a Competent Person. He conducts regular site visits and covers all aspects of the Project. John Donaldson is Gold Road's General Manager Geology and a Competent Person. He has completed specific site visits to focus on understanding the geology of the Golden Highway. Jane Levett is Gold Road's Principal Resource Geologist and a Competent Person and has completed three specific site visits to focus on understanding the geology of the Golden Highway from field observations, historic diamond core and RC chips.
Geological interpretation *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Diamond drilling allows a robust geological interpretation to be developed. Airborne magnetic data gives weight to the broad interpretation and breaks in the continuity of stratigraphy (fault offsets) provide an explanation for strike extents of mineralisation. Type and thickness of host lithology, and mineralisation, is predictable along strike and down dip. As the deposit has good grade and geological continuity the Competent Persons regard the confidence in the geological interpretation as high.
Nature of the data used and of any assumptions made.	All available data has been used to help build the geological interpretation. This includes geological logging data (lithology and structure), portable XRF multi-element data, gold assay data, and airborne magnetics.
The effect, if any, of alternative interpretations on Mineral Resource Estimation.	Modelling of the mineralisation was conducted with reference to the previous resource update, when comparison is made between the current interpretation and one completed in 2015, the differences are a result of refining the geological interpretation with further information.

Criteria and JORC Code explanation	Commentary
The use of geology in guiding and controlling Mineral Resource Estimation.	Regionally the deposit is hosted on the western margin of the Yamarna greenstone belt. The Alaric Deposit is located proximal to the North West striking Yamarna Shear Zone, a ~1.5 km wide zone of mylonitic mafic and felsic volcanics and sediments. The Main Shear, hosting the bulk of the mineralisation is constrained within a chrome rich doleritic portion of the mafic-felsic sequence of volcanoclastics and intrusives of the Archaean package, below the base of cover. There does not appear to be any mineralisation associated with supergene processes and the mineralised domains are constrained to below the saprolite-saprock boundary. Mineralisation within the sheared package has been modelled at a 0.2 g/t cut-off, including up to 2 m of internal waste. Internal higher grade zones apply a 0.5 g/t cut-off. The values of 0.2 and 0.5 g/t were recognised as inflection points in the drilling data corresponding to the non-mineralised, mineralised, and higher grade populations. Internal higher grade zones correspond to higher intensity alteration, presence of sulphides and a greater density of quartz veining. The lower grade sheared package is similarly altered and veined, but not to the same intensity. Several cross-cutting faults have been interpreted from the magnetics and distribution of interpreted lithologies. These faults appear to bound different zones of mineralisation and have been used as a control in domaining mineralisation. The trend of the main mineralisation is interpreted to be steeply dipping to the east at 65-75^{o}. The mineralisation trend can be readily observed in areas of closely spaced drilling and easily interpreted in wider spaced areas. Spatial analysis of assay data using variography supports and helps to refine the mineralisation orientations during the interpretive process.
The factors affecting continuity both of grade and geology.	Cross-cutting features interpreted as faults from the aeromagnetic imagery and IP surveys (2011 and 2017) appear to bound different zones of mineralisation.
Dimensions *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Length along strike: 2,350 m (pit shell constraint, three individual shells) Horizontal Width: 50 m (comprising a series of 5-10 m wide mineralised surfaces). Depth from surface to top of mineralisation: 1m Depth from surface to limit of Mineral Resource: 100 m. The Mineral Resource has been constrained by an optimised Whittle shell that considers all mineralisation in the geological model. The optimisation utilises mining, geotechnical and processing parameters from Gruyere Feasibility Study and an A$1,850 per ounce gold price. Only Measured, Indicated and Inferred categories within this shell are reported as Mineral Resource. Mineralisation in the geology model outside the shell is not reported.
Estimation and modelling techniques. *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Software used: Leapfrog Geo – Drill hole validation, lithology, material type, mineralisation and fault wireframes Datamine Studio RM – Drill hole validation, cross-section, plan and long-section plotting, block modelling, estimation, block model validation, classification, reporting. Snowden Supervisor – Statistics, variography, kriging neighbourhood analysis, block model validation Block model and estimation parameters: Treatment of extreme grade values (top cuts): 5 to 25 g/t Au top-cut applied to 1 m composites selected within mineralisation wireframes. Top cuts were determined by domain through analysis of histograms, log histograms, log probability plots and spatial analysis. Estimation technique: Ordinary Kriging. KNA was undertaken to optimise the search neighbourhood used for the estimation and test the parent block size. The search ellipse and selected samples by block were viewed in three dimensions to verify the parameters. A local grid is used with a rotation 20 degrees west of true north from MGA. Parent block size - 5 m X by 25 m Y by 5 m Z (parent cell estimation with full subset of points). Smallest sub cell – 0.5 m X by 5 m Y by 0.5 m Z (small X dimension is required to fill mineralisation wireframes and a small Z dimension is required to fill to material type boundaries). Discretisation - 3 X by 5 Y by 2 Z (using number of points method).

Criteria and JORC Code explanation	Commentary
	Search ellipse – aligned to mineralisation trend, dimensions range from 55-150 m X by 90-200 m Y by 20-600 m Z depending on mineralisation domain. Number of samples – maximum per drill hole = 5, first search 12 min / 40 max, second search 10 min / 60 max, volume factor 2, third search 5 min / 60 max, volume factor 4. Domain boundary conditions – A hard boundary is applied to all domains.
The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The Alaric Deposit has previously been estimated and reported using Ordinary Kriging methodologies in 2008, 2012, 2015 and 2017. Prior to 2008, estimates utilised a Multiple Indicator Kriging approach. An ID estimation was completed in 2017 as a check. Results were within acceptable limits.
The assumptions made regarding recovery of by-products.	No economic by-products.
Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	Initial metallurgical test work indicates no deleterious elements.
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The parent block size of 5 m X by 25 m Y by 5 m Z is approximately one quarter of the average drill spacing of 20 m X by 20 m Y in Indicated areas.
Any assumptions behind modelling of selective mining units.	The Selective Mining Unit chosen is a function of the Whittle optimisation and parent block size of 5 m X by 12.5 m Y by 5 m Z.
Any assumptions about correlation between variables.	No correlation between variables analysed or made; the resource is gold-only.
Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation was used at all stages to control the estimation. If geostatistics, variography and/or visual checks of the model were difficult to understand then the geological interpretation was questioned and refined.
Discussion of basis for using or not using grade cutting or capping.	Top-cuts were used in the estimate as this is the most appropriate way to control outliers when using Ordinary Kriging.
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation checks performed: ▪ QQ plot of RC vs diamond input grades. ▪ Volume of wireframe vs volume of block model ▪ Sum of gram metres prior to compositing vs sum of gram metres post compositing ▪ Negative gold grade check ▪ Model average grade vs declustered top-cut sample grade by Domain. ▪ Swath plots by Northing and elevation by Domain. ▪ Visual check of drill data vs model data in plan, section and three dimensions. All validation checks gave acceptable results. No mining, therefore no reconciliation data available.
Moisture *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Bulk density values used are a combination of local and regional data. Average bulk density values are modified by a moisture percentage so that dry tonnages are reported. Percentage reductions were: overburden and saprolite 5%, saprock 3%, transition 2% and fresh 1 %.
Cut-off parameters *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The cut-off grade used for reporting is 0.50 g/t. This has been determined from the latest regional mining, geotechnical and processing parameters developed from the Golden Highway Pre-Feasibility Study (this report). Processing costs include haulage to the proposed mill.
Mining factors or assumptions *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The mining method assumed is a conventional open pit with a contract mining fleet appropriately scaled to the size of the deposit. De facto minimum mining width is a function of optimisation parent cell size (5 m X by 12.5 m Y by 5 m Z). No allowance for dilution or recovery has been made. However, a minimum width of 2 m is used in construction of the mineralisation wireframes
Metallurgical factors or assumptions *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Metallurgical recovery assumptions used in the optimisation are informed by numerous testwork programmes completed between 1995 and 2017 on samples from the Golden Highway. The recoveries applied in the optimisation range from 85% to 92%, depending on ore type, and are supported by this testwork.

Criteria and JORC Code explanation	Commentary
Environmental factors or assumptions *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Surface waste dumps will be used to store waste material from open pit mining. A conventional tailings storage facility as defined in the Golden Highway Pre-Feasibility Study will be utilised for tailings disposal. No test work has been completed regarding potential acid mine drainage material types, however, if identified in future studies appropriate measures will be used to manage any issues.
Bulk density *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density has been determined using data available from the Golden Highway drilling, and other more detailed bulk density data in the region. Historical data from Attila was collected using the weight in air / weight Density values were modified for fresh mineralised domains, this modification was informed by bulk density values from metallurgical holes drilled down dip in mineralisation and reflects the increased percentage of quartz material in mineralised zones compared to the mafic host rock.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Bulk density is applied by weathering (material) type.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Data was coded by weathering type (material) and domain (mineralisation). Assumptions for moisture percentages were made and accounted for in the final value used for bulk density.
Classification *The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource is constrained within a Whittle shell. Blocks in the geological model above that shell have been classified as Indicated or Inferred. No measured has been classified due to inadequate drill spacing to resolve high short range variability. Several factors have been used in combination to aid the classification; ▪ Drill hole spacing ▪ Indicated - 20 mE by 20 mN ▪ Inferred – 50 mE by 100 mN. Depth of drilling and 50 m along strike from extent of drilling. Extrapolation 40 m down dip from last drill hole intercept. ▪ Geological continuity ▪ Grade continuity. ▪ Estimation quality parameters derived from the Ordinary Kriging process.
Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	All relevant factors have been taken into account in the classification of the Mineral Resource.
Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Persons' view of the deposit.
Audits or reviews *The results of any audits or reviews of Mineral Resource estimates.*	Internal geological peer reviews were held and documented. Reviews were completed with appropriate Gold Fields staff as part of the JV requirements and considered geology, estimation and inputs to optimisation.
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	Variances to the tonnage, grade and metal of the Mineral Resource estimate are expected with further definition drilling. It is the opinion of the Competent Persons that these variances will not significantly affect economic extraction of the deposit.
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource relates to global tonnage and grade estimates.
These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No previous mining.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria including JORC Code (2012) explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Mineral Resource estimate for the Alaric deposit which formed the basis of this Ore Reserve estimate was compiled by the Gold Road Competent Person(s) utilising relevant data. This Mineral Resource is described in detail in sections 1 to 3 of this Table. The Mineral Resources are reported inclusive of the Ore Reserve.
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	The Competent Person has completed several site visits to undertake the following activities: ▪ Site familiarisation and assessment of proposed locations for mining related infrastructure relative to proposed open pit locations. ▪ Inspection of site access, waste dump and ROM locations and site drainage. ▪ Inspection of surface haulage routes to the Gruyere Mill ▪ Inspected selected diamond drill core to gain an understanding of weathering profiles
Study status *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The Alaric Ore Reserve estimate is the result of a Pre-Feasibility Study (Golden Highway PFS) completed by Gold Road Resources and external consultants. The project is considered technically achievable and all aspects of operational phases involve the application of conventional technology and mining methods widely utilised in the Western Australian goldfields. Financial modelling shows the project to be economically viable under current assumptions and quoted rates. Material modifying factors such as mining, processing, metallurgical, environmental, legal, social and commercial have been considered during the Ore Reserve estimation process.
Cut-off parameters *The basis of the cut-off grade(s) or quality parameters applied.*	Variable economic cut-off grades have been applied in estimating the Ore Reserve. Cut-off grade is calculated in consideration of the following parameters: ▪ Gold price ▪ Operating costs ▪ Process recovery ▪ Transport and refining costs ▪ General and administrative cost ▪ Royalty costs.
Mining factors or assumptions *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* *The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate).* *The mining dilution factors used.* *The mining recovery factors used.* *Any minimum mining widths used.* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* *The infrastructure requirements of the selected mining methods.*	Alaric will be mined by open pit mining methods utilising conventional mining equipment. A final pit design was completed as part of the PFS. The final pit design is the basis of the Ore Reserve estimate. The selected mining method, design and extraction sequence are tailored to suit orebody characteristics, minimise dilution and ore loss, utilise proposed process plant capacity and expedite free cash generation in a safe and environmentally sustainable manner. Geotechnical modelling has been completed by an external consultant on the basis of field logging and testing of selected diamond drill core samples. The recommended geotechnical design parameters assume dry slopes on the basis of adequate dewatering ahead of mining. Four geotechnical domains were identified: ▪ Domain North-North East: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 70° and berm widths of 6 m. ▪ Domain East South East and South East: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 55° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m. ▪ Domain South West:

Criteria including JORC Code (2012) explanation	Commentary
	▪ Weathered material: batter heights of 10 m, batter angles of 55° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 70° and berm widths of 6 m. ▪ Domain North West: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 65° and berm widths of 6m ▪ Fresh material: batter heights of 20m, batter angles of 70° and berm widths of 6 m. The resource model was imported from the original Datamine™ format and re-blocked in MineSight™ to produce the mining block model for optimisation and scheduling. The re-blocking process preserved the tonnes and gold content in the ore parcels with grade averaging within the final 5 m x 25 m x 5 m mining block size. Edge dilution of 0.5 m was applied as a post process resulting in overall dilution of 20% and ore loss of 6%. A minimum mining width of 5.0 m was applied consistent with ore block dimension. Any Inferred Mineral Resources contained within the pit design has been considered as waste. The proposed mine plan includes waste rock dumps, a ROM pad, mine access road, light and heavy vehicle workshop facilities, technical services and contractor administration facilities.
Metallurgical factors or assumptions *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	Ore from Alaric will be processed at the Gruyere Mill (under construction). The Gruyere process flowsheet consists of a single stage primary crush, SABC comminution circuit followed by a conventional gravity and CIL process is proposed. This process is considered appropriate for the Alaric ore. The proposed metallurgical process is commonly used in the Australian and international gold mining industry and is considered well-tested and proven technology. In 2017, a program of comminution, extraction, and materials handling testing was carried out on 6 diamond drill core composite samples. The test-work was completed on oxide, transitional, and fresh ore types which were obtained across the Attila deposit from depths ranging between 19.9 m and 130 m. Estimated plant gold recovery ranges from 78% to 98% at 125 µm P80 grind size depending on head grade and ore type. A variable metallurgical recovery was applied accordingly in the Golden Highway PFS. The head assay of the samples from the Alaric deposit shows low concentrations of deleterious elements such as As, Te, Hg, Sb, organic carbon and base metals. Comminution, extraction, and materials handling testing has also been carried out on material selected from the Alaric composite samples to confirm compatibility with the Gruyere mill. N/A
Environmental *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Level 2 Flora and Fauna surveys have previously been completed over the Alaric deposit however these will need refreshing ahead of project permitting and development. Waste rock characterisation work has been completed and all waste types are non-acid forming and have limited metal leachate potential. Waste rock storage locations have been selected based on suitable geographical characteristics and proximity to the pit. Alaric ore is considered potentially acid forming and will be encapsulated within the Gruyere Tailings Storage Facility (TSF) comprising less than 0.5% total project tailings volume.
Infrastructure *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.*	The Alaric project site is within economic distances of existing infrastructure of the Eastern Goldfields region. Services and consumable supplies will be delivered by existing roads from Laverton some 150km to the west. The workforce will be Fly In-Fly Out (FIFO) and accommodated at the Gruyere camp during rostered days on. An on-site sealed airstrip has been built adjacent to the Gruyere camp.

Criteria including JORC Code (2012) explanation	Commentary
Costs *The derivation of, or assumptions made, regarding projected capital costs in the study.* *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* *The allowances made for royalties payable, both Government and private.*	All capital estimates are based on contractor budget estimates supplied during 2018. It is assumed that all mining equipment required for the project will be supplied by a mining contractor. Mine development costs were developed from a budget estimate supplied by a reputable mining contractor. The basis of estimate is: ▪ Contract mining ▪ Mobilisation of mining equipment and personnel from Perth ▪ Earthworks quantities determined from indicative site layout ▪ A mining schedule developed on a monthly basis The operating cost estimate accuracy is +/- 25%. Operating costs assume a FIFO scenario with various rosters on site. Mine operating costs and surface ore haulage costs have been derived from a budget estimate from a reputable mining contractor. The estimate is based on mining of scheduled material movements and mining rates, with technical services supplied by Gruyere JV employees. Mine design and schedules were prepared by competent mining engineers. Process and other operating costs were estimated from the current Gruyere Business Plan estimates on the assumption that: A conventional SABC circuit will be utilised to treat ore at a rate of 8.2 Mtpa for fresh ore with the capability to treat up to 8.8 Mtpa of oxide material Comminution grind sizes will be in the range of 106 µm to 150 µm for all material types Power will be generated on site utilising gas delivered by pipeline The process plant will be operated by Gruyere JV employees. The operating cost estimate is considered to be appropriate for the current market in the eastern goldfields of WA. No allowance is made for deleterious elements All costs are estimated in 2018 Australian dollars. Gold bullion transportation charges are derived on the basis of a quote provided by a leading industry bullion shipment organisation. Treatment and refining charges are derived from current agreement with a leading Perth Gold Refinery. An allowance has been made for all royalties, including an allowance of 2.5% of revenue for royalties payable to the Western Australian State Government and an allowance for other royalties payable to private parties (these royalties being commercially sensitive and covered by confidentiality).
Revenue factors *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	The mined ore head grades are estimated utilising industry accepted geostatistical techniques with the application of relevant mining modifying factors. Gold price and exchange rates have been determined from corporate guidance. A Life-of-mine gold price forecast of A$1,600/oz (Real 2018) is applied in the financial modelling for the Ore Reserve calculation process. This price forecast was established by agreement between Gruyere JV partners.
Market assessment *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* *A customer and competitor analysis along with the identification of likely market windows for the product.* *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	There is a transparent market for the sale of gold.
Economic *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	Discounted cash flow modelling and sensitivity analysis has been completed to evaluate the economic performance of the Ore Reserve. Key value driver inputs into the financial model included: ▪ Gold price at A$1,600/oz based on Gold Road corporate guidance ▪ Discount rate of 5% based on Gold Road corporate guidance The Ore Reserve returns a positive NPV based on the assumed commodity price and the Competent Person is satisfied that the project economics that make up the Ore Reserve retains a suitable profit margin against reasonable future commodity price movements.
Social *The status of agreements with key stakeholders and matters leading to social licence to operate.*	A Native Title Mining Agreement has been signed for the Project

Criteria including JORC Code (2012) explanation	Commentary
Other *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* *Any identified material naturally occurring risks.* *The status of material legal agreements and marketing arrangements.* *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	No material naturally occurring risks have been identified. No significant species have been identified that would be significantly impacted by the Project in a manner that could not be adequately managed. There are reasonable prospects to anticipate that contract terms as assumed in the Ore Reserves estimate could be achieved.
Classification *The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The main basis of classification of Ore Reserves is the underlying Mineral Resource classification. All Proved Ore Reserves are derived from Measured Mineral Resources and all Probable Ore Reserves derive from Indicated Mineral Resources in accordance with JORC Code (2012) guidelines. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit. No Probable Ore Reserves are derived from Measured Mineral Resources. No inferred Mineral Resource is included in the Ore Reserves. All Alaric reserves are Probable.
Audits or reviews *The results of any audits or reviews of Ore Reserve estimates.*	The PFS which forms the basis of the Ore Reserve estimate was subjected to various peer reviews: ▪ Metallurgical test-work was peer reviewed by Gold Fields technical personnel ▪ Geotechnical input was peer reviewed Gold Fields technical personnel ▪ Open pit designs, production schedules and mining cost model was subject to mining consultant's internal peer process ▪ Golden Highway PFS was peer reviewed by Gold Road personnel
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Alaric PFS resulted in a technically robust and economically viable business case. This is deemed to be an appropriate basis for a high level of confidence in the Ore Reserves estimate. In the opinion of the Competent Person, cost assumptions and modifying factors applied in the process of estimating Ore Reserves are reasonable. Gold price and exchange rate assumptions were set out by Gold Road and are subject to market forces and present an area of uncertainty. In the opinion of the Competent Person, there are reasonable prospects to anticipate that all relevant legal, environmental and social approvals to operate will be granted within the project timeframe.

GOLDEN HIGHWAY

Argos

JORC CODE 2012 EDITION TABLE 1 – SECTIONS 1 TO 4

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria and JORC Code explanation	Commentary
Sampling techniques *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The sampling has been carried out using a combination of Reverse Circulation (**RC**) and diamond drilling. Significant RAB and Aircore drilling covers the project area and is used in developing the lithological and mineralisation interpretation. However, this data is not used in the estimate and is not detailed here. Drilling was completed between 1998 and 2018 and was undertaken by several different companies. 149 RC and 11 Diamond holes were drilled angled at -60 degrees to 250 degrees azimuth (MGA). Drill core is logged geologically and marked up for assay at approximately one metre intervals based on geological observation. Drill core is cut in half by a diamond saw and half core samples submitted for assay analysis. Previously, RC chips were logged geologically, and four-metre composite spear samples are submitted for assay, with one metre RC split samples are submitted for re-assay if composites return anomalous results. From 2017 onwards, RC chips were logged geological and one metre RC split samples were collected and submitted for assay, no composite samples are collected.
Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.	Between 2010 and 2018 sampling was carried out under Gold Road's protocols and QAQC procedures as per industry best practice. 50% of the holes drilled on the Golden Highway were completed by Gold Road. Prior to 2010, sampling was carried out under the relevant company's protocols and procedures and is assumed to be industry standard practice for the time. Specific details for this historical drilling are not readily available.
Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	Details regarding sampling prior to 2010 are not readily available. Sampling under Gold Road's protocols comprises the following: The RC holes were drilled with a 5¼" or 5¾" inch face-sampling bit, 1 m samples collected through a cyclone and riffle splitter (pre 2010) or static cone splitter (post 2010), to form a 2-3 kg sample. 4 m composite samples were created by spear sampling of the total reject of the 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. 1 m sample intervals were submitted for analysis when the composite interval returned anomalous results. No composite samples were used in the resource estimate, holes containing composites through mineralised intersections were removed from the estimation. Diamond drilling was completed using an HQ or NQ drilling bit for all holes. Core is cut in half for sampling, with a half core sample sent for assay at measured lithological/mineralogical intervals. All samples were fully pulverised at the lab to -75 µm, to produce a 50 g charge for Fire Assay with either AAS finish or ICPOES finish.
Drilling techniques *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Available data indicates historical diamond drill hole diameters range in size from HQ to NQ. This drilling was completed by Drill Corp. Historical RC drill holes were completed by Drillex, DT Drilling and Drill Corp using a face sampling bit with a diameter of 5¼" or 3¾". Holes drilled under GOR operations were completed by Wallis Drilling and DDH1 (DD – HQ3 & NQ2 core) and RC completed by Wallis Drilling, Raglan Drilling and Ranger Drilling using a 5¼" and 5¾" face sampling bit.
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.*	RC recoveries were visually estimated, and recoveries recorded in the log as a percentage. Where data is available recovery of the samples was good, generally estimated to be close to 100%, except for some sample loss at the top of the hole in the Quaternary cover. All diamond core collected is dry. Drill operators measure core recoveries for every drill run completed using a 3 metre core barrel. The core recovered is physically measured by tape measure and the length recovered is recorded for every 3 m "run". Core recovery can be calculated as a percentage recovery. Almost 100% recoveries were achieved for diamond drilling.

Criteria and JORC Code explanation	Commentary
Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC face-sample bits and dust suppression were used to minimise sample loss. Drilling pressure airlifted the water column above the bottom of the hole to ensure dry sampling. RC samples were previously collected through a cyclone and riffle splitter (pre 2010) static cone splitter (post 2010) and are now collected through a cyclone and static cone splitter. The rejects are deposited in a large plastic bag and retained for potential future use. The sample required for assay is collected directly into a calico sample bag at a designed 3 to 4 kg sample mass which is optimal for full sample crushing and pulverisation at the assay laboratory. Diamond drilling collects uncontaminated fresh core samples which are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling. Protocols for drilling undertaken prior to 2010 are not readily available.
Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	RC samples were generally dry except for a few samples (<5%) that are reported as slightly damp to end of hole. Apart from for the top of the holes while drilling through the cover, there is no evidence of excessive loss of material, and at this stage no information is available regarding possible bias due to sample loss. There is no significant loss of material reported in any of the Diamond core.
Logging *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource Estimation, mining studies and metallurgical studies.*	Logging of **DDH** core records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other features of the samples. All core is photographed in the core trays, with individual photographs taken of each tray both dry and wet. Logging of **RC** chips records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging codes have been developed over time and the historical codes translated to a scheme similar to the current Gold Road logging scheme in 2007. This provides data to a level of detail adequate to support Mineral Resource Estimation activities. Some holes are logged using hand held NITON XRF to assist in lithogeochemical analysis. From 2016 most fire assay results routinely include pXRF collected at the lab and used to validate logging.
Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging of drill core captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples, and structural information from oriented drill core. All samples are stored in core trays. All core is photographed in the core trays, with individual photographs taken of each tray both dry, and wet, and photos uploaded to the Gold Road server database.
The total length and percentage of the relevant intersections logged	All holes were logged in full.
Sub-sampling techniques and sample preparation *If core, whether cut or sawn and whether quarter, half or all core taken.*	Core samples were cut in half and half core samples were collected for assay, with the remaining half core samples stored in the core trays.
If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Under Gold Road protocols 1 m RC drill samples are channelled through a static cone splitter, and an average 2-3 kg sample is collected in an un-numbered calico bag and positioned on top of the plastic bag. 4 m composite samples are generated by spear sampling of the four 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. A number of RC holes utilised 4 m composite samples for waste intervals. If composite samples returned anomalous gold values, the intervals were resampled as 1 m samples by collecting the sample produced from the riffle splitter. From 2017 onwards, no composites were collected from RC drill holes, only 1 metre cone split chip samples. Sampling procedures used prior to 2010 are not readily available.
For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were prepared and analysed at a variety of laboratories. For data prior to 2010 it is assumed the procedures undertaken are industry standard for the time. Post-2010 samples were dried, and the whole sample pulverised to 80% passing 75 µm, and a sub-sample of approx. 200 g retained. A nominal 50 g was used for the fire assay analysis. The procedure is industry standard for this type of sample.

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.</td><td>Details of historical QAQC procedures are not readily available. Reviews of QAQC and assay quality in 2002 (Golder Associates) and 2012 (Maxwell) indicate there are no significant issues with regards to quality of the historical assay data. Concerns regarding historical drilling are mitigated by drilling completed in 2011, 2012 and 2016. A QAQC report has been compiled for the 2016 drilling (Sauter Geological Services) – no significant issues were identified.</td></tr>
<tr><td>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</td><td>Gold Road protocols state duplicate samples are collected at a frequency of 1 in 40 samples for all RC drill holes.
RC duplicate samples are collected directly from the Rig-mounted static cone splitter.
No diamond duplicates were collected.
Details of historical duplicate sampling are not readily available.</td></tr>
<tr><td>Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>Sample sizes are considered appropriate to give an indication of mineralisation given the particle size and preference to keep the sample weight below 3 kg to ensure requisite grind size in a LM5 sample mill.</td></tr>
<tr><td>Quality of assay data and laboratory tests
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</td><td>Samples were analysed at a variety of laboratories using methodologies that include:

<table><tr><th>Analysis Type</th><th>Total</th></tr><tr><td>Aqua Regia Digest, unspecified AAS finish.</td><td>932</td></tr><tr><td>Fire Assay, unspecified AAS finish.</td><td>1,917</td></tr><tr><td>Fire Assay, flame AAS finish.</td><td>1,690</td></tr><tr><td>Fire Assay, graphite furnace AAS finish.</td><td>9</td></tr><tr><td>Fire Assay. Finish by ICP-MS</td><td>4</td></tr><tr><td>Screen Fire Assay, ICP-OES finish.</td><td>57</td></tr><tr><td>Fire Assay. Finish by ICP-OES</td><td>10,554</td></tr><tr><td>Unknown Method, Unknown Finish.</td><td>219</td></tr><tr><td>No method recorded</td><td></td></tr></table>
Laboratories used include:
▪ SGS – Kalgoorlie, Perth and Leonora
▪ Amdel – Perth
▪ Genalysis/Intertek – Perth
It is assumed laboratory procedures were appropriate for the time.</td></tr>
<tr><td>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</td><td>NITON handheld XRF was used on a small number of drill holes. Calibration of the hand-held XRF tools is applied at start-up. XRF results are only used for indicative analysis of lithogeochemistry and alteration and to aid logging and subsequent interpretation. Four acid digest data are also used to assist in lithogeochemical determination. pXRF analysis, conducted at the lab, is completed on most holes post 2016 to aid in lithogeochemical determination.</td></tr>
<tr><td>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>Gold Road protocol is for Field Standards (Certified Reference Materials) and Blanks inserted at a rate of 3 Standards and 3 Blanks per 100 samples. Field Duplicates for RC drilling are generally inserted at a rate of approximately 1 in 40. No duplicates are collected for diamond drill holes. At the Lab, regular assay Repeats, Lab Standards, Checks and Blanks are analysed.
For drilling at Argos, the relevant assays and QAQC numbers are as follows:

<table><tr><th>Assay and QAQC Numbers</th><th>RC</th><th>DDH</th></tr><tr><td>Total Sample Submission</td><td>16,716</td><td>3046</td></tr><tr><td>Assays</td><td>15,134</td><td>2809</td></tr><tr><td>Field Blanks</td><td>544</td><td>117</td></tr><tr><td>Field Standards</td><td>544</td><td>120</td></tr><tr><td>Field Duplicates</td><td>494</td><td>3</td></tr><tr><td>Laboratory Checks</td><td>503</td><td>96</td></tr><tr><td>Umpire Checks</td><td>-</td><td>-</td></tr></table>
Historical drilling QAQC has been reviewed by Maxwell (2012) and Golder Associates (2002) and deemed satisfactory and fit for use in Resource Estimation.</td></tr>
<tr><td>Verification of sampling and assaying
The verification of significant intersections by either independent or alternative company personnel.</td><td>Significant results are checked by the Principal Resource Geologist, General Manager Geology and Executive Director. Additional checks are completed by the Database Manager.</td></tr>
</table>

Criteria and JORC Code explanation	Commentary
The use of twinned holes.	One diamond hole (17ALDD0010) was drilled within five metres of an existing RC hole and is suitable for review as twinned holes. One down-dip metallurgical hole (18ALDD0031) was drilled within twelve metres of an existing RC hole, and comes within two metres of other RC holes on section. The spacing of the metallurgical diamond hole is sufficient to observe grade trends and short scale continuity of mineralisation. Mineralisation location and tenor is consistent across the area of close spaced drilling.
Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All logging data is stored in a Datashed/SQL database system and maintained by the Gold Road Database Manager.
Discuss any adjustment to assay data.	No assay data was adjusted. The lab's primary Au field is the one used for plotting and resource purposes. No averaging is employed.
Location of data points *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource Estimation.*	The drill hole locations were initially picked up by handheld GPS, with an accuracy of 5 m in northing and easting. All 2018 drilling was picked using DGPS to a level of accuracy of 1 cm in elevation and position. For angled drill holes, the drill rig mast is set up using a clinometer, and rigs aligned by surveyed positions and/or compass. Drillers use an electronic single-shot camera to take dip and azimuth readings inside the stainless-steel rods, at 50 m intervals, prior to August 2014, and 30 m interval, post August 2014. From 2017 onwards, drillers using a north seeking gyroscopic tool taking measurements at 30 m intervals and bottom of hole. The drill hole locations were initially picked up by handheld GPS, with an accuracy of 5 m in northing and easting. All 2018 drilling was picked using DGPS to a level of accuracy of 1 cm in elevation and position. For angled drill holes, the drill rig mast is set up using a clinometer, and rigs aligned by surveyed positions and/or compass. Drillers use an electronic single-shot camera to take dip and azimuth readings inside the stainless steel rods, at 50 m intervals, prior to August 2014, and 30 m interval, post August 2014. From 2017 onwards, drillers using a north seeking gyroscopic tool taking measurements at 30 m intervals and bottom of hole.
Specification of the grid system used.	A local grid (Attila) is used at Argos.
Quality and adequacy of topographic control.	A topographic surface was generated using LIDAR data collected in December 2015.
Data spacing and distribution *Data spacing for reporting of Exploration Results.*	Drill spacing at surface is approximately 50mE by 50mN with a small area of 25mE by 50mN, and this spacing extends to 50mE by 1-200mN at the margins of the deposit.
Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Spacing of the reported drill holes is sufficient for the geological and grade continuity of the deposit, is appropriate for Resource Estimation procedures and to report an Inferred Resource.
Whether sample compositing has been applied.	12 RC holes out of a total 159 RC holes, selected by wireframes for use in the estimation, employed compositing over waste intervals. These intervals are utilised to demonstrate geological continuity
Orientation of data in relation to geological structure *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The orientation of the drill lines (250 degrees azimuth 270 degrees local) is approximately perpendicular to the regional strike of the targeted mineralisation. Drilling angled at -60 to the west does not introduce any directional bias given that structural orientations indicate a steep easterly dip and are perpendicular to the current understanding of the mineralisation.
Sample security *The measures taken to ensure sample security.*	Pre-numbered calico bags are collected in plastic bags and transported to the laboratory. Details regarding sample security of drilling prior to 2010 are not readily available.
Audits or reviews *The results of any audits or reviews of sampling techniques and data.*	Sampling and assaying techniques are industry-standard. No specific audits or reviews have been undertaken.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria and JORC Code explanation	Commentary
Mineral tenement and land tenure status *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The RC and Diamond exploration drilling was managed by Gold Road, which since November 2016 has formed part of the 50:50 Gruyere JV with Gold Fields. This tenement is located on the Yamarna Pastoral Lease which is owned and managed by Gold Road. Tenement M38/814 is located on tenements granted in respect of land in which non-exclusive native title has been determined to exist and to be held by a group of native title holders which includes the persons on whose behalf the Yilka (WAD297/2008) and Sullivan Edwards (WAD498/2011) native title claims were brought. The determination was made by the Federal Court on 27 September 2017. The native title holders are required to nominate a body corporate to act as trustee of, or as their agent in future dealings relating to, their native title. Exploration activities in the specified "Gruyere and Central Bore Project Areas" within the Pastoral Lease are conducted in accordance with the 2016 "Gruyere and Central Bore Native Title Agreement" between Gold Road, the Yilka native title claim group and Cosmo Newberry Aboriginal Corporation. Exploration activities within the balance of the Pastoral Lease are conducted in accordance with the 2004 "Yamarna Pastoral Lease Heritage Protection Agreement" between Gold Road and Harvey Murray (the applicant in relation to the Yilka native title claim).
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area	The tenement is in good standing with the WA DMIRS.
Exploration done by other parties *Acknowledgment and appraisal of exploration by other parties.*	Exploration has been completed at Argos other parties: ▪ 1998-2006 Asarco Exploration Company Inc ▪ 2006-2010 Eleckra Mines Limited (renamed Gold Road in 2010) ▪ 2010-November 2016 Gold Road ▪ November 2016 – Present Gold Road and Gold Fields (Gruyere JV) Gold Road understands that previous exploration has been completed to industry standard. A total of 26% of drilling in the deposit area was completed prior to 2009. Recent drill programs included holes designed to test location, width and tenor of mineralisation in historic drilling.
Geology *Deposit type, geological setting and style of mineralisation.*	Gold mineralisation has been defined over 17 kilometres in strike, the anomalous structural corridor termed the Golden Highway hosts deposits at Alaric, Montagne, Argos, Orleans & Attila. The stratigraphy comprises a sequence of mafic and felsic sediments and volcanic intrusives on the western margin of the Yamarna Greenstone Belt. The sequence is metamorphosed to amphibolite facies and is strongly foliated, with the sequence striking northwest and dipping steeply to the east. Notable lithological units include the Gotham tuff - a felsic-intermediate porphyritic crystal tuff located to the east of the mineralisation, and a chloritic shale – also east of the mineralisation. A Cr-rich intermediate-mafic sediments and mafic intrusives are being consistently identified in the footwall position, west of the mineralisation where drilling intersects this position. Gold mineralisation is defined by shear zones characterised by laminated quartz-mica-amphibole schist units. High grade mineralisation occurs as 3-5+ metre, gently north plunging shoots, and is associated with pervasive albite ± chlorite ± pyrite ± pyrrhotite alteration. Mineralisation is laterally continuous, with broader zones of mineralisation associated with intense biotite ± amphibole ± pyrite alteration that can span over >50 metres width. Mineralisation has both a lithological and structural control, being contained within the intermediate to mafic units of the sequence with the morphology of high-grade zones appearing to be structurally controlled by shearing and folding.

Criteria and JORC Code explanation	Commentary
Drill hole Information *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ▪ *easting and northing of the drill hole collar* ▪ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ▪ *dip and azimuth of the hole* ▪ *down hole length and interception depth* ▪ *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	A total of 60 RC and 4 diamond holes have been completed within the deposit area since the previous Resource Estimate, refer ASX announcement dated 21 February 2018. Details of this drilling are included in the ASX announcement dated 20 September 2018 and 19 December 2018.
Data aggregation methods *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	No weighting or averaging of grades was undertaken. Grades are reported as down-hole length-weighted average grades across the full width of mineralised domains. The drill angle generates an approximation of the true-width intersection.
Relationship between mineralisation widths and intercept lengths *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	No new exploration results are reported. Intersections quoted may not match those previously reported as they are selected for Resource Estimation purposes.
The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used.
These relationships are particularly important in the reporting of Exploration Results. *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Mineralisation is hosted within a steep east dipping, NNW striking package of mafic to intermediate intrusive and sedimentary rocks. Mineralisation is hosted in shear zones parallel to stratigraphy. The general drill direction of 60^0 to 250 is approximately perpendicular to the lithological package and is a suitable drilling direction to avoid directional biases.
Diagrams *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to Figures and Tables in the body of text.
Balanced reporting *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results used in this resource have been published in previous releases; please refer to Appendix 2 for a summary of previous releases.
Other substantive exploration data *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Regional Aeromagnetic and gravity data cover the project area and assist in the geological interpretation; including the strike orientation of the stratigraphy, location of cross-cutting faults and dykes, and general regional geology. Induced Polarisation (IP) survey completed along the Golden Highway in 2017 has assisted in detection of mineralised structures and assisted geological interpretation of structures and stratigraphy. Handheld XRF data exists for some drill holes, pXRF conducted at the lab exists for most drill holes post 2016 and assists in lithogeochemical analysis. Metallurgical testwork undertaken during 2018 indicates no deleterious elements are present and mineralisation is amenable to conventional cyanidation.
Further work *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Mineralisation is not closed off along strike. Mining optimisation and feasibility studies may drive further drilling requirements.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria and JORC Code explanation	Commentary
Database integrity *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource Estimation purposes.*	Geological metadata is stored centrally in a relational SQL database with a DataShed front end. Gold Road employs a Database Manager who is responsible for the integrity and efficient use of the system. Only the Database Manager or the Data Entry Clerk has permission to modify the data. Sampling and geological logging data is collected in the field using LogChief software and uploaded digitally. The software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Sampling data is sent to, and received from, the assay laboratory digitally. Drill hole collars are picked up by differential GPS and delivered to the database digitally. Down hole surveys are delivered to the database digitally. The Mineral Resource estimate only uses a selection of RC and DDH assay data available; historical data is used, and measures of integrity applied by previous companies are not readily available
Data validation procedures used.	DataShed software has validation procedures that include constraints, library tables, triggers and stored procedures. Data that does not pass validation must be corrected first. The LogChief software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Geological logging data is checked visually in three dimensions against the existing data and geological interpretation. Assay data must pass company QAQC hurdles. Gold Road utilises QAQCR software to further analyse QAQC data, and batches which do not meet criteria are requested to be re-assayed. Sample grades are checked visually in three dimensions against the logged geology and geological interpretation. Drill hole collar pickups are checked against planned and/or actual collar locations. A hierarchical system is used to identify the most reliable down hole survey data. Drill hole traces are checked visually in three dimensions. Data validation procedures of previous companies are not readily available.
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case*	Justin Osborne is Gold Road's Executive Director of Exploration & Growth and a Competent Person. He conducts regular site visits and covers all aspects of the Project. John Donaldson is Gold Road's General Manager Geology and a Competent Person. He has completed specific site visits to focus on understanding the geology of the Golden Highway. Jane Levett is Gold Road's Principal Resource Geologist and a Competent Person and has completed several specific site visits to focus on understanding the geology of the Golden Highway from field observations, historic diamond core and RC chips.
Geological interpretation *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Diamond drilling allows a robust geological interpretation to be developed. Airborne magnetic data and induced polarisation data gives weight to the broad interpretation and breaks in the continuity of stratigraphy (fault offsets) provide an explanation for strike extents of mineralisation. Type and thickness of host lithology, and mineralisation, is predictable along strike and down dip. As the deposit has good grade and geological continuity the Competent Persons regard the confidence in the geological interpretation as high.
Nature of the data used and of any assumptions made.	All available data has been used to help build the geological interpretation. This includes geological logging data (lithology and structure), portable XRF multi-element data, gold assay data, induced polarisation and airborne magnetic surveys.
The effect, if any, of alternative interpretations on Mineral Resource Estimation.	Drilling completed in 2017, specifically targeted diamond holes enabled a refinement of the interpretation of the mineralisation domains. Six mineralised structures were modelled, including one high-grade main shear with an internal high grade domain. New understanding of stratigraphy, controls on mineralisation and associated alteration assemblages were incorporated into the mineral resource estimate.

Criteria and JORC Code explanation	Commentary
The use of geology in guiding and controlling Mineral Resource Estimation.	Regionally the deposit is hosted on the western margin of the Yamarna greenstone belt. The Argos deposit is located proximal to the North West striking Yamarna Shear Zone, a ~1.5km wide zone of mylonitic mafic and felsic volcanics and sediments. Gold mineralisation is hosted within north-striking (Golden Highway local grid), steeply east dipping shear zones. Multiple high grade zones are 3 to 5 metres in thickness, proximal to the core of the shear zones, and are characterised by laminated quartz-mica-amphibole units. Internal high-grade zones also coincide with greater intensity of alteration, increased presence of disseminated pyrite ± pyrrhotite, and a greater density of fine quartz veining. The low-grade sheared package exhibits a lower intensity of similar alteration and lesser veining. There does not appear to be any mineralisation associated with supergene processes and the mineralised domains are constrained to below the Quaternary cover boundary. Mineralisation within the sheared package has been modelled at a 0.2 g/t cut-off, including up to 2 m of internal waste. Internal higher grade zones apply a 0.5 g/t cut-off. The values of 0.2 and 0.5 g/t were recognised as inflection points in the drilling data corresponding to the non-mineralised, mineralised, and higher grade populations. Internal higher grade zones correspond to higher intensity alteration, presence of sulphides and a greater density of quartz veining. The lower grade sheared package is similarly altered and veined, but not to the same intensity. Three cross-cutting faults have been interpreted from the aeromagnetics, induced polarisation (IP) data and distribution of interpreted lithologies. These faults appear to bound different zones of mineralisation and have been used as a control in domaining mineralisation. The trend of the main mineralisation is interpreted to be steeply dipping to the east at 65-75^{o}. The mineralisation trend can be readily observed in areas of closely spaced drilling and easily interpreted in wider spaced areas. Spatial analysis of assay data using variography supports and helps to refine the mineralisation orientations during the interpretive process.
The factors affecting continuity both of grade and geology.	Cross-cutting features interpreted as faults from the aeromagnetic imagery (2011) and induced polarisation data (2017) appear to bound different zones of mineralisation, with mappable fault displacement defined for stratigraphy and mineralisation.
Dimensions *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Length along strike: 1,900 m (pit shell constraint, four individual shells) Horizontal Width: 50-60 m (comprising a series of 2-7 m wide mineralised surfaces) Depth from surface to top of Mineral Resource: 2 m Depth from surface to limit of Mineral Resource: 90 m The Mineral Resource has been constrained by an optimised Whittle shell that considers all mineralisation in the geological model. The optimisation utilises mining, geotechnical and processing parameters from Gruyere Feasibility Study and an A$1,850 per ounce gold price. Only Measured, Indicated and Inferred categories within this shell are reported as Mineral Resource. Mineralisation in the geology model outside the shell is not reported.

Criteria and JORC Code explanation	Commentary
Estimation and modelling techniques. *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Software used: Leapfrog Geo – Drill hole validation, lithology, material type, mineralisation and fault wireframes Datamine Studio RM – Drill hole validation, cross-section, plan and long-section plotting, block modelling, estimation, block model validation, classification, reporting. Snowden Supervisor – Statistics, variography, kriging neighbourhood analysis, block model validation Block model and estimation parameters: Treatment of extreme grade values (top cuts): 15 to 25 g/t Au top-cut applied to 1 m composites selected within mineralisation wireframes. Top cuts were determined by domain through analysis of histograms, log histograms, log probability plots and spatial analysis. Estimation technique: Ordinary Kriging. KNA was undertaken to optimise the search neighbourhood used for the estimation and test the parent block size. The search ellipse and selected samples by block were viewed in three dimensions to verify the parameters. A local grid is used with a rotation 20 degrees west of true north from MGA. Parent block size - 5 m X by 25 m Y by 5 m Z (parent cell estimation with full subset of points). Smallest sub cell – 1 m X by 5 m Y by 1 m Z (small X dimension is required to fill mineralisation wireframes and a small Z dimension is required to fill to material type boundaries). Discretisation - 3 X by 5 Y by 2 Z (using number of points method). Search ellipse (sub-vertical domains 5500, 5300, 5400, 5450 & 5600) – aligned to mineralisation trend, dimensions are 130 m X by 60 m Y by 10m Z. Search ellipse (sub-vertical domains 5200) – aligned to mineralisation trend, dimensions are 210 m X by 120 m Y by 15m Z. Number of samples (domains 5500, 5200) – maximum per drill hole = 5, first search 25 min / 35 max, second search 25 min / 35 max, volume factor 2, third search 5 min / 25 max, volume factor 0. Number of samples (domains 5300, 5400, 5600) – maximum per drill hole = 5, first search 10 min / 35 max, second search 10 min / 35 max, volume factor 2, third search 5 min / 25 max, volume factor 2. Number of samples (domains 5450) – maximum per drill hole = 5, first search 5 min / 35 max, second search 5 min / 35 max, volume factor 2, third search 5 min / 25 max, volume factor 4. Domain boundary conditions – A hard boundary is applied to all domains.
The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The Argos Deposit Mineral Resource estimation was previously reported during in the 2017 Resource and Reserve publication (21 February 2018). Analysis shows that this model has performed well globally and locally against the previously released model. Prior to 2017, the Argos Deposit, previously known as Alaric 1, was removed from the Yamarna Mineral Resource in 2015 as the Resource did not meet internal Gold Road standards. As such, this Mineral Resource estimation and evaluation is considered an update, however due to the previous reporting approach, where Alaric 1, 2 and 3 deposits (now known as Argos, Montagne and Alaric respectively), were grouped together and reported as a single entity it is not possible to compare the resource estimates prior to 2017. There is no previous production.
The assumptions made regarding recovery of by-products.	No economic by-products.
Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	Metallurgical test work completed at Argos has not identified any deleterious elements.
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The parent block size of 5 m X by 25 m Y by 5 m Z is approximately one quarter of the average drill spacing of 20 m X by 20 m Y in Indicated areas.
Any assumptions behind modelling of selective mining units.	The Selective Mining Unit chosen is a function of the Whittle optimisation and parent block size of 5 m X by 12.5 m Y by 5 m Z.
Any assumptions about correlation between variables.	No correlation between variables analysed or made; the resource is gold-only.
Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation was used at all stages to control the estimation. If geostatistics, variography and/or visual checks of the model were difficult to understand then the geological interpretation was questioned and refined.
Discussion of basis for using or not using grade cutting or capping.	Top-cuts were used in the estimate as this is the most appropriate way to control outliers when using Ordinary Kriging.

Criteria and JORC Code explanation	Commentary
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation checks performed: ▪ QQ plot of RC vs DDH input grades. ▪ Volume of wireframe vs volume of block model ▪ Sum of gram metres prior to compositing vs sum of gram metres post compositing ▪ Negative gold grade check ▪ Model average grade vs declustered top-cut sample grade by Domain. ▪ Swath plots by Northing and elevation by Domain. ▪ Visual check of drill data vs model data in plan, section and three dimensions. All validation checks gave acceptable results. No mining, therefore no reconciliation data available.
Moisture *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Bulk density values used are a combination of local and regional data. Average bulk density values are modified by a moisture percentage so that dry tonnages are reported. Percentage reductions were: overburden and saprolite 5%, saprock 3%, transition 2% and fresh 1 %.
Cut-off parameters *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The cut-off grade used for reporting is 0.50 g/t. This has been determined from the latest regional mining, geotechnical and processing parameters developed from the Golden Highway Pre-Feasibility Study. Processing costs include haulage to the proposed mill.
Mining factors or assumptions *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The mining method assumed is a conventional open pit with a contract mining fleet appropriately scaled to the size of the deposit. De facto minimum mining width is a function of optimisation cell size (5 m X by 12.5m Y by 5 m Z). No allowance for dilution or recovery has been made, however, a minimum width of 2 m is used in construction of the mineralisation wireframes.
Metallurgical factors or assumptions *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	It is assumed Argos ore will be processed at the Gruyere processing plant (under construction) consisting of single stage primary crush, Semi Autogenous Grinding and Ball Milling with Pebble Crushing (**SABC**) comminution circuit followed by a conventional gravity and carbon in leach (**CIL**) process is proposed. This process is considered appropriate for Argos ore. The proposed metallurgical process is commonly used in the Australian and international gold mining industry and is considered a well-tested technology. A significant program of metallurgical test-work was undertaken in 2018 on 15 samples resulting in recoveries ranging between 78% and 92% depending on grade and material type. A variable recovery was applied accordingly in the optimisation process depending on ore type.
Environmental factors or assumptions *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Surface waste dumps will be used to store waste material from open pit mining. A conventional tailings storage facility as defined in the Gruyere Feasibility Study will be utilised for tailings disposal. No test work has been completed regarding potential acid mine drainage material types, however, if identified in future studies appropriate measures will be used to manage any issues.
Bulk density *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density has been determined using limited data available from the 2017 diamond drilling, and other more detailed bulk density data in the region. All density data including historical data from the Golden Highway was collected using the weight in air / weight method.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Bulk density is applied by weathering (material) type.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Data was coded by weathering type (material) and domain (mineralisation). Assumptions for moisture percentages were made and accounted for in the final value used for bulk density.

Criteria and JORC Code explanation	Commentary
Classification *The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource is constrained within a Whittle shell. Blocks in the geological model above that shell have been classified as Inferred. Several factors have been used in combination to aid the classification; ▪ Drill hole spacing ▪ Indicated – 25 m East by 50 m North. Depth of drilling and 50 m along strike from extent of drilling. Extrapolation 20 m down dip from last drill hole intercept ▪ Inferred – 50 m East by 100 m North. Depth of drilling and 50 m along strike from extent of drilling. Extrapolation 25 m down dip from last drill hole intercept ▪ Geological continuity ▪ Grade continuity ▪ Estimation quality parameters derived from the Ordinary Kriging process
Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	All relevant factors have been taken into account in the classification of the Mineral Resource.
Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Persons' view of the deposit.
Audits or reviews *The results of any audits or reviews of Mineral Resource estimates.*	Internal geological peer reviews were held and documented. Reviews were completed with appropriate Gold Fields staff as part of the Gruyere JV requirements and considered geology, estimation and inputs to optimisation.
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	Variances to the tonnage, grade and metal of the Mineral Resource estimate are expected with further definition drilling. It is the opinion of the Competent Persons that these variances will not significantly affect economic extraction of the deposit.
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource relates to global tonnage and grade estimates.
These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No previous mining.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria including JORC Code (2012) explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Mineral Resource estimate for the Argos deposit which formed the basis of this Ore Reserve estimate was compiled by the Gold Road Competent Person(s) utilising relevant data. This Mineral Resource is described in detail in sections 1 to 3 of this Table. The Mineral Resources are reported inclusive of the Ore Reserve.
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	The Competent Person has completed several site visits to undertake the following activities: ▪ Site familiarisation and assessment of proposed locations for mining related infrastructure relative to proposed open pit locations. ▪ Inspection of site access, waste dump and ROM locations and site drainage. ▪ Inspection of surface haulage routes to the Gruyere Mill ▪ Inspected selected diamond drill core to gain an understanding of weathering profiles
Study status *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The Argos maiden Ore Reserve estimate is the result of a Pre-Feasibility Study (PFS) completed by Gold Road Resources and external consultants. The project is considered technically achievable and all aspects of operational phases involve the application of conventional technology and mining methods widely utilised in the Western Australian goldfields. Financial modelling shows the project to be economically viable under current assumptions and quoted rates. Material modifying factors such as mining, processing, metallurgical, environmental, legal, social and commercial have been considered during the maiden Ore Reserve estimation process.
Cut-off parameters *The basis of the cut-off grade(s) or quality parameters applied.*	Variable economic cut-off grades have been applied in estimating the Ore Reserve. Cut-off grade is calculated in consideration of the following parameters: ▪ Gold price ▪ Operating costs ▪ Process recovery ▪ Transport and refining costs ▪ General and administrative cost ▪ Royalty costs.
Mining factors or assumptions *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.*	Argos will be mined by open pit mining methods utilising conventional mining equipment. A final pit design was completed as part of the PFS. The final pit design is the basis of the Ore Reserve estimate. The selected mining method, design and extraction sequence are tailored to suit orebody characteristics, minimise dilution and ore loss, utilise proposed process plant capacity and expedite free cash generation in a safe and environmentally sustainable manner. Mining operating and capital costs were estimated as part of the PFS and referenced against contractor budget quotes.
The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	Geotechnical modelling has been completed by an external consultant on the basis of field logging and testing of selected diamond drill core samples and geotechnical interpretation of downhole televiewer surveys. The recommended geotechnical design parameters assume dry slopes on the basis of adequate dewatering ahead of mining. The following geotechnical domains were identified: ▪ Argos North Domain South West: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 55° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 60° and berm widths of 6 m. ▪ Argos North Domain South East: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6m

Criteria including JORC Code (2012) explanation	Commentary
	▪ Fresh material: batter heights of 20 m, batter angles of 60° and berm widths of 6 m. ▪ Argos North Domain North East and North West: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 55° and berm widths of 6 m. ▪ Argos South Domain North East and North West: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m.
The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate). *The mining dilution factors used.* *The mining recovery factors used.* *Any minimum mining widths used.* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* *The infrastructure requirements of the selected mining methods.*	The resource model was imported from the original Datamine™ format and re-blocked in MineSight™ to produce the mining block model for optimisation and scheduling. The re-blocking process preserved the tonnes and gold content in the ore parcels with grade averaging within the final 5 m by 12.5 m by 5 m mining block size. Edge dilution of 0.5 m was applied as a post process resulting in overall dilution of 9% and ore loss of 7%. A minimum mining width of 5.0 m was applied consistent with ore block dimension. Any Inferred Mineral Resources contained within the pit design has been considered as waste. The proposed mine plan includes waste rock dumps, a ROM pad, mine access road, light and heavy vehicle workshop facilities, technical services and contractor administration facilities.
Metallurgical factors or assumptions *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	Ore from Argos will be processed at the Gruyere Mill (under construction). The Gruyere process flowsheet consists of a single stage primary crush, SABC comminution circuit followed by a conventional gravity and CIL process is proposed. This process is considered appropriate for the Attila ore. The proposed metallurgical process is commonly used in the Australian and international gold mining industry and is considered to be well-tested and proven technology. In 2018, significant comminution, extraction, and materials handling testing was carried out on 15 diamond drill core composite samples. The testwork was completed on oxide, saprock, transitional, and fresh ore types which were obtained across the Argos deposit from depths ranging between 4.0 m and 126.0 m. Estimated plant gold recovery ranges from 78% to 92% at 125 µm P80 grind size depending on head grade and ore type. A variable metallurgical recovery was applied accordingly in the Golden Highway PFS. The head assay of the samples from the Argos deposit shows low concentrations of deleterious elements such as As, Te, Hg, Sb, organic carbon and base metals. Comminution, extraction, and materials handling testing has also been carried out on material selected from the Argos composite samples to confirm compatibility with the Gruyere mill. N/A
Environmental *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Level 2 Flora and Fauna surveys have previously been completed over the Argos deposit however these will need refreshing ahead of project permitting and development. Preliminary waste rock characterisation work has been completed with some waste types being potentially acid forming. Appropriate measures will be undertaken to manage any issues. Waste rock storage locations have been selected based on suitable geographical characteristics and proximity to the pit. Argos ore is considered potentially acid forming and will be encapsulated within the Gruyere Tailings Storage Facility (TSF) comprising approximately 4% total project tailings volume.

Criteria including JORC Code (2012) explanation	Commentary
Infrastructure *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.*	The Argos project site is within economic distances of existing infrastructure of the Eastern Goldfields region. Services and consumable supplies will be delivered by existing roads from Laverton some 150 km to the west. The workforce will be Fly In-Fly Out and accommodated at the Gruyere camp during rostered days on. An on-site sealed airstrip has been built adjacent to the Gruyere camp.
Costs *The derivation of, or assumptions made, regarding projected capital costs in the study.* *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* *The allowances made for royalties payable, both Government and private.*	All capital estimates are based on contractor budget estimates supplied during 2018. It is assumed that all mining equipment required for the project will be supplied by a mining contractor. Mine development costs were developed from a budget estimate supplied by a reputable mining contractor. The basis of estimate is: ▪ Contract mining ▪ Mobilisation of mining equipment and personnel from Perth ▪ Earthworks quantities determined from indicative site layout ▪ A mining schedule developed on a monthly basis The operating cost estimate accuracy is +/- 25%. Operating costs assume a FIFO scenario with various rosters on site. Mine operating costs and surface ore haulage costs have been derived from a budget estimate from a reputable mining contractor. The estimate is based on mining of scheduled material movements and mining rates, with technical services supplied by Gruyere JV employees. Mine design and schedules were prepared by competent mining engineers. Process and other operating costs were estimated from the current Gruyere Business Plan estimates on the assumption that: A conventional SABC circuit will be utilised to treat ore at a rate of 8.2 Mtpa for fresh ore with the capability to treat up to 8.8 Mtpa of oxide material Comminution grind sizes will be in the range of 106 µm to 150 µm for all material types Power will be generated on site utilising gas delivered by pipeline The process plant will be operated by Gruyere JV employees. The operating cost estimate is considered to be appropriate for the current market in the eastern goldfields of WA. No allowance is made for deleterious elements All costs are estimated in 2018 Australian dollars. Gold bullion transportation charges are derived on the basis of a quote provided by a leading industry bullion shipment organisation. Treatment and refining charges are derived from current agreement with a leading Perth Gold Refinery. An allowance has been made for all royalties, including an allowance of 2.5% of revenue for royalties payable to the Western Australian State Government and an allowance for other royalties payable to private parties (these royalties being commercially sensitive and covered by confidentiality).
Revenue factors *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	The mined ore head grades are estimated utilising industry accepted geostatistical techniques with the application of relevant mining modifying factors. Gold price and exchange rates have been determined from corporate guidance. A Life-of-mine gold price forecast of A$1,600/oz (Real 2018) is applied in the financial modelling for the Ore Reserve calculation process. This price forecast was established by agreement between Gruyere JV partners.
Market assessment *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* *A customer and competitor analysis along with the identification of likely market windows for the product.* *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	There is a transparent market for the sale of gold.

Criteria including JORC Code (2012) explanation	Commentary
Economic *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	Discounted cash flow modelling and sensitivity analysis has been completed to evaluate the economic performance of the Ore Reserve. Key value driver inputs into the financial model included: ▪ Gold price at A$1,600/oz based on Gold Road corporate guidance ▪ Discount rate of 5% based on Gold Road corporate guidance The Ore Reserve returns a positive NPV under the assumptions detailed herein. The Ore Reserve returns a positive NPV based on the assumed commodity price and the Competent Person is satisfied that the project economics that make up the Ore Reserve retains a suitable profit margin against reasonable future commodity price movements.
Social *The status of agreements with key stakeholders and matters leading to social licence to operate.*	A Native Title Mining Agreement has been signed covering the project area.
Other *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* *Any identified material naturally occurring risks.* *The status of material legal agreements and marketing arrangements.* *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	No material naturally occurring risks have been identified. No significant species have been identified that would be significantly impacted by the Project in a manner that could not be adequately managed. There are reasonable prospects to anticipate that contract terms as assumed in the Ore Reserves estimate could be achieved.
Classification *The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The main basis of classification of Ore Reserves is the underlying Mineral Resource classification. All Proved Ore Reserves are derived from Measured Mineral Resources and all Probable Ore Reserves derive from Indicated Mineral Resources in accordance with JORC Code (2012) guidelines. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit. No Probable Ore Reserves are derived from Measured Mineral Resources. No inferred Mineral Resource is included in the Ore Reserves. All Ore Reserve is in the Probable category.
Audits or reviews *The results of any audits or reviews of Ore Reserve estimates.*	The PFS which forms the basis of the Ore Reserve estimate was subjected to various peer reviews: ▪ Metallurgical test-work was peer reviewed by Gold Fields technical personnel ▪ Geotechnical input was peer reviewed Gold Fields technical personnel ▪ Open pit designs, production schedules and mining cost model was subject to mining consultant's internal peer process ▪ Golden Highway PFS was peer reviewed by Gold Road personnel
Discussion of relative accuracy/ confidence	

Criteria including JORC Code (2012) explanation	Commentary
Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The PFS which forms the basis of the Ore Reserve estimate was subjected to various peer reviews: ▪ Metallurgical test-work was peer reviewed by Gold Fields technical personnel ▪ Geotechnical input was peer reviewed Gold Fields technical personnel ▪ Open pit designs, production schedules and mining cost model was subject to mining consultant's internal peer process ▪ Golden Highway PFS was peer reviewed by Gold Road personnel
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Argos PFS resulted in a technically robust and economically viable business case. This is deemed to be an appropriate basis for a high level of confidence in the Ore Reserves estimate. In the opinion of the Competent Person, cost assumptions and modifying factors applied in the process of estimating Ore Reserves are reasonable. Gold price and exchange rate assumptions were set out by Gold Road and are subject to market forces and present an area of uncertainty. In the opinion of the Competent Person, there are reasonable prospects to anticipate that all relevant legal, environmental and social approvals to operate will be granted within the project timeframe.

GOLDEN HIGHWAY

Montagne

JORC CODE 2012 EDITION TABLE 1 – SECTIONS 1 TO 4

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria and JORC Code explanation	Commentary
Sampling techniques *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The sampling has been carried out using a combination of Reverse Circulation (**RC**) and diamond drilling. Significant RAB and Aircore drilling covers the project area and is used in developing the lithological and mineralisation interpretation. However, this data is not used in the estimate and is not detailed here. Drilling was completed between 1994 and 2018 and was undertaken by several different companies: 143 RC and 14 Diamond holes were drilled angled at -60 degrees to 250 degrees azimuth (MGAn). Drill core is logged geologically and marked up for assay at approximately one metre intervals based on geological observation. Drill core is cut in half by a diamond saw and half core samples submitted for assay analysis. RC chips are logged geologically, and four-metre composite spear samples are submitted for assay. One metre RC split samples are submitted for re-assay if composites return anomalous results.
Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.	Between 2010 and 2018 sampling was carried out under Gold Road's protocols and QAQC procedures as per industry best practice. 50% of the holes drilled on the Golden Highway were completed by Gold Road. Prior to 2010, sampling was carried out under the relevant company's protocols and procedures and is assumed to be industry standard practice for the time. Specific details for this historical drilling are not readily available.
Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	Details regarding sampling prior to 2010 are not readily available. Sampling under Gold Road's protocols comprises the following: The RC holes were drilled with a 5¼" or 5¾" inch face-sampling bit, 1 m samples collected through a cyclone and riffle splitter (pre 2010) or static cone splitter (post 2010), to form a 2-3 kg sample. 4 m composite samples were created by spear sampling of the total reject of the 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. 1 m sample intervals were submitted for analysis when the composite interval returned anomalous results. A total of 14 (1%) 4 m composite samples were used in the resource estimate where no 1 m samples were available. Diamond drilling was completed using an HQ or NQ drilling bit for all holes. Core is cut in half for sampling, with a half core sample sent for assay at measured lithological/mineralogical intervals. All samples were fully pulverised at the lab to -75 µm, to produce a 50 g charge for Fire Assay with either AAS finish or ICPOES finish.
Drilling techniques *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Available data indicates historical diamond drill hole diameters range in size from HQ to NQ. This drilling was completed by Wallis Drilling, Drillex, DrillCorp and Sanderson Drilling. Historical RC drill holes were completed by Wallis Drilling using a face sampling bit with a diameter of 5¼" or 3¾". Holes drilled under GOR operations were completed by Terra Drilling, Wallis Drilling and DDH1 (DD – HQ3 & NQ2 core) and RC completed by Wallis Drilling, Raglan Drilling and Ranger Drilling using a 5¼" and 5¾" face sampling bit.
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.*	RC recoveries were visually estimated, and recoveries recorded in the log as a percentage. Where data is available recovery of the samples was good, generally estimated to be close to 100%, except for some sample loss at the top of the hole in the Quaternary cover. All diamond core collected is dry. Drill operators measure core recoveries for every drill run completed using a 3 metre core barrel. The core recovered is physically measured by tape measure and the length recovered is recorded for every 3 m "run". Core recovery can be calculated as a percentage recovery. Almost 100% recoveries were achieved for diamond drilling.

Criteria and JORC Code explanation	Commentary
Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC face-sample bits and dust suppression were used to minimise sample loss. Drilling pressure airlifted the water column above the bottom of the hole to ensure dry sampling. RC samples are collected through a cyclone and riffle splitter (pre 2010) and static cone splitter (post 2010). The rejects are deposited in a large plastic bag and retained for potential future use. The sample required for assay is collected directly into a calico sample bag at a designed 3 to 4 kg sample mass which is optimal for full sample crushing and pulverisation at the assay laboratory. Diamond drilling collects uncontaminated fresh core samples which are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling. Protocols for drilling undertaken prior to 2010 are not readily available.
Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	RC samples were generally dry with the exception of a few samples (<5%) that are reported as slightly damp to end of hole. Apart from for the top of the holes while drilling through the cover, there is no evidence of excessive loss of material, and at this stage no information is available regarding possible bias due to sample loss. There is no significant loss of material reported in any of the Diamond core.
Logging *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource Estimation, mining studies and metallurgical studies.*	Logging of **DDH** core records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other features of the samples. All core is photographed in the core trays, with individual photographs taken of each tray both dry and wet. Logging of **RC** chips records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging codes have been developed over time and the historical codes translated to a scheme similar to the current Gold Road logging scheme in 2007. This provides data to a level of detail adequate to support Mineral Resource Estimation activities. Some holes are logged using hand held NITON XRF to assist in lithogeochemical analysis. From 2016 most fire assay results routinely include pXRF collected at the lab and used to validate logging.
Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging of drill core captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples, and structural information from oriented drill core. All samples are stored in core trays. All core is photographed in the core trays, with individual photographs taken of each tray both dry, and wet, and photos uploaded to the Gold Road server database.
The total length and percentage of the relevant intersections logged	All holes were logged in full.
Sub-sampling techniques and sample preparation *If core, whether cut or sawn and whether quarter, half or all core taken.*	Core samples were cut in half and half core samples were collected for assay, with the remaining half core samples stored in the core trays.
If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Under Gold Road protocols 1 m RC drill samples are channelled through a cone splitter, and an average 2-3 kg sample is collected in an un-numbered calico bag and positioned on top of the plastic bag. 4 m composite samples are generated by spear sampling of the four 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. A number of RC holes utilised 4 m composite samples for waste intervals. If composite samples returned anomalous gold values, the intervals were resampled as 1 m samples by collecting the sample produced from the riffle splitter. Sampling procedures used prior to 2010 are not readily available.
For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were prepared and analysed at a variety of laboratories. For data prior to 2010 it is assumed the procedures undertaken are industry standard for the time. Post-2010 samples were dried, and the whole sample pulverised to 80% passing 75 µm, and a sub-sample of approx. 200 g retained. A nominal 50 g was used for the fire assay analysis. The procedure is industry standard for this type of sample.

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.</td><td>Details of historical QAQC procedures are not readily available. Reviews of QAQC and assay quality in 2002 (Golder Associates) and 2012 (Maxwell) indicate there are no significant issues with regards to quality of the historical assay data. Concerns regarding historical drilling are mitigated by more recent drilling, with several diamond holes twinning historic RC along the trend. QAQC for the 2017 has been reviewed and no significant issues were identified.</td></tr>
<tr><td>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</td><td>Gold Road protocols state duplicate samples are collected at a frequency of 1 in 40 samples for all drill holes.
RC duplicate samples are collected directly from the Rig-mounted rotary cone splitter.
No diamond duplicates were collected.
Details of historical duplicate sampling are not readily available.</td></tr>
<tr><td>Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>Sample sizes are considered appropriate to give an indication of mineralisation given the particle size and preference to keep the sample weight below 3 kg to ensure requisite grind size in a LM5 sample mill.</td></tr>
<tr><td>Quality of assay data and laboratory tests
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</td><td>Samples were analysed at a variety of laboratories using methodologies that include:

<table><tr><th>Analysis Type</th><th>Total</th></tr><tr><td>Aqua Regia Digest, unspecified AAS finish.</td><td>654</td></tr><tr><td>Fire Assay, unspecified AAS finish.</td><td>3,888</td></tr><tr><td>Fire Assay, flame AAS finish.</td><td>360</td></tr><tr><td>Fire Assay. Finish by ICP-MS</td><td>1</td></tr><tr><td>No method recorded</td><td>94</td></tr><tr><td>Fire Assay, graphite furnace AAS finish.</td><td>1</td></tr><tr><td>Fire Assay. Finish by ICP-OES</td><td>10,503</td></tr><tr><td>Unknown Method, Unknown Finish.</td><td>237</td></tr></table>
Laboratories used include:
▪ SGS – Kalgoorlie, Perth and Leonora
▪ Amdel – Perth
▪ Genalysis – Perth
It is assumed historical laboratory procedures were appropriate for the time.</td></tr>
<tr><td>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</td><td>NITON handheld XRF was used on a small number of drill holes. Calibration of the hand-held XRF tools is applied at start-up. XRF results are only used for indicative analysis of lithogeochemistry and alteration and to aid logging and subsequent interpretation. Four acid digest data are also used to assist in lithogeochemical determination. pXRF analysis, conducted at the lab, is completed on most holes post 2016 to aid in lithogeochemical determination.</td></tr>
<tr><td>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>Gold Road protocol is for Field Standards (Certified Reference Materials) and Blanks inserted at a rate of 4 Standards and 4 Blanks per 100 samples. Field Duplicates for RC drilling are generally inserted at a rate of approximately 1 in 40. No duplicates are collected for diamond drill holes. At the Lab, regular assay Repeats, Lab Standards, Checks and Blanks are analysed.
For drilling at Montagne, the relevant assays and QAQC numbers are as follows:

<table><tr><th>Assay and QAQC Numbers</th><th>RC</th><th>DDH</th></tr><tr><td>Total Sample Submission</td><td>14,223</td><td>3,073</td></tr><tr><td>Assays</td><td>12,885</td><td>2,853</td></tr><tr><td>Field Blanks</td><td>432</td><td>110</td></tr><tr><td>Field Standards</td><td>468</td><td>110</td></tr><tr><td>Field Duplicates</td><td>438</td><td>6</td></tr><tr><td>Laboratory Checks</td><td>607</td><td>117</td></tr><tr><td>Umpire Checks</td><td>-</td><td></td></tr></table>
Historical drilling QAQC has been reviewed by Maxwell (2012) and Golder Associates (2002) and deemed satisfactory and fit for use in Resource Estimation.
Infill drilling completed in 2017 by Gold Road has allowed a comparative review (twinned hole) to be undertaken which has validated the location, width and tenor of gold mineralisation intersected in historical data.</td></tr>
</table>

Criteria and JORC Code explanation	Commentary
Verification of sampling and assaying *The verification of significant intersections by either independent or alternative company personnel.*	Significant results are checked by the Principal Resource Geologist, Geology Manager and Executive Director. Additional checks are completed by the Database Manager.
The use of twinned holes.	One diamond hole (17ALDD0011) was drilled within five metres of an existing, historic, RC hole (9EYRC0039), and is suitable for review as a twinned hole. Mineralisation location, grade and thickness is consistent between these two holes, somewhat validating the historic data.
Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All logging data is stored in a Datashed/SQL database system and maintained by the Gold Road Database Manager.
Discuss any adjustment to assay data.	No assay data was adjusted. The lab's primary Au field is the one used for plotting and resource purposes. No averaging is employed.
Location of data points *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource Estimation.*	The drill hole locations were initially picked up by handheld GPS, with an accuracy of 5 m in northing and easting. All 2017 drilling was picked using DGPS to a level of accuracy of 1 cm in elevation and position. For angled drill holes, the drill rig mast is set up using a clinometer, and rigs aligned by surveyed positions and/or compass. Drillers use an electronic single-shot camera to take dip and azimuth readings inside the stainless steel rods, at 50 m intervals, prior to August 2014, and 30 m interval, post August 2014. Downhole directional surveying using north-seeking gyroscopic tool was completed on site and live (down drill rod string) or after the rod string had been removed from the hole. Most diamond drill holes were surveyed live whereas most RC holes were surveyed upon exiting the hole.
Specification of the grid system used.	A local grid (Golden Highway grid) is used at Montagne.
Quality and adequacy of topographic control.	A topographic surface was generated using LIDAR data collected in December 2015.
Data spacing and distribution *Data spacing for reporting of Exploration Results.*	Drill spacing at surface is ranges from 25mE by 25mN to 50mE by 50mN to 100mN at the margins of the deposit.
Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Spacing of the reported drill holes is sufficient for the geological and grade continuity of the deposit, is appropriate for Resource Estimation procedures and to report Indicated, and Inferred Resources.
Whether sample compositing has been applied.	11 RC holes out of a total 79 RC holes, selected by wireframes for use in the estimation, employed compositing over waste intervals. These intervals are utilised to demonstrate geological continuity
Orientation of data in relation to geological structure *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The orientation of the drill lines (250 degrees azimuth (270 degrees local)) is approximately perpendicular to the regional strike of the targeted mineralisation.
If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drilling angled at -60 to the west does not introduce any directional bias given that structural orientations indicate a steep easterly dip and are perpendicular to the current understanding of the mineralisation.
Sample security *The measures taken to ensure sample security.*	Pre-numbered calico bags are collected in plastic bags and transported to the laboratory. Details regarding sample security of drilling prior to 2010 are not readily available.
Audits or reviews *The results of any audits or reviews of sampling techniques and data.*	Sampling and assaying techniques are industry-standard. No specific audits or reviews have been undertaken.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria and JORC Code explanation	Commentary
Mineral tenement and land tenure status *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The RC and Diamond exploration drilling was managed by Gold Road, which since November 2016 has formed part of the 50:50 Gruyere JV with Gold. This tenement is located on the Yamarna Pastoral Lease which is owned and managed by Gold Road. Tenement M38/814 is located on tenements granted in respect of land in which non-exclusive native title has been determined to exist and to be held by a group of native title holders which includes the persons on whose behalf the Yilka (WAD297/2008) and Sullivan Edwards (WAD498/2011) native title claims were brought. The determination was made by the Federal Court on 27 September 2017. The native title holders are required to nominate a body corporate to act as trustee of, or as their agent in future dealings relating to, their native title. Exploration activities in the specified "Gruyere and Central Bore Project Areas" within the Pastoral Lease are conducted in accordance with the 2016 "Gruyere and Central Bore Native Title Agreement" between Gold Road, the Yilka native title claim group and Cosmo Newberry Aboriginal Corporation. Exploration activities within the balance of the Pastoral Lease are conducted in accordance with the 2004 "Yamarna Pastoral Lease Heritage Protection Agreement" between Gold Road and Harvey Murray (the applicant in relation to the Yilka native title claim).
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area	The tenement is in good standing with the WA DMIRS.
Exploration done by other parties *Acknowledgment and appraisal of exploration by other parties.*	Exploration has been completed by other parties: ▪ 1997-2006 Asarco Exploration Company Inc ▪ 2006-2010 Eleckra Mines Limited (renamed Gold Road in 2010) ▪ 2010-November 2016 Gold Road ▪ November 2016 – Present Gold Road and Gold Fields (Gruyere JV) Gold Road understands that previous exploration has been completed to industry standard. A total of 36% of the drilling was completed prior to 2009. Specific holes have been drilled to confirm location grade and tenor with satisfactory results.
Geology *Deposit type, geological setting and style of mineralisation.*	Gold mineralisation has been defined over 17 km in strike, the anomalous structural corridor termed the Golden Highway hosts deposits at Alaric, Montagne, Argos, Orleans & Attila. The stratigraphy comprises a sequence of mafic and felsic sediments and volcanic intrusives on the western margin of the Yamarna Greenstone Belt. The sequence is metamorphosed to amphibolite facies and is strongly foliated, with the sequence striking northwest and dipping steeply to the east. Notable lithological units include the Gotham tuff - a felsic-intermediate porphyritic crystal tuff located to the east of the mineralisation, and a chloritic shale – also east of the mineralisation. A Cr-rich intermediate-mafic sediments and mafic intrusives are being consistently identified in the footwall position, west of the mineralisation where drilling intersects this position. Gold mineralisation is defined by shear zones characterised by laminated quartz-mica-amphibole schist units. High grade mineralisation occurs as 3-5+ metre, gently north plunging shoots, and is associated with pervasive albite ± chlorite ± pyrite ± pyrrhotite alteration. Mineralisation is laterally continuous, with broader zones of mineralisation associated with intense biotite ± amphibole ± pyrite alteration that can span over >50 metres width. Mineralisation has both a lithological and structural control, being contained within the intermediate to mafic units of the sequence with the morphology of high grade zones appearing to be structurally controlled by shearing and folding.

Criteria and JORC Code explanation	Commentary
Drill hole Information *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ▪ easting and northing of the drill hole collar ▪ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ▪ dip and azimuth of the hole ▪ down hole length and interception depth ▪ hole length. *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	All relevant RC and Diamond holes included in the reported resource estimation have been previously reported in AXS announcements, listed in Appendix 2
Data aggregation methods *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	No weighting or averaging of grades was undertaken. Grades are reported as down-hole length-weighted average grades across the full width of mineralised domains. The drill angle generates an approximation of the true-width intersection.
Relationship between mineralisation widths and intercept lengths *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	No new exploration results are reported. Intersections quoted may not match those previously reported as they are selected for Resource Estimation purposes.
The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used.
These relationships are particularly important in the reporting of Exploration Results. *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Mineralisation is hosted within a steep east dipping, NNW striking package of mafic to intermediate intrusive and sedimentary rocks. Mineralisation is hosted in shear zones parallel to stratigraphy. The general drill direction of 60^0 to 250 is approximately perpendicular to the lithological package and is a suitable drilling direction to avoid directional biases.
Diagrams *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to Figures and Tables in the body of text.
Balanced reporting *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results used in this resource have been published in previous releases; please refer to Appendix 2 for a summary of previous releases.
Other substantive exploration data *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Regional Aeromagnetic and gravity data cover the project area and assist in the geological interpretation; including the strike orientation of the stratigraphy, location of cross-cutting faults and dykes Induced Polarisation (IP) survey completed along the Golden Highway in 2017 has assisted in detection of mineralised structures and assisted geological interpretation of structures and stratigraphy. Handheld XRF data exists for some drill holes, pXRF conducted at the lab exists for most drill holes post 2016 and assists in lithogeochemical analysis. Metallurgical testwork undertaken at the deposits indicates no deleterious elements are present and mineralisation is amenable to conventional cyanidation.
Further work *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Mineralisation is not closed off along strike. Mining optimisation and feasibility studies may drive further drilling requirements.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria and JORC Code explanation	Commentary
Database integrity *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource Estimation purposes.*	Geological metadata is stored centrally in a relational SQL database with a DataShed front end. Gold Road employs a Database Manager who is responsible for the integrity and efficient use of the system. Only the Database Manager or the Data Entry Clerk has permission to modify the data. Sampling and geological logging data is collected in the field using LogChief software and uploaded digitally. The software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Sampling data is sent to, and received from, the assay laboratory digitally. Drill hole collars are picked up by differential GPS (DGPS) and delivered to the database digitally. Down hole surveys are delivered to the database digitally. The Mineral Resource estimate only uses a selection of RC and DDH assay data available; historical data is used, and measures of integrity applied by previous companies are not readily available
Data validation procedures used.	DataShed software has validation procedures that include constraints, library tables, triggers and stored procedures. Data that does not pass validation must be corrected first. The LogChief software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Geological logging data is checked visually in three dimensions against the existing data and geological interpretation. Assay data must pass company QAQC hurdles. Gold Road utilises QAQCR software to further analyse QAQC data, and batches which do not meet criteria are requested to be re-assayed. Sample grades are checked visually in three dimensions against the logged geology and geological interpretation. Drill hole collar pickups are checked against planned and/or actual collar locations. A hierarchical system is used to identify the most reliable down hole survey data. Drill hole traces are checked visually in three dimensions. Data validation procedures of previous companies are not readily available.
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case*	Justin Osborne is Gold Road's Executive Director of Exploration & Growth and a Competent Person. He conducts regular site visits and covers all aspects of the Project. John Donaldson is Gold Road's General Manager Geology and a Competent Person. He has completed specific site visits to focus on understanding the geology of the Golden Highway trend. Jane Levett is Gold Road's Principal Resource Geologist and a Competent Person and has completed several specific site visits to focus on understanding the geology of the Golden Highway trend from field observations, historic diamond core and RC chips.
Geological interpretation *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Diamond drilling allows a robust geological interpretation to be developed. Airborne magnetic data and induced polarisation data gives weight to the broad interpretation and breaks in the continuity of stratigraphy (fault offsets) provide an explanation for strike extents of mineralisation. Type and thickness of host lithology, and mineralisation, is predictable along strike and down dip. As the deposit has good grade and geological continuity the Competent Persons regard the confidence in the geological interpretation as high.
Nature of the data used and of any assumptions made.	All available data has been used to help build the geological interpretation. This includes geological logging data (lithology and structure), portable XRF multi-element data, gold assay data, induced polarisation and airborne magnetic surveys.
The effect, if any, of alternative interpretations on Mineral Resource Estimation.	Modelling of the mineralisation was conducted with reference to the previous resource update, when comparison is made between the current interpretation and one completed in 2017, the differences are a result of refining the geological interpretation with further information. New IP survey data and refined understanding of stratigraphy has improved geological modelling since the previous resource update.

Criteria and JORC Code explanation	Commentary
The use of geology in guiding and controlling Mineral Resource Estimation.	Regionally the deposit is hosted on the western margin of the Yamarna greenstone belt. The Montagne deposit is located proximal to the North West striking Yamarna Shear Zone, a ~1.5km wide zone of mylonitic mafic and felsic volcanics and sediments. The Main Shear, hosting the bulk of the mineralisation is constrained within a chrome rich doleritic portion of the mafic-felsic sequence of volcanoclastics and intrusives of the Archaean package, below the base of cover. There does not appear to be any mineralisation associated with supergene processes and the mineralised domains are constrained to below the saprolite-saprock boundary. Mineralisation within the sheared package has been modelled at a 0.2 g/t cut-off, including up to 2 m of internal waste. This value was recognised as an inflection point in the drilling data corresponding to the non-mineralised, and mineralised populations. Higher grade zones correspond to higher intensity alteration, presence of sulphides and a greater density of quartz veining. The lower grade sheared package is similarly altered and veined, but not to the same intensity. Several cross-cutting faults have been interpreted from the magnetics and distribution of interpreted lithologies. These faults appear to bound different zones of mineralisation and have been used as a control in domaining mineralisation. The trend of the main mineralisation is interpreted to be steeply dipping to the east at 65-75^{o}. The mineralisation trend can be readily observed in areas of closely spaced drilling and easily interpreted in wider spaced areas. Spatial analysis of assay data using variography supports and helps to refine the mineralisation orientations during the interpretive process.
The factors affecting continuity both of grade and geology.	Cross-cutting features interpreted as faults from the aeromagnetic imagery (2011) and induced polarisation data (2017) appear to bound different zones of mineralisation, with mappable fault displacement defined for stratigraphy and mineralisation.
Dimensions *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Length along strike: 1,000 m (pit shell constraint, one shell1) Horizontal Width: 50 m (comprising a series of 5-10 m wide mineralised surfaces). Depth from surface to top of mineralisation: 5 to 25m. Depth from surface to limit of Mineral Resource: 100 m. The Mineral Resource has been constrained by an optimised Whittle shell that considers all mineralisation in the geological model. The optimisation utilises mining, geotechnical and processing parameters from Gruyere Operational Plan and an A$1,850 per ounce gold price. Only Measured, Indicated and Inferred categories within this shell are reported as Mineral Resource. Mineralisation outside the shell is not reported.

Criteria and JORC Code explanation	Commentary
Estimation and modelling techniques *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Software used: Leapfrog Geo – Drill hole validation, lithology, material type, mineralisation and fault wireframes Datamine Studio RM – Drill hole validation, cross-section, plan and long-section plotting, block modelling, estimation, block model validation, classification, reporting. Snowden Supervisor – Statistics, variography, kriging neighbourhood analysis, block model validation Block model and estimation parameters: Treatment of extreme grade values (top cuts): 10 to 25 g/t Au top-cut applied to 2 m composites selected within mineralisation wireframes. Top cuts were determined by domain through analysis of histograms, log histograms, log probability plots and spatial analysis. Estimation technique: Ordinary Kriging. KNA was undertaken to optimise the search neighbourhood used for the estimation and test the parent block size. The search ellipse and selected samples by block were viewed in three dimensions to verify the parameters. A local grid is used with a rotation 20 degrees west of true north from MGA. Parent block size - 5 m X by 25 m Y by 10 m Z (parent cell estimation with full subset of points). Smallest sub cell – 1 m X by 5 m Y by 1 m Z (small X dimension is required to fill mineralisation wireframes and a small Z dimension is required to fill to material type boundaries). Discretisation - 3 X by 5 Y by 2 Z (using number of points method). Search ellipse – aligned to mineralisation trend, dimensions range from 10 m X by 140 m Y by 75 m Z for each mineralisation domain. Number of samples – maximum per drill hole = 5, first search 12 min / 30 max, second search 10 min / 40 max, volume factor 2, third search 5 min / 60 max, volume factor 4. Domain boundary conditions – A hard boundary is applied to all domains.
The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The Montagne Deposit, previously known as Alaric 2, was removed from the Yamarna Mineral Resource in 2015 as the Resource did not meet internal Gold Road standards. The Mineral Resource was re-instated in 2017 after significant further work. In 2018 significant work was undertaken in association with pre-feasibility level studies. The resulting estimate is not significantly different from previous but represents a development in understanding associated with increased drill spacing.
The assumptions made regarding recovery of by-products.	No economic by-products.
Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	Metallurgical test work at the deposit indicates no deleterious elements are present.
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The parent block size of 5 m X by 25 m Y by 10 m Z is approximately one quarter of the average drill spacing of 25 m X by 25 m Y in Indicated areas.
Any assumptions behind modelling of selective mining units.	The Selective Mining Unit chosen is a function of the Whittle optimisation and parent block size of 5 m X by 12.5 m Y by 5 m Z.
Any assumptions about correlation between variables.	No correlation between variables analysed or made; the resource is gold-only.
Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation was used at all stages to control the estimation. If geostatistics, variography and/or visual checks of the model were difficult to understand then the geological interpretation was questioned and refined.
Discussion of basis for using or not using grade cutting or capping.	Top-cuts were used in the estimate as this is the most appropriate way to control outliers when using Ordinary Kriging.

Criteria and JORC Code explanation	Commentary
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation checks performed: ▪ QQ plot of RC vs DDH input grades. ▪ Volume of wireframe vs volume of block model ▪ Sum of gram metres prior to compositing vs sum of gram metres post compositing ▪ Negative gold grade check ▪ Model average grade vs declustered top-cut sample grade by Domain. ▪ Swath plots by Northing and elevation by Domain. ▪ Visual check of drill data vs model data in plan, section and three dimensions. All validation checks gave acceptable results. No mining, therefore no reconciliation data available.
Moisture *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Bulk density values used are a combination of local and regional data. Average bulk density values are modified by a moisture percentage so that dry tonnages are reported. Percentage reductions were: overburden and saprolite 5%, saprock 3%, transition 2% and fresh 1 %.
Cut-off parameters *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The cut-off grade used for reporting is 0.50 g/t. This has been determined from the latest regional mining, geotechnical and processing parameters developed from the Golden Highway Pre Operational Plan. Processing costs include haulage to the proposed mill.
Mining factors or assumptions *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The mining method assumed is a conventional open pit with a contract mining fleet appropriately scaled to the size of the deposit. De facto minimum mining width is a function of (re-blocked) parent cell size (5 m X by 12.5 m Y by 5 m Z). No allowance for dilution or recovery has been made. However, a minimum selection of 2m downhole is invoked at the mineralisation interpretation stage.
Metallurgical factors or assumptions *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	It is assumed Montagne ore will be processed at the Gruyere processing plant (under construction) consisting of single stage primary crush, Semi Autogenous Grinding and Ball Milling with Pebble Crushing (SABC) comminution circuit followed by a conventional gravity and carbon in leach (CIL) process is proposed. This process is considered appropriate for Montagne ore. The proposed metallurgical process is commonly used in the Australian and international gold mining industry and is considered a well-tested technology. A significant program of metallurgical test-work was undertaken in 2018 on 16 samples resulting in recoveries ranging between 80% and 90% depending on grade and material type. A variable recovery was applied accordingly in the optimisation process depending on ore type.
Environmental factors or assumptions *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Surface waste dumps will be used to store waste material from open pit mining. Tailings will be disposed of in the Gruyere tailings storage facility. Preliminary waste rock classification test work was completed during 2018 with some rock-types being potentially acid forming. Appropriate measures will be undertaken to manage any issues.
Bulk density *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density has been determined using data available from the Golden Highway drilling, and other more detailed bulk density data in the region. Historical data from the Golden Highway was collected using the weight in air / weight in water method.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Bulk density is applied by weathering (material) type.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Data was coded by weathering type (material) and domain (mineralisation). Assumptions for moisture percentages were made and accounted for in the final value used for bulk density.

Criteria and JORC Code explanation	Commentary
Classification *The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource is constrained within a Whittle shell. Blocks in the geological model above that shell have been classified as Indicated or Inferred. No measured has been classified due to inadequate drill spacing to resolve high short range variability. Several factors have been used in combination to aid the classification; ▪ Drill hole spacing ▪ Indicated - 25 m East by 25 m North ▪ Inferred – 25 m East by 100m North. Depth of drilling and 50 m along strike from extent of drilling. Extrapolation 40 m down dip from last drill hole intercept. ▪ Geological continuity. ▪ Grade continuity. ▪ Estimation quality parameters derived from the Ordinary Kriging process.
Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	All relevant factors have been taken into account in the classification of the Mineral Resource.
Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Persons' view of the deposit.
Audits or reviews *The results of any audits or reviews of Mineral Resource estimates.*	Internal geological peer reviews were held and documented. Reviews were completed with appropriate Gold Fields staff as part of the Gruyere JV requirements and considered geology, estimation and inputs to optimisation.
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	Variances to the tonnage, grade and metal of the Mineral Resource estimate are expected with further definition drilling. It is the opinion of the Competent Persons that these variances will not significantly affect economic extraction of the deposit.
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource relates to global tonnage and grade estimates.
These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No previous mining.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria including JORC Code (2012) explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Mineral Resource estimate for the Montagne deposit which formed the basis of this Ore Reserve estimate was compiled by the Gold Road Competent Person(s) utilising relevant data. This Mineral Resource is described in detail in sections 1 to 3 of this Table. The Mineral Resources are reported inclusive of the Ore Reserve.
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	The Competent Person has completed several site visits to undertake the following activities: ▪ Site familiarisation and assessment of proposed locations for mining related infrastructure relative to proposed open pit locations. ▪ Inspection of site access, waste dump and ROM locations and site drainage. ▪ Inspection of surface haulage routes to the Gruyere Mill ▪ Inspected selected diamond drill core to gain an understanding of weathering profiles
Study status *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The Montagne maiden Ore Reserve estimate is the result of the Golden Highway Pre-Feasibility Study (PFS) completed by Gold Road Resources and external consultants. The project is considered technically achievable and all aspects of operational phases involve the application of conventional technology and mining methods widely utilised in the Western Australian goldfields. Financial modelling shows the project to be economically viable under current assumptions and quoted rates. Material modifying factors such as mining, processing, metallurgical, environmental, legal, social and commercial have been considered during the maiden Ore Reserve estimation process.
Cut-off parameters *The basis of the cut-off grade(s) or quality parameters applied.*	Variable economic cut-off grades have been applied in estimating the Ore Reserve. Cut-off grade is calculated in consideration of the following parameters: ▪ Gold price ▪ Operating costs ▪ Process recovery ▪ Transport and refining costs ▪ General and administrative cost ▪ Royalty costs.
Mining factors or assumptions *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.*	Montagne will be mined by open pit mining methods utilising conventional mining equipment. A final pit design was completed as part of the Golden Highway PFS. The final pit design is the basis of the Ore Reserve estimate. The selected mining method, design and extraction sequence are tailored to suit orebody characteristics, minimise dilution and ore loss, utilise proposed process plant capacity and expedite free cash generation in a safe and environmentally sustainable manner.
The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	Geotechnical modelling has been completed by an external consultant on the basis of field logging and testing of selected diamond drill core samples and interpretation of down-hole televiewer data. The recommended geotechnical design parameters assume dry slopes on the basis of adequate dewatering ahead of mining. Four geotechnical domains were identified: ▪ Domain South West: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 60° and berm widths of 6 m. ▪ Domain South East: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6m ▪ Fresh material: batter heights of 20 m, batter angles of 60° and berm widths of 6 m. ▪ Domain North West:

Criteria including JORC Code (2012) explanation	Commentary
	▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 60° and berm widths of 6 m. ▪ Domain North East: ▪ Weathered material: batter heights of 10 m, batter angles of 50° and berm widths of 5 m ▪ Transitional Material: batter heights of 20 m, batter angles of 50° and berm widths of 6 m ▪ Fresh material: batter heights of 20 m, batter angles of 65° and berm widths of 6 m.
The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate). *The mining dilution factors used.* *The mining recovery factors used.* *Any minimum mining widths used.* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* *The infrastructure requirements of the selected mining methods.*	The resource model was imported from the original Datamine™ format and re-blocked in MineSight™ to produce the mining block model for optimisation and scheduling. The re-blocking process preserved the tonnes and gold content in the ore parcels with grade averaging within the final 5 m by 12.5 m by 5 m mining block size. Edge dilution of 0.5 m was applied as a post process resulting in overall dilution of 10% and ore loss of 12%. A minimum mining width of 5.0 m was applied consistent with ore block dimension. Any Inferred Mineral Resources contained within the pit design has been considered as waste. The proposed mine plan includes waste rock dumps, a ROM pad, mine access road, light and heavy vehicle workshop facilities, technical services and contractor administration facilities.
Metallurgical factors or assumptions *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	Ore from Montagne will be processed at the Gruyere Mill (under construction). The Gruyere process flowsheet consists of a single stage primary crush, SABC comminution circuit followed by a conventional gravity and CIL process is proposed. This process is considered appropriate for the Montagne ore. The proposed metallurgical process is commonly used in the Australian and international gold mining industry and is considered to be well-tested and proven technology. In 2018, significant comminution, extraction, and materials handling testing was carried out on 16 diamond drill core composite samples. The testwork was completed on oxide, saprock, transitional, and fresh ore types which were obtained across the Montagne deposit from depths ranging between 5 m and 86 m. Estimated plant gold recovery ranges from 80% to 90% at 125 µm P80 grind size depending on head grade and ore type. A variable metallurgical recovery was applied accordingly in the Golden Highway PFS. The head assay of the samples from the Montagne deposit shows low concentrations of deleterious elements such as As, Te, Hg, Sb, organic carbon and base metals. Significant comminution, extraction, and materials handling testing has also been carried out on material selected from the Montagne composite samples to confirm compatibility with the Gruyere mill. N/A
Environmental *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Level 2 Flora and Fauna surveys have previously been completed over the Argos deposit however these will need refreshing ahead of project permitting and development. Preliminary waste rock characterisation work has been completed with some waste types being potentially acid forming. Appropriate measures will be undertaken to manage any issues. Waste rock storage locations have been selected based on suitable geographical characteristics and proximity to the pit.
Infrastructure *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.*	The Montagne project site is within economic distances of existing infrastructure of the Eastern Goldfields region. Services and consumable supplies will be delivered by existing roads from Laverton some 150 km to the west. The workforce will be Fly In-Fly Out and accommodated at the Gruyere camp during rostered days on. An on-site sealed airstrip has been built adjacent to the Gruyere camp.

Criteria including JORC Code (2012) explanation	Commentary
Costs *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* *The allowances made for royalties payable, both Government and private.*	All capital estimates are based on contractor budget estimates supplied during 2018. It is assumed that all mining equipment required for the project will be supplied by a mining contractor. Mine development costs were developed from a budget estimate supplied by a reputable mining contractor. The basis of estimate is: ▪ Contract mining ▪ Mobilisation of mining equipment and personnel from Perth ▪ Earthworks quantities determined from indicative site layout ▪ A mining schedule developed on a monthly basis The operating cost estimate accuracy is +/- 25%. Operating costs assume a FIFO scenario with various rosters on site. Mine operating costs and surface ore haulage costs have been derived from a budget estimate from a reputable mining contractor. The estimate is based on mining of scheduled material movements and mining rates, with technical services supplied by Gruyere JV employees. Mine design and schedules were prepared by competent mining engineers. Process and other operating costs were estimated from the current Gruyere Business Plan estimates on the assumption that: A conventional SABC circuit will be utilised to treat ore at a rate of 8.2 Mtpa for fresh ore with the capability to treat up to 8.8 Mtpa of oxide material Comminution grind sizes will be in the range of 106 µm to 150 µm for all material types Power will be generated on site utilising gas delivered by pipeline The process plant will be operated by Gruyere JV employees. The operating cost estimate is considered to be appropriate for the current market in the eastern goldfields of WA. No allowance is made for deleterious elements All costs are estimated in 2018 Australian dollars. Gold bullion transportation charges are derived on the basis of a quote provided by a leading industry bullion shipment organisation. Treatment and refining charges are derived from current agreement with a leading Perth Gold Refinery. An allowance has been made for all royalties, including an allowance of 2.5% of revenue for royalties payable to the Western Australian State Government and an allowance for other royalties payable to private parties (these royalties being commercially sensitive and covered by confidentiality).
Revenue factors *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	The mined ore head grades are estimated utilising industry accepted geostatistical techniques with the application of relevant mining modifying factors. Gold price and exchange rates have been determined from corporate guidance. A Life-of-mine gold price forecast of A$1,600/oz (Real 2018) is applied in the financial modelling for the Ore Reserve calculation process. This price forecast was established by agreement between Gruyere JV partners.
Market assessment *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* *A customer and competitor analysis along with the identification of likely market windows for the product.* *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	There is a transparent market for the sale of gold.

Criteria including JORC Code (2012) explanation	Commentary
Economic *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	Discounted cash flow modelling and sensitivity analysis has been completed to evaluate the economic performance of the Ore Reserve. Key value driver inputs into the financial model included: ▪ Gold price at A$1,600/oz based on Gold Road corporate guidance ▪ Discount rate of 5% based on Gold Road corporate guidance The Ore Reserve returns a positive NPV under the assumptions detailed herein. The Ore Reserve returns a positive NPV based on the assumed commodity price and the Competent Person is satisfied that the project economics that make up the Ore Reserve retains a suitable profit margin against reasonable future commodity price movements.
Social *The status of agreements with key stakeholders and matters leading to social licence to operate.*	A Native Title Mining Agreement has been signed covering the project area.
Other *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* *Any identified material naturally occurring risks.* *The status of material legal agreements and marketing arrangements.* *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	No material naturally occurring risks have been identified. No significant species have been identified that would be significantly impacted by the Project in a manner that could not be adequately managed. There are reasonable prospects to anticipate that contract terms as assumed in the Ore Reserves estimate could be achieved.
Classification *The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The main basis of classification of Ore Reserves is the underlying Mineral Resource classification. All Proved Ore Reserves are derived from Measured Mineral Resources and all Probable Ore Reserves derive from Indicated Mineral Resources in accordance with JORC Code (2012) guidelines. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit. No Probable Ore Reserves are derived from Measured Mineral Resources. No inferred Mineral Resource is included in the Ore Reserves.
Audits or reviews *The results of any audits or reviews of Ore Reserve estimates.*	The PFS which forms the basis of the Ore Reserve estimate was subjected to various peer reviews: ▪ Metallurgical test-work was peer reviewed by Gold Fields technical personnel ▪ Geotechnical input was peer reviewed Gold Fields technical personnel ▪ Open pit designs, production schedules and mining cost model was subject to mining consultant's internal peer process ▪ Golden Highway PFS was peer reviewed by Gold Road personnel
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Golden Highway PFS resulted in a technically robust and economically viable business case. This is deemed to be an appropriate basis for a high level of confidence in the Ore Reserves estimate. In the opinion of the Competent Person, cost assumptions and modifying factors applied in the process of estimating Ore Reserves are reasonable. Gold price and exchange rate assumptions were set out by Gold Road and are subject to market forces and present an area of uncertainty. In the opinion of the Competent Person, there are reasonable prospects to anticipate that all relevant legal, environmental and social approvals to operate will be granted within the project timeframe.

GOLDEN HIGHWAY

Orleans

JORC CODE 2012 EDITION TABLE 1 – SECTIONS 1 TO 3

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria and JORC Code explanation	Commentary
Sampling techniques *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The sampling has been carried out using a combination of Reverse Circulation (**RC**) and diamond drilling. Significant RAB and Aircore drilling covers the project area and is used in developing the lithological and mineralisation interpretation. However, this data is not used in the estimate and is not detailed here. Drilling was completed between 1983 and 2017 and was undertaken by several different companies. 84 RC and 4 Diamond holes were drilled angled at -60 degrees to 250 degrees azimuth (MGAn). Drill core is logged geologically and marked up for assay at approximately one metre intervals based on geological observation. Drill core is cut in half by a diamond saw and half core samples submitted for assay analysis. Previously, RC chips were logged geologically, and four metre composite spear samples are submitted for assay, with one metre RC split samples are submitted for re-assay if composites return anomalous results. From 2017 onwards, RC chips were logged geological and one metre RC split samples were collected and submitted for assay, no composite samples are collected.
Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.	Between 2010 and 2017 sampling was carried out under Gold Road's protocols and QAQC procedures as per industry best practice. 50% of the holes drilled on the Attila –Alaric trend were completed by Gold Road. Prior to 2010, sampling was carried out under the relevant company's protocols and procedures and is assumed to be industry standard practice for the time. Specific details for this historical drilling are not readily available.
Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	Details regarding sampling prior to 2010 are not readily available. Sampling under Gold Road's protocols comprises the following: The RC holes were drilled with a 5¼" or 5¾" inch face-sampling bit, 1 m samples collected through a cyclone and riffle splitter, to form a 2-3 kg sample. 4 m composite samples were created by spear sampling of the total reject of the 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. 1 m sample intervals were submitted for analysis when the composite interval returned anomalous results. No composite samples were used in the resource estimate, holes containing composites through mineralised intersections were removed from the estimation. Diamond drilling was completed using an HQ or NQ drilling bit for all holes. Core is cut in half for sampling, with a half core sample sent for assay at measured lithological/mineralogical intervals. All samples were fully pulverised at the lab to -75 µm, to produce a 50 g charge for Fire Assay with either AAS finish or ICPOES finish.
Drilling techniques *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Available data indicates historical diamond drill hole diameters range in size from HQ to NQ. This drilling was completed by Drill Corp. Historical RC drill holes were completed by Drillex, DT Drilling and Drill Corp using a face sampling bit with a diameter of 5¼" or 3¾". Holes drilled under GOR operations were completed by DDH1 (DD – HQ3 & NQ2 core) and RC completed by Wallis Drilling, Raglan Drilling and Ranger Drilling using a 5¼" and 5¾" face sampling bit.
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.*	RC recoveries were visually estimated, and recoveries recorded in the log as a percentage. Where data is available recovery of the samples was good, generally estimated to be close to 100%, except for some sample loss at the top of the hole in the Quaternary cover. All diamond core collected is dry. Drill operators measure core recoveries for every drill run completed using a 3 metre core barrel. The core recovered is physically measured by tape measure and the length recovered is recorded for every 3 m "run". Core recovery can be calculated as a percentage recovery. Almost 100% recoveries were achieved for diamond drilling.

Criteria and JORC Code explanation	Commentary
Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC face-sample bits and dust suppression were used to minimise sample loss. Drilling pressure airlifted the water column above the bottom of the hole to ensure dry sampling. RC samples were previously collected through a cyclone and riffle splitter and are now collected through a cyclone and static cone splitter. The rejects are deposited in a large plastic bag and retained for potential future use. The sample required for assay is collected directly into a calico sample bag at a designed 3 to 4 kg sample mass which is optimal for full sample crushing and pulverisation at the assay laboratory. Diamond drilling collects uncontaminated fresh core samples which are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling. Protocols for drilling undertaken prior to 2010 are not readily available.
Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	RC samples were generally dry with the exception of a few samples (<5%) that are reported as slightly damp to end of hole. Apart from for the top of the holes while drilling through the cover, there is no evidence of excessive loss of material, and at this stage no information is available regarding possible bias due to sample loss. There is no significant loss of material reported in any of the Diamond core.
Logging *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Logging of **DDH** core records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other features of the samples. All core is photographed in the core trays, with individual photographs taken of each tray both dry and wet. Logging of **RC** chips records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging codes have been developed over time and the historical codes translated to a scheme similar to the current Gold Road logging scheme in 2007. This provides data to a level of detail adequate to support Mineral Resource Estimation activities. Some holes are logged using hand held Thermo Niton portable XRF to assist in lithogeochemical analysis. From 2016 most fire assay results routinely include Olympus portable XRF (pXRF) collected at the lab and used to validate logging.
Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging of drill core captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples, and structural information from oriented drill core. All samples are stored in core trays. All core is photographed in the core trays, with individual photographs taken of each tray both dry, and wet, and photos uploaded to the Gold Road server database.
The total length and percentage of the relevant intersections logged	All holes were logged in full.
Sub-sampling techniques and sample preparation *If core, whether cut or sawn and whether quarter, half or all core taken.*	Core samples were cut in half and half core samples were collected for assay, with the remaining half core samples stored in the core trays.
If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Under Gold Road protocols 1 m RC drill samples are channelled through a static cone splitter, and an average 2-3 kg sample is collected in an un-numbered calico bag and positioned on top of the plastic bag. 4 m composite samples are generated by spear sampling of the four 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. A number of RC holes utilised 4 m composite samples for waste intervals. If composite samples returned anomalous gold values, the intervals were resampled as 1 m samples by collecting the sample produced from the riffle splitter. From 2017 onwards, no composites were collected from RC drill holes, only 1 metre cone split chip samples. Sampling procedures used prior to 2010 are not readily available.
For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were prepared and analysed at a variety of laboratories. For data prior to 2010 it is assumed the procedures undertaken are industry standard for the time. Post-2010 samples were dried, and the whole sample pulverised to 80% passing 75 µm, and a sub-sample of approx. 200 g retained. A nominal 50 g was used for the fire assay analysis. The procedure is industry standard for this type of sample.

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.</td><td>Details of historical QAQC procedures are not readily available. Reviews of QAQC and assay quality in 2002 (Golder Associates) and 2012 (Maxwell) indicate there are no significant issues with regards to quality of the historical assay data. Concerns regarding historical drilling are mitigated by drilling completed in 2011, 2012 and 2016. A QAQC report has been compiled for the 2016 drilling (Sauter Geological Services) – no significant issues were identified.</td></tr>
<tr><td>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</td><td>Gold Road protocols state duplicate samples are collected at a frequency of 1 in 40 samples for all RC drill holes.
RC duplicate samples are collected directly from the Rig-mounted static cone splitter.
No diamond duplicates were collected.
Details of historical duplicate sampling are not readily available.</td></tr>
<tr><td>Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>Sample sizes are considered appropriate to give an indication of mineralisation given the particle size and preference to keep the sample weight below 3 kg to ensure requisite grind size in a LM5 sample mill.</td></tr>
<tr><td>Quality of assay data and laboratory tests
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</td><td>Samples were analysed at a variety of laboratories using methodologies that include:

<table>
<tr><th>Analysis Type</th><th>RC</th><th>DDH</th></tr>
<tr><td>Aqua Regia Digest, unspecified AAS finish.</td><td>903</td><td>1</td></tr>
<tr><td>Fire Assay, unspecified AAS finish.</td><td>3,913</td><td>106</td></tr>
<tr><td>Fire Assay, flame AAS finish.</td><td>1,034</td><td></td></tr>
<tr><td>Fire Assay. Finish by ICP-OES</td><td></td><td>825</td></tr>
<tr><td>Fire Assay. Finish by ICP-MS</td><td></td><td>3</td></tr>
<tr><td>Unknown Method, Unknown Finish.</td><td>11</td><td>3</td></tr>
<tr><td>No method recorded</td><td>14</td><td>13</td></tr>
</table>

Laboratories used include:
▪ SGS – Kalgoorlie, Perth and Leonora
▪ Amdel – Perth
▪ Genalysis – Perth
It is assumed laboratory procedures were appropriate for the time.

Portable XRF provides a semi-quantitative scan on a prepared pulp sample. The scan is done through the pulp packet in an air path. A total of 30 elements are reported using the “soil” mode i.e. calibrated for low level silicate matrix samples. The reported data includes the XRF unit and operating parameters during analysis. The elements available are; Ag, As, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mn, Mo, Ni, P, Pb, Rb, S, Sb, Se, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr.
Portable XRF data on a prepared pulp are subject to limitations which include absorption by the air path, as well as particle size and mineralogical effects. Light elements in particular are very prone to these effects. Matrix effect correction algorithms and X-ray emission line overlaps (e.g. Fe on Co) are a further source of uncertainty in the data. Gold Road uses XRF only to assist with determination of rock types, and to identify potential anomalism in the elements which react most appropriately to the analysis technique.
Representative lithological units, and AC end-of-hole samples, were also analysed using the Intertek multi-element 4A/OM routine which uses a 4 acid digestion of the pulp sample and then analysis of 60 individual elements using a combination of either ICP-OES or ICP-MS. Individual elements have different detection limits with each type of machine and the machine that offers the lowest detection limit is used. Four acid digestion, with the inclusion of hydrofluoric acid targeting silicates, will decompose almost all mineral species and are referred to as “near-total digestions”. Highly resistant minerals such as zircon (Zr), cassiterite (Sn), columbite--tantalite (Ta), rutile and wolframite (W) will require a fusion digest to ensure complete dissolution. Four acid digests may volatilise some elements.</td></tr>
<tr><td>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</td><td>NITON handheld XRF was used on a small number of drill holes in 2011 & 2012. Calibration of the hand-held XRF tools is applied at start-up. XRF results are only used for indicative analysis of lithogeochemistry and alteration and to aid logging and subsequent interpretation. Four acid digest data are also used to assist in lithogeochemical determination. pXRF analysis, conducted at the lab, is completed on most holes post 2016 to aid in lithogeochemical determination.</td></tr>
</table>

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>Gold Road protocols for:
DDH programmes is for Field Standards (Certified Reference Materials) and Blanks inserted at a rate of 4 Standards and 4 Blanks per 100 samples. No field duplicates are collected.

<table><tr><th>Assay and QAQC Numbers</th><th>RC</th><th>DDH</th></tr><tr><td>Total Sample Submission</td><td>6,332</td><td>1,027</td></tr><tr><td>Assays</td><td>5,875</td><td>951</td></tr><tr><td>Field Blanks</td><td>150</td><td>38</td></tr><tr><td>Field Standards</td><td>154</td><td>38</td></tr><tr><td>Field Duplicates</td><td>153</td><td>4</td></tr><tr><td>Laboratory Checks</td><td>297</td><td>39</td></tr><tr><td>Umpire Checks</td><td>-</td><td>-</td></tr></table>
RC programmes is for Field Standards (certified Reference Materials) and Blanks inserted at a rate of 4 Standards and 4 Blanks per 100 samples. Field duplicates are generally inserted at a rate of approximate 1 in 60.</td></tr>
<tr><td>Verification of sampling and assaying
The verification of significant intersections by either independent or alternative company personnel.</td><td>Significant results are checked by the Principal Resource Geologist and Executive Director. Additional checks are completed by the Database Manager.</td></tr>
<tr><td>The use of twinned holes.</td><td>No twinned holes have been completed.</td></tr>
<tr><td>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</td><td>All logging data is stored in a Datashed/SQL database system and maintained by the Gold Road Database Manager.</td></tr>
<tr><td>Discuss any adjustment to assay data.</td><td>No assay data was adjusted. The lab's primary Au field is the one used for plotting and resource purposes. No averaging is employed.</td></tr>
<tr><td>Location of data points
Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</td><td>Most drill hole locations were verified by handheld GPS, with an accuracy of 5m in Northing and Easting. 50 holes were picked up by a Qualified Surveyor using DGPS.
For angled DDH and RC drill holes, the drill rig mast is set up using a clinometer.
RC drillers use an electronic single-shot camera to take dip and azimuth readings inside the stainless steel rods, at 30 m intervals.
Diamonds drillers use a true north seeking gyroscope at 30 m intervals and end-of-hole.</td></tr>
<tr><td>Specification of the grid system used.</td><td>A local grid is used at Orleans.</td></tr>
<tr><td>Quality and adequacy of topographic control.</td><td>RC and DDH RL's are surveyed by a Qualified Surveyor using DGPS.
A topographic surface was generated using LIDAR data collected in December 2015.</td></tr>
<tr><td>Data spacing and distribution
Data spacing for reporting of Exploration Results.</td><td>Drill spacing at surface is approximately 50mE by 100mN, and this spacing extends to 50mE by +200mN at the margins of the deposit.</td></tr>
<tr><td>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</td><td>Spacing of the reported drill holes is sufficient for the geological and grade continuity of the deposit, is appropriate for Resource Estimation procedures and to report an Inferred Resource.</td></tr>
<tr><td>Whether sample compositing has been applied.</td><td>Historical drilling utilised compositing over waste intervals. No composite samples were used in estimation</td></tr>
<tr><td>Orientation of data in relation to geological structure
Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</td><td>The orientation of the drill lines (250 degrees azimuth) is approximately perpendicular to the regional strike of the targeted mineralisation.</td></tr>
<tr><td>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</td><td>Drilling angled at -60 to the west does not introduce any directional bias given that structural orientations indicate a steep easterly dip and are normal to the current understanding of the mineralisation.</td></tr>
<tr><td>Sample security
The measures taken to ensure sample security.</td><td>Pre-numbered calico bags are collected in plastic bags and transported to the laboratory. Details regarding sample security of drilling prior to 2010 are not readily available.</td></tr>
<tr><td>Audits or reviews
The results of any audits or reviews of sampling techniques and data.</td><td>Sampling and assaying techniques are industry-standard. No specific audits or reviews have been undertaken.</td></tr>
</table>

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria and JORC Code explanation	Commentary
Mineral tenement and land tenure status *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The RC and Diamond exploration drilling was managed by Gold Road, which since November 2016 has formed part of the 50:50 Gruyere Joint Venture with Gold Fields Limited and occurred within tenement M38/814. This tenement is located on the Yamarna Pastoral Lease. The mining lease has been incorporated into the Gruyere and Central Bore Native Title Mining Agreement.
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing with the WA DMP.
Exploration done by other parties *Acknowledgment and appraisal of exploration by other parties.*	Exploration has been completed at Orleans by one other party: ▪ 1998-2000 Asarco Exploration Company Inc ▪ 2006-2010 Eleckra Mines Limited (renamed Gold Road in 2010) ▪ 2010-November 2016 Gold Road ▪ November 2016 – Present Gold Road and Gold Fields (Gruyere JV) Gold Road understands that previous exploration has been completed to industry standard. 51% of drilling in the deposit area was completed prior to 2009.
Geology *Deposit type, geological setting and style of mineralisation.*	Gold mineralisation has been defined over 17 kilometres in strike, the anomalous structural corridor termed the Golden Highway hosts deposits at Alaric, Montagne, Argos, Orleans & Attila. The stratigraphy comprises a sequence of mafic and felsic sediments and volcanic intrusives on the western margin of the Yamarna Greenstone Belt. The sequence is metamorphosed to amphibolite facies and is strongly foliated, with the sequence striking northwest and dipping steeply to the east. Notable lithological units include the Gotham tuff - a felsic-intermediate porphyritic crystal tuff located to the east of the mineralisation, and a chloritic shale – also east of the mineralisation. A Cr-rich intermediate-mafic sediments and mafic intrusives are being consistently identified in the footwall position, west of the mineralisation where drilling intersects this position. Gold mineralisation is defined by shear zones characterised by laminated quartz-mica-amphibole schist units. High grade mineralisation occurs as 3-5+ metre, gently north plunging shoots, and is associated with pervasive albite ± chlorite ± pyrite ± pyrrhotite alteration. Mineralisation is laterally continuous, with broader zones of mineralisation associated with intense biotite ± amphibole ± pyrite alteration that can span over >50 metres width. Mineralisation has both a lithological and structural control, being contained within the intermediate to mafic units of the sequence with the morphology of high grade zones appearing to be structurally controlled by shearing and folding.
Drill hole Information *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ▪ *easting and northing of the drill hole collar* ▪ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ▪ *dip and azimuth of the hole* ▪ *down hole length and interception depth* ▪ *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	A total of 4 diamond holes have been completed within the deposit area since the previous Resource Estimate in 2012. In 2015 Orleans (Attila North) was removed from the Mineral Resource. All results used in this resource have been published in previous releases; please refer to Appendix 2 for a summary of previous releases
Data aggregation methods *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	No weighting or averaging of grades was undertaken. Grades are reported as down-hole length-weighted average grades across the full width of mineralised domains. The drill angle generates an approximation of the true-width intersection.
Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No new exploration results are reported. Intersections quoted may not match those previously reported as they are selected for Resource Estimation purposes.
The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used.

Criteria and JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths *These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Mineralisation is hosted within a steep east dipping, NNW striking package of mafic to intermediate intrusive and sedimentary rocks. Mineralisation is hosted in shear zones parallel to stratigraphy. The general drill direction of 60^0 to 250 is approximately perpendicular to the lithological package and is a suitable drilling direction to avoid directional biases.
Diagrams *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to Figures and Tables in the body of text.
Balanced reporting *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results used in this resource have been published in previous releases; please refer to Appendix 2 for a summary of previous releases.
Other substantive exploration data *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Regional Aeromagnetic and gravity data cover the project area and assist in the geological interpretation; including the strike orientation of the stratigraphy, location of cross-cutting faults and dykes, and general regional geology. Induced Polarisation (IP) survey completed along the Attila-Alaric trend in 2017 has assisted in detection of mineralised structures and assisted geological interpretation of structures and stratigraphy. Handheld XRF data exists for some drill holes, pXRF conducted at the lab exists for most drill holes post 2016 and assists in lithogeochemical analysis. No metallurgical work has been completed at Orleans to date, although metallurgical test work at neighbouring deposits including Attila & Alaric indicates no deleterious elements are present and mineralisation is amenable to conventional cyanidation.
Further work *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Mineralisation is not closed off along strike. Mining optimisation and feasibility studies may drive further drilling requirements.

YAM14

JORC CODE 2012 EDITION TABLE 1 – SECTIONS 1 TO 3

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria and JORC Code explanation	Commentary
Sampling techniques *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The sampling has been carried out using a combination of Reverse Circulation (**RC**) and diamond drilling (**DDH**). All drilling was completed at -60 degrees dip to 270 degrees west (MGA Grid) orientation. DDH: Drill core is logged geologically and marked up for assay at approximate 0.5 - 1 m intervals based on geological observations. Drill core is cut in half by a diamond saw and half core samples submitted for assay analysis. Where whole core is specified, the entire interval is submitted for analysis. RC: Samples were collected as drilling chips from the RC rig using a cyclone collection unit and directed through a static cone splitter to create a 2-3 kg sample for assay. Samples were taken as individual metre samples and composite samples collected with a spear.
Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.	Sampling was carried out under Gold Road's protocol and QAQC procedures. Laboratory QAQC was also conducted. See further details below
Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	DDH: diamond drilling was completed using a PQ, HQ3 or NQ2 drilling bit for all holes. Core is cut in half for sampling, with a half core sample sent for assay at measured intervals. All sample pulps are analysed by the laboratory using a desk mounted Portable XRF machine to provide a 30 element suite of XRF assays. Where whole core sampling is required, the entire interval is submitted for analysis. RC: holes were drilled with a 5.5 inch face-sampling bit, 1 m samples collected through a cyclone and static cone splitter, to form a 2-3 kg sample. For all samples the entire 1 m sample was sent to the laboratory for analysis. (Historically, for non-mineralised samples identified through logging, four consecutive 1 m samples were composited to form a 4 m composite sample for analysis.) All samples were fully pulverised at the lab to -75 um, to produce a 50 g charge for Fire Assay with AAS finish. All pulps from the samples were also analysed by the laboratory using a desk mounted Portable XRF machine to provide a 30 element suite of XRF assays. RC samples suspected to have been subject to any down hole contamination are twinned with DDH as a check.
Drilling techniques *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	DDH: diamond drilling rigs operated by Terra Drilling Pty Ltd and DDH1 Drilling Pty Ltd collected the diamond core as PQ3 (83.1 mm), HQ3 (61.1 mm) and NQ2 (45.1 mm) size for sampling and assay. All suitably competent drill core (100%) is oriented using Reflex orientation tools, with core initially cleaned and pieced together at the drill site, and fully orientated by GOR field staff at the Yamarna Exploration Camp core farm. RC: RC drilling rigs, owned and operated by Raglan Drilling and Ranger Drilling, were used to collect the RC samples. The face-sampling RC bit has a diameter of 5.5 inches (140 mm).
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.*	The majority of samples collected from all drilling were dry, minor RC samples were damp. **DDH:** All diamond core collected is dry. Driller's measure core recoveries for every drill run completed using 3 and 6 m core barrels. The core recovered is physically measured by tape measure and the length recovered is recorded for every 3 m "run". Core recovery can be calculated as a percentage recovery. Almost 100% recoveries were achieved, with minimal core loss recorded in strongly weathered material near the base of saprolite.
	RC: The RC samples were dry. Drilling operators' ensured water was lifted from the face of the hole at each rod change to ensure water did not interfere with drilling and to make sure samples were collected dry. All samples collected were dry. RC recoveries were visually estimated, and recoveries recorded in the log as a percentage. Recovery of the samples was good, generally estimated to be full, except for some sample loss at the top of the hole. All mineralised samples were dry. If samples cannot be collected dry, the hole is completed with a DDH tail.

Criteria and JORC Code explanation	Commentary
Measures taken to maximise sample recovery and ensure representative nature of the samples.	**DDH:** diamond drilling collects uncontaminated fresh core samples which are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling. RC: face-sample bits and dust suppression were used to minimise sample loss. Drilling airlifted the water column above the bottom of the hole to ensure dry sampling. 2 to 3 kg RC samples are collected through a cyclone and static cone splitter into calico bags, the rejects deposited in a plastic bag. The 2 to 3 kg sample size is ideal to enable a full sample pulverisation at the laboratory. If samples cannot be collected dry, the hole is completed with a DDH tail.
Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	**DDH:** no sample bias was observed to have taken place during drilling activities. A small amount of core loss was noted and recorded **RC:** no significant sample bias or material loss was observed to have taken place during drilling activities. RC samples suspected to have been subject to any down hole contamination are twinned with DDH as a check. A small amount of sample loss was observed and recorded
Logging *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource Estimation, mining studies and metallurgical studies.*	All chips and drill core were geologically logged by Gold Road geologists, using the Gold Road logging scheme. Detail of logging was sufficient for mineral resource estimation and technical studies. Logging of DDH core records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other features of the samples. All core is photographed in the core trays, with individual photographs taken of each tray both dry and wet. Logging of RC chips records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging codes have been developed over time and the historical codes translated to a scheme similar to the current Gold Road logging scheme in 2007. This provides data to a level of detail adequate to support Mineral Resource Estimation activities. Some holes are logged using hand held NITON XRF to assist in lithogeochemical analysis. From 2016 most fire assay results routinely include pXRF collected at the lab and used to validate logging.
Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging of drill core captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples, and structural information from oriented drill core. All samples are stored in core trays. All core is photographed in the core trays, with individual photographs taken of each tray both dry, and wet, and photos uploaded to the Gold Road server database.
The total length and percentage of the relevant intersections logged	All holes were logged in full.
Sub-sampling techniques and sample preparation *If core, whether cut or sawn and whether quarter, half or all core taken.*	Core samples were cut in half using an automated Corewise diamond saw. Half core samples were collected for assay, and the remaining half core samples stored in the core trays. Where whole core was required (17DHDD0014) the entire interval was submitted. No core was left in the core tray.
If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	**RC:** 1 m drill samples are channelled through a rotary or static cone-splitter, installed directly below a rig mounted cyclone, and an average 2-3 kg sample is collected in a calico bag, and positioned on top of the plastic bag containing the reject. >95% of samples were dry, and whether wet or dry is recorded. Historically, for composite samples, four consecutive green plastic bags were sampled using a PVC spear and combined to produce a 4 m composite sample of 2-3 kg.
For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were prepared at the Intertek laboratory in Kalgoorlie. Samples were dried, and the whole sample pulverised to 85% passing 75um, and a sub-sample of approx. 200g retained. A nominal 50g was used for the analysis. The procedure is industry standard for this type of sample.
Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.	A duplicate field sample is taken from the cone splitter at a rate of approximately 1 in 60 samples. At the laboratory, regular Repeats and Lab Check samples are assayed.
Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Gold Road protocols state duplicate samples are collected at a frequency of 1 in 40 samples for all drill holes. RC duplicate samples are collected directly from the Rig-mounted rotary cone splitter. No diamond duplicates were collected.

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>Sample sizes are considered appropriate for the mineralisation given the particle size and the preference to keep the sample weight below a targeted 3 kg mass which is the optimal weight to ensure requisite grind size in the LM5 sample mills used by Intertek in sample preparation.</td></tr>
<tr><td>Quality of assay data and laboratory tests
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</td><td>DDH and RC: Samples were analysed at the Intertek laboratory in Perth. The analytical method used was a 50g Fire Assay with ICP finish for gold only, which is considered to be appropriate for the material and mineralization. The method gives a near total digestion of the material intercepted in RC drilling.
Portable XRF provides a semi-quantitative scan on a prepared pulp sample. The scan is done through the pulp packet in an air path. A total of 30 elements are reported using the “soil” mode i.e. calibrated for low level silicate matrix samples. The reported data includes the XRF unit and operating parameters during analysis. The elements available are; Ag, As, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mn, Mo, Ni, P, Pb, Rb, S, Sb, Se, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr.
Portable XRF data on a prepared pulp are subject to limitations which include absorption by the air path, as well as particle size and mineralogical effects. Light elements in particular are very prone to these effects. Matrix effect correction algorithms and X-ray emission line overlaps (e.g. Fe on Co) are a further source of uncertainty in the data. Gold Road uses XRF only to assist with determination of rock types, and to identify potential anomalism in the elements which react most appropriately to the analysis technique.
The first fresh rock sample in each hole at the YAM14 prospect analysed using the Intertek multi-element 4A/OM routine which uses a 4 acid digestion of the pulp sample and then analysis of 60 individual elements using a combination of either ICP-OES or ICP-MS. Individual elements have different detection limits with each type of machine and the machine that offers the lowest detection limit is used. Four acid digestion, with the inclusion of hydrofluoric acid targeting silicates, will decompose almost all mineral species and are referred to as “near-total digestions”. Highly resistant minerals such as zircon (Zr), cassiterite (Sn), columbite--tantalite (Ta), rutile and wolframite (W) will require a fusion digest to ensure complete dissolution. Four acid digests may volatilise some elements.</td></tr>
<tr><td>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</td><td>NITON handheld XRF was used on a small number of drill holes. Calibration of the hand-held XRF tools is applied at start-up. XRF results are only used for indicative analysis of lithogeochemistry and alteration and to aid logging and subsequent interpretation. Four acid digest data is also used to assist in lithogeochemical determination. pXRF analysis, conducted at the lab, is completed on most holes post 2016 to aid in lithogeochemical determination.</td></tr>
<tr><td>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>Gold Road protocol for RC programs is for Field Standards (Certified Reference Materials) and Blanks inserted at a rate of 3 Standards and 3 Blanks per 100 samples. Field Duplicates are generally inserted at a rate of approximately 1 in 40.
For drilling at YAM14 the relevant assays and QAQC numbers are as follows:

<table>
<tr><th>Assay and QAQC Numbers</th><th>RC</th><th>DDH</th></tr>
<tr><td>Total Sample Submission</td><td>11,187</td><td>2,279</td></tr>
<tr><td>Assays</td><td>10,309</td><td>2,143</td></tr>
<tr><td>Field Blanks</td><td>338</td><td>68</td></tr>
<tr><td>Field Standards</td><td>338</td><td>68</td></tr>
<tr><td>Field Duplicates</td><td>202</td><td>16</td></tr>
<tr><td>Laboratory Checks</td><td>429</td><td>77</td></tr>
<tr><td>Umpire Checks</td><td>-</td><td>-</td></tr>
</table>

The protocol for DDH programs is for Field Standards (Certified Reference Materials) and Blanks inserted at a rate of 3 Standards and 3 Blanks per 100 samples. No field duplicates are collected.
Results of the Field and Laboratory QAQC were checked on assay receipt using QAQCR software. All assays showed no significant level of contamination or sample bias.</td></tr>
</table>

Criteria and JORC Code explanation	Commentary
Verification of sampling and assaying *The verification of significant intersections by either independent or alternative company personnel.*	Significant results are checked by the Principal Resource Geologist and Executive Director. Additional checks are completed by the Database Manager. High grade gold RC samples are panned or sieved to check for visual evidence of coarse gold.
The use of twinned holes.	17DHDD0010 twinned the RC hole 17DHRC0060. Significant gold mineralisation was intersected by the RC twin in the expected location. Tenor of mineralisation is not relevant given differences in the quality of the sampling techniques. The DDH intersected similar widths and locations of mineralisation. However, the tenor of grade was lower. The mineralised zone is highly weathered and some problems with sample loss were encountered.
Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All field logging is carried out on Toughbooks using LogChief. Logging data is submitted electronically to the Database Geologist in the Perth office. Assay files are received electronically from the Laboratory. All data is stored in a Datashed/SQL database system and maintained by the Database Manager.
Discuss any adjustment to assay data.	No assay data was adjusted. The lab's primary Au field is the one used for plotting and resource purposes. No averaging is employed.
Location of data points *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource Estimation.*	Most drill hole locations were verified by handheld GPS, with an accuracy of 5m in Northing and Easting. DDH and RC collars are surveyed post drilling by a Certified Surveyor using a DGPS system. For angled DDH and RC drill holes, the drill rig mast is set up using a clinometer. RC drillers use an electronic single-shot camera to take dip and azimuth readings inside the stainless steel rods, at 30 m intervals. DDH drillers use a true north seeking gyroscope at 30 m intervals and end-of-hole.
Specification of the grid system used.	Grid projection is MGA94, Zone 51.
Quality and adequacy of topographic control.	A topographic surface was generated using a Lidar survey completed in 2015. The accuracy of the DTM is estimated to be better than 1 m in elevation.
Data spacing and distribution *Data spacing for reporting of Exploration Results.*	Drill spacing varies from 25 to 50 to 100 m along strike to 12.5 to 25 to 50 to 100m on section.
Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Spacing of the reported drill holes is sufficient for the geological and grade continuity of the deposit, is appropriate for Resource Estimation procedures and to report Indicated, and Inferred Resources.
Whether sample compositing has been applied.	No sample compositing was applied.
Orientation of data in relation to geological structure *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The orientation of the drill lines (270 degrees azimuth) is approximately perpendicular to the strike of the regional geology. All holes are drilled approximately -60 degrees angled to the West (270).
If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drilling is considered to have been perpendicular to strike of mineralisation. Detailed structural logging of DDH core identified important stratigraphic sequences with an approximate moderate-steep dip to the east. Drilling angled RC or DDH holes -60 degrees to the west does not introduce any directional bias given the current understanding of the structural orientations and the dip and strike of mineralisation.
Sample security *The measures taken to ensure sample security.*	Pre-numbered calico sample bags were collected in plastic bags (four calico bags per single plastic bag), sealed, and transported by company transport to the Intertek laboratory in Kalgoorlie. Pulps were despatched by Intertek to their laboratory in Perth for assaying.
Audits or reviews *The results of any audits or reviews of sampling techniques and data.*	Sampling and assaying techniques are industry-standard. No specific audits or reviews have been undertaken at this stage in the programme.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria and JORC Code explanation	Commentary
Mineral tenement and land tenure status *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The RC and diamond exploration drilling was managed by Gold Road, which since November 2016 has formed part of the 50:50 Gruyere JV with Gold. This tenement is located on the Yamarna Pastoral Lease which is owned and managed by Gold Road. Tenement M38/1267 is located on tenements granted in respect of land in which non-exclusive native title has been determined to exist and to be held by a group of native title holders which includes the persons on whose behalf the Yilka (WAD297/2008) and Sullivan Edwards (WAD498/2011) native title claims were brought. The determination was made by the Federal Court on 27 September 2017. The native title holders are required to nominate a body corporate to act as trustee of, or as their agent in future dealings relating to, their native title. Exploration activities in the specified "Gruyere and Central Bore Project Areas" within the Pastoral Lease are conducted in accordance with the 2016 "Gruyere and Central Bore Native Title Agreement" between Gold Road, the Yilka native title claim group and Cosmo Newberry Aboriginal Corporation. Exploration activities within the balance of the Pastoral Lease are conducted in accordance with the 2004 "Yamarna Pastoral Lease Heritage Protection Agreement" between Gold Road and Harvey Murray (the applicant in relation to the Yilka native title claim).
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area	The tenements are in good standing with the Western Australian Department of Mines, Infrastructure, Resource and Safety.
Exploration done by other parties *Acknowledgment and appraisal of exploration by other parties.*	There has been no historical drilling or work completed prior to Gold Road's activity, commencing in 2013.
Geology *Deposit type, geological setting and style of mineralisation.*	The YAM14 prospect is situated in the south end of the regional camp-scale South Dorothy Hills Target identified by Gold Road during its Regional Targeting campaign completed in early 2013. Discovered at the same time as Gruyere the target comprises a coincident structural-geochemical target within a major regional-scale structural corridor associated with the Dorothy Hills Shear Zone. This zone occurs within the Dorothy Hills Greenstone Belt at Yamarna in the eastern part of the Archaean Yilgarn Craton. The Dorothy Hills Greenstone is the most easterly known occurrence of outcropping to sub-cropping greenstone in the Yilgarn province of Western Australia. Mineralisation at the YAM14 prospect is located at a major flexure of the Dorothy Hill Shear Zone and north of the northwest trending Monocot Fault (interpreted from aeromagnetics). Mineralisation is hosted in six north-northwest striking and steep to moderate east dipping discrete shear zones. The Main Shear is the most continuous zone of mineralisation and is localised on the contact between a sheared rhyolitic tuff and Intermediate Sediments. Two hanging wall shear zones are localised on mafic and intermediate sediment contacts (HW01 and HW02). In the immediate footwall to the Main Shear is a zone of mineralisation hosted entirely in the sheared rhyolitic tuff and two footwall shears (FW01 and FW02) are hosted within intermediate sediments, shales and felsic intrusives at the southern end of the prospect. Mineralised structures are generally 4m wide, however, there is a thickening up to 64 m in a zone where the dip of the structures refract through a "ramp-flat-ramp" geometry in association with the lithology. Primary mineralisation in fresh rock is hosted within shearing and is associated with quartz veining and albite-chlorite-pyrite-pyrrhotite-arsenopyrite alteration. The weathering profile is of moderate thickness with the transition to fresh rock occurring at a depth of 50 to 60 m. Within the weathered profile, mineralisation is observed to be associated with quartz veining and preserved shearing with iron staining after sulphides. Observations of primary controls indicate that mineralisation is likely in situ and undergone only minor dispersion and localised leaching.

Criteria and JORC Code explanation	Commentary
Drill hole Information *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ▪ *easting and northing of the drill hole collar* ▪ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ▪ *dip and azimuth of the hole* ▪ *down hole length and interception depth* ▪ *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	Previous exploration announcements that contain reported drill hole information for all RC and diamond holes included in the reported Mineral Resource estimation are listed in Appendix 2
Data aggregation methods *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	No weighting or averaging of grades was undertaken. Grades are reported as down-hole length-weighted average grades across the full width of mineralised domains. The drill angle generates an approximation of the true-width intersection.
Relationship between mineralisation widths and intercept lengths *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	No new exploration results are reported. Intersections quoted may not match those previously reported as they are selected for Resource Estimation purposes.
The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used.
These relationships are particularly important in the reporting of Exploration Results. *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Mineralised shear zones are north-northwest striking and steep to moderate east dipping. The general drill direction of -60^0 to 270 is approximately perpendicular to the shear zones and a suitable drilling direction to avoid directional biases. As a result, reported intersections approximate, but are not, true width.
Diagrams *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to Figures and Tables in the body of text.
Balanced reporting *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results used in this resource have been published in previous releases; please refer to Appendix 2 for a summary of previous releases.
Other substantive exploration data *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Regional Aeromagnetic and gravity data cover the project area and assist in the geological interpretation; including the strike orientation of the stratigraphy, location of cross-cutting faults and dykes, and general regional geology. Induced Polarisation (IP) survey completed at YAM14 in 2017 has assisted in the delineation of lithologies and geological interpretation of structures and stratigraphy. Handheld XRF data exists for some drill holes, pXRF conducted at the lab exists for most drill holes post 2016 and assists in lithogeochemical analysis. Leachwell analysis indicates, at a high level, that no deleterious elements are present, and mineralisation is amenable to conventional cyanidation.
Further work *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Extensional drilling along strike and infill drilling is required to increase resource classification confidence. Further along strike drilling has the potential to identify changes in dip and strike of the lithologies which appear to be localising mineralisation.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria and JORC Code explanation	Commentary
Database integrity *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource Estimation purposes.*	Geological metadata is stored centrally in a relational SQL database with a DataShed front end. Gold Road employs a Database Manager who is responsible for the integrity and efficient use of the system. Only the Database Manager or the Data Entry Clerk has permission to modify the data. Sampling and geological logging data is collected in the field using LogChief software and uploaded digitally. The software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Sampling data is sent to, and received from, the assay laboratory digitally. Drill hole collars are picked up by differential GPS and delivered to the database digitally. Down hole surveys are delivered to the database digitally. The Mineral Resource estimate only uses a selection of RC and DDH assay data
Data validation procedures used.	DataShed software has validation procedures that include constraints, library tables, triggers and stored procedures. Data that does not pass validation must be corrected first. The LogChief software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Geological logging data is checked visually in three dimensions against the existing data and geological interpretation. Assay data must pass company QAQC hurdles. Gold Road utilises QAQCR software to further analyse QAQC data, and batches which do not meet criteria are requested to be re-assayed. Sample grades are checked visually in three dimensions against the logged geology and geological interpretation. Drill hole collar pickups are checked against planned and/or actual collar locations. A hierarchical system is used to identify the most reliable down hole survey data. Drill hole traces are checked visually in three dimensions. Data validation procedures of previous companies are not readily available.
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case*	Justin Osborne is Gold Road's Executive Director of Exploration & Growth and a Competent Person. He conducts regular site visits and covers all aspects of the Project. John Donaldson is Gold Road's General Manager Geology and a Competent Person. He has completed specific site visits to focus on understanding the geology of YAM14. Jane Levett is Gold Road's Principal Resource Geologist and a Competent Person and has completed several specific site visits to focus on understanding the geology of YAM14 from field observations, diamond core and RC chips.
Geological interpretation *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Diamond drilling allows a robust geological interpretation to be developed. Airborne magnetic data and induced polarisation data gives weight to the broad interpretation and breaks in the continuity of stratigraphy (fault offsets) provide an explanation for strike extents of mineralisation. Type and thickness of host lithology, and mineralisation, is moderately predictable along strike and down dip. As the deposit has moderate grade and geological continuity at the current drill spacing, the Competent Persons regard the confidence in the geological interpretation as high.
Nature of the data used and of any assumptions made.	All available data has been used to help build the geological interpretation. This includes geological logging data (lithology and structure), portable XRF multi-element data, gold assay data, induced polarisation and airborne magnetic surveys.
The effect, if any, of alternative interpretations on Mineral Resource Estimation.	Modelling of the mineralisation was conducted with reference to interpretation iterations developed since 2013. New IP survey data and refined understanding of stratigraphy has improved geological.

Criteria and JORC Code explanation	Commentary
The use of geology in guiding and controlling Mineral Resource Estimation.	Regionally the deposit is hosted within the Dorothy Hills greenstone belt. The YAM14 prospect is located proximal to the north south striking Dorothy Hills Shear Zone. Host rocks to gold mineralisation at YAM14 are dominated by a felsic volcanoclastic sedimentary package and a sequence of intercalated mafic and intermediate sediments. Primary gold mineralisation in the north is hosted within north-south striking, moderately east dipping shear zones and are confined to a zone between the felsic tuff (Stimson's Felsic Tuff) and a high chrome marker unit of the intercalated mafic to intermediate sediments of the hangingwall package. In the southern portion of the deposit, the main mineralisation is located to the footwall of the SFT. Primary mineralisation in this area is not as well developed. Mineralisation is associated with increased quartz veining, sulphide presence and alteration. Mineralisation within the sheared package has been modelled at a 0.2 g/t cut-off, including up to 2 m of internal waste. Internal higher grade zones correspond to higher intensity alteration, presence of sulphides and a greater density of quartz veining. Two major faults have been delineated, the Monocot to the south and the Breakaway in the north. These faults are interpreted from aeromagnetic and IP data. The faults appear to define the along strike extent of mineralisation, however the area north of the Breakaway Fault has not been thoroughly tested. The trend of the main mineralisation is interpreted to be dipping to the east at 55-75^{o}. The mineralisation trend can be readily observed in areas of closely spaced drilling and easily interpreted in wider spaced areas. Spatial analysis of assay data using variography supports and helps to refine the mineralisation orientations during the interpretive process.
The factors affecting continuity both of grade and geology.	Cross-cutting features interpreted as faults from the aeromagnetic imagery (2011) and induced polarisation data (2017) appear to bound different zones of mineralisation.
Dimensions *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Length along strike: 850 m (pit shell constraint, two individual shells) Horizontal Width: 45 m (comprising a series of 5-10 m wide mineralised surfaces). Depth from surface to limit of Mineral Resource: 125 m. The Mineral Resource has been constrained by an optimised Whittle shell that considers all mineralisation in the geological model. The optimisation utilises mining, geotechnical and processing parameters from Gruyere Feasibility Study and an A$1,850 per ounce gold price. Only Measured, Indicated and Inferred categories within this shell are reported as Mineral Resource. Mineralisation in the geology model outside the shell is not reported.

Criteria and JORC Code explanation	Commentary
Estimation and modelling techniques. *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Software used: Leapfrog Geo – Drill hole validation, lithology, material type, mineralisation and fault wireframes Datamine Studio RM – Drill hole validation, cross-section, plan and long-section plotting, block modelling, estimation, block model validation, classification, reporting. Snowden Supervisor – Statistics, variography, kriging neighbourhood analysis, block model validation Block model and estimation parameters: Treatment of extreme grade values (top cuts): 5 to 20 g/t Au top-cut applied to 1 m composites selected within mineralisation wireframes. A 2.5 g.t Au top cut is used for the laterally dispersed weathered domains. Top cuts were determined by domain through analysis of histograms, log histograms, log probability plots and spatial analysis. Estimation technique: Ordinary Kriging. KNA was undertaken to optimise the search neighbourhood used for the estimation and test the parent block size. The search ellipse and selected samples by block were viewed in three dimensions to verify the parameters. The grid is MGA94 zone 51. Parent block size - 5 m X by 12.5 m Y by 5 m Z (parent cell estimation with full subset of points). Smallest sub cell – 2.5 m X by 2.5 m Y by 1 m Z (small X dimension is required to fill mineralisation wireframes and a small Z dimension is required to fill to material type boundaries). Discretisation - 3 X by 5 Y by 2 Z (using number of points method). Search ellipse – aligned to mineralisation trend, dimensions range from 10-30 m X by 60-120 m Y by 30-80 m Z depending on mineralisation domain. Dynamic Anisotropy (where the orientation of the ellipse is modified by the dip and strike of the wireframe) is utilised for the estimation of Domains 5400, 5500, 5600 and 5700. Number of samples – maximum per drill hole = 6, first search 16 min / 32 max, second search 4 min / 32 max, third search 1 min / 32 max. Domain boundary conditions – A hard boundary is applied to all domains.
The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The project has not previously been estimated. Alternate interpretations and iterations of the estimate have been completed and do not differ materially from the interpretation and estimation utilised in the Mineral Resource.
The assumptions made regarding recovery of by-products.	No economic by-products.
Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	Initial Leachwell analysis, a proxy for high level metallurgical test work indicates no deleterious elements.
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The parent block size of 5 m X by 12.5 m Y by 5 m Z is approximately one quarter of the average drill spacing of 25 m X by 50 m Y in Indicated areas.
Any assumptions behind modelling of selective mining units.	The Selective Mining Unit chosen is a function of the Whittle optimisation and parent block size of 5 m X by 12.5 m Y by 5 m Z.
Any assumptions about correlation between variables.	No correlation between variables analysed or made; the resource is gold-only.
Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation was used at all stages to control the estimation. If geostatistics, variography and/or visual checks of the model were difficult to understand then the geological interpretation was questioned and refined.
Discussion of basis for using or not using grade cutting or capping.	Top-cuts were used in the estimate as this is the most appropriate way to control outliers when using Ordinary Kriging.
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation checks performed: ▪ QQ plot of RC vs DDH input grades. ▪ Volume of wireframe vs volume of block model ▪ Sum of gram metres prior to compositing vs sum of gram metres post compositing ▪ Negative gold grade check ▪ Model average grade vs declustered top-cut sample grade by Domain. ▪ Swath plots by Northing and elevation by Domain. ▪ Visual check of drill data vs model data in plan, section and three dimensions. All validation checks gave acceptable results. No mining therefore no reconciliation data available.

Criteria and JORC Code explanation	Commentary
Moisture *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Bulk density values used are a combination of local and regional data. Average bulk density values are modified by a moisture percentage so that dry tonnages are reported. Percentage reductions were: overburden and saprolite 5%, saprock 3%, transition 2% and fresh 1 %.
Cut-off parameters *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The cut-off grade used for reporting is 0.40 g/t. This has been determined from the latest regional mining, geotechnical and processing parameters developed from the Gruyere Feasibility Study. Processing costs include haulage to the proposed mill.
Mining factors or assumptions *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The mining method assumed is a conventional open pit with a contract mining fleet appropriately scaled to the size of the deposit. De facto minimum mining width is a function of parent cell size (5 m X by 12.5 m Y by 5 m Z). No allowance for dilution or recovery has been made. However, a minimum width of 2 m for steeply dipping zones and 1 m for flat lying zones are used in construction of the mineralisation wireframes.
Metallurgical factors or assumptions *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Metallurgical recovery assumptions used in the optimisation are informed by numerous testwork programmes completed between 2013 and 2017 on samples from the neighbouring Gruyere deposit. The recoveries applied in the optimisation range from 91% to 94%, depending on ore type. Leachwell testwork has been completed as a high level scan for any refractory issues, none were encountered.
Environmental factors or assumptions *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Surface waste dumps will be used to store waste material from open pit mining. A conventional tailings storage facility as defined in the Gruyere Operational Plan will be utilised for tailings disposal. No test work has been completed regarding potential acid mine drainage material types, however, if identified in future studies appropriate measures will be used to manage any issues.
Bulk density *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density has been determined using limited data available from the YAM14 drilling, and other more detailed bulk density data in the region.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Bulk density is applied by weathering (material) type.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Data was coded by weathering type (material) and domain (mineralisation). Assumptions for moisture percentages were made and accounted for in the final value used for bulk density.
Classification *The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource is constrained within a Whittle shell. Blocks in the geological model above that shell have been classified as Indicated or Inferred. No measured has been classified due to inadequate drill spacing. Several factors have been used in combination to aid the classification: ▪ Drill hole spacing ▪ Indicated - 25 m East by 25 m North ▪ Inferred – 50 m East by 100m North. Depth of drilling and 50 m along strike from extent of drilling. Extrapolation 40 m down dip from last drill hole intercept. ▪ Geological continuity. ▪ Grade continuity. ▪ Estimation quality parameters derived from the Ordinary Kriging process.
Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	All relevant factors have been taken into account in the classification of the Mineral Resource.

Criteria and JORC Code explanation	Commentary
Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Persons' view of the deposit.
Audits or reviews *The results of any audits or reviews of Mineral Resource estimates.*	Internal geological peer reviews were held and documented. Reviews were completed with appropriate Gold Fields staff as part of the Gruyere JV requirements and considered geology, estimation and inputs to optimisation.
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	Variances to the tonnage, grade and metal of the Mineral Resource estimate are expected with further definition drilling. It is the opinion of the Competent Persons that these variances will not significantly affect economic extraction of the deposit.
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource relates to global tonnage and grade estimates.
These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No previous mining.

CENTRAL BORE

JORC CODE 2012 EDITION TABLE 1 – SECTIONS 1 TO 3

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria and JORC Code explanation	Commentary
Sampling techniques *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The sampling has been carried out using a combination of Reverse Circulation (**RC**), diamond drilling (**DD**), and Rotary Air Blast (**RAB**). Significant RAB drilling covers the project area and is used in developing the lithological and mineralisation interpretation, with a small amount of RAB drilling used in the resource estimate. Drilling was completed between 1994 and 2016 and was undertaken by several different companies. 8 RAB, 361 RC and 60 Diamond holes were drilled angled at -60 degrees to 250 degrees azimuth and -60 to 70 degrees azimuth (MGA). Drill core is logged geologically and marked up for assay at approximately one metre intervals based on geological observation. Drill core is cut in half by a diamond saw and half core samples submitted for assay analysis. Previously, RAB & RC chips were logged geologically, and four-metre composite spear samples are submitted for assay, with one metre RAB & RC split samples are submitted for re-assay if composites return anomalous results.
Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.	Between 2006 and 2017 sampling was carried out under Gold Road's protocols and QAQC procedures as per industry best practice. Over 98% of the holes drilled at Central Bore were completed by Gold Road. Prior to 2006, sampling was carried out under the relevant company's protocols and procedures and is assumed to be industry standard practice for the time. Specific details for this historical drilling are not readily available.
Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	Details regarding sampling prior to 2010 are not readily available. Sampling under Gold Road's protocols comprises the following: The RC holes were drilled with a 5¼" or 5¾" inch face-sampling bit, 1 m samples collected through a cyclone and riffle splitter (pre 2010) or static cone splitter (post 2010), to form a 2-3 kg sample. 4 m composite samples were created by spear sampling of the total reject of the 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. 1 m sample intervals were submitted for analysis when the composite interval returned anomalous results. No composite samples were used in the resource estimate. Diamond drilling was completed using an HQ or NQ drilling bit for all holes. Core is cut in half for sampling, with a half core sample sent for assay at measured lithological/mineralogical intervals. All samples were fully pulverised at the lab to -75 µm, to produce a 50 g charge for Fire Assay with either AAS finish or ICPOES finish.
Drilling techniques *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Diamond drill hole diameters range in size from HQ to NQ. This drilling was completed by Wallis Drilling and Terra Drilling. RC drill holes were completed by Top Drill, Wallis Drilling and Raglan Drilling using a face sampling bit with a diameter of 5¼" or 3¾". RAB drill holes were completed by Raglan Drilling using 3 ½ blade sampling bit.
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.*	RC recoveries were visually estimated, and recoveries recorded in the log as a percentage. Where data is available recovery of the samples was good, generally estimated to be close to 100%, except for some sample loss at the top of the hole in the Quaternary cover. All diamond core collected is dry. Drill operators measure core recoveries for every drill run completed using a 3 metre core barrel. The core recovered is physically measured by tape measure and the length recovered is recorded for every 3 m "run". Core recovery can be calculated as a percentage recovery. Almost 100% recoveries were achieved for diamond drilling.

Criteria and JORC Code explanation	Commentary
Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC face-sample bits and dust suppression were used to minimise sample loss. Drilling pressure airlifted the water column above the bottom of the hole to ensure dry sampling. RC samples were collected through a cyclone and riffle splitter. The rejects are deposited in a large plastic bag and retained for potential future use. The sample required for assay is collected directly into a calico sample bag at a designed 3 to 4 kg sample mass which is optimal for full sample crushing and pulverisation at the assay laboratory. Diamond drilling collects uncontaminated fresh core samples which are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling. Protocols for drilling undertaken prior to 2006are not readily available.
Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	RC samples were generally dry with the exception of a few samples (<5%) that are reported as slightly damp to end of hole. Apart from for the top of the holes while drilling through the cover, there is no evidence of excessive loss of material, and at this stage no information is available regarding possible bias due to sample loss. There is no significant loss of material reported in any of the Diamond core.
Logging *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource Estimation, mining studies and metallurgical studies.*	Logging of **DDH** core records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other features of the samples. All core is photographed in the core trays, with individual photographs taken of each tray both dry and wet. Logging of **RC** chips records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging codes have been developed over time and the historical codes translated to a scheme similar to the current Gold Road logging scheme in 2007. This provides data to a level of detail adequate to support Mineral Resource Estimation activities. Some holes are logged using hand held NITON XRF to assist in lithogeochemical analysis. From 2016 most fire assay results routinely include pXRF collected at the lab and used to validate logging.
Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging of drill core captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples, and structural information from oriented drill core. All samples are stored in core trays.
The total length and percentage of the relevant intersections logged	All holes were logged in full.
Sub-sampling techniques and sample preparation *If core, whether cut or sawn and whether quarter, half or all core taken.*	Core samples were generally cut in half and half core samples were collected for assay, with the remaining half core samples stored in the core trays. A quarter core sample programme has been undertaken where three quarter core samples were individually assayed for each interval. This sample methodology impacts 9% of all diamond core sampled. These samples have been reviewed and are considered acceptable for use in an Inferred Mineral Resource.
If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Under Gold Road protocols 1 m RC drill samples are channelled through either a rotary cone or riffle splitter, and an average 2-3 kg sample is collected in an un-numbered calico bag and positioned on top of the plastic bag. 4 m composite samples are generated by spear sampling of the four 1 m samples collected in large plastic bag from the drilling rig and deposited into separate numbered calico bags for sample despatch. A number of RC holes utilised 4 m composite samples for waste intervals. If composite samples returned anomalous gold values, the intervals were resampled as 1 m samples by collecting the sample produced from the riffle splitter. From 2017 onwards, no composites were collected from RC drill holes, only 1 metre cone split chip samples. Sampling procedures used prior to 2010 are not readily available.
For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were prepared and analysed at a variety of laboratories. For data prior to 2010 it is assumed the procedures undertaken are industry standard for the time. Post-2010 samples were dried, and the whole sample pulverised to 80% passing 75 µm, and a sub-sample of approx. 200 g retained. A nominal 50 g was used for the fire assay analysis. The procedure is industry standard for this type of sample.

<table>
<tr><th>Criteria and JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.</td><td>Two external reports Maxwell Geoservices and GCXplore (2012) and internal report Sauter (2013) have been completed reviewing the QAQC associated with drilling at Central Bore. No significant issues have been identified.</td></tr>
<tr><td>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</td><td>Gold Road protocols state duplicate samples are collected at a frequency of 1 in 40 samples for all RC drill holes.
RC duplicate samples are collected directly from the Rig-mounted static cone splitter.
No diamond duplicates were collected.
Details of historical duplicate sampling are not readily available.</td></tr>
<tr><td>Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>Sample sizes are considered appropriate to give an indication of mineralisation given the particle size and preference to keep the sample weight below 3 kg to ensure requisite grind size in a LM5 sample mill.</td></tr>
<tr><td>Quality of assay data and laboratory tests
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</td><td>Samples were analysed at a variety of laboratories using methodologies that include:

<table><tr><th>Analysis Type</th><th>Total</th></tr><tr><td>Aqua Regia Digest, graphite furnace AAS finish.</td><td>64</td></tr><tr><td>Fire Assay, unspecified AAS finish.</td><td>12,959</td></tr><tr><td>Fire Assay, flame AAS finish.</td><td>4,628</td></tr><tr><td>Fire Assay. Finish by ICP-OES</td><td>296</td></tr><tr><td>Fire Assay. Finish by ICP-MS</td><td>45</td></tr><tr><td>No method recorded</td><td>14</td></tr><tr><td>Fire Assay, unspecified AAS finish.</td><td>302</td></tr></table>
Laboratories used include:
1. SGS – Kalgoorlie, Perth and Leonora
2. Amdel – Perth
3. Genalysis – Perth
It is assumed laboratory procedures were appropriate for the time.</td></tr>
<tr><td>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</td><td>NITON handheld XRF was used on a number of drill holes. Calibration of the hand-held XRF tools is applied at start-up. XRF results are only used for indicative analysis of lithogeochemistry and alteration and to aid logging and subsequent interpretation. Four acid digest data are also used to assist in lithogeochemical determination. pXRF analysis, conducted at the lab, is completed on most holes post 2016 to aid in lithogeochemical determination.</td></tr>
<tr><td>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>Gold Road protocol is for Field Standards (Certified Reference Materials) and Blanks inserted at a rate of 3 Standards and 3 Blanks per 100 samples. Field Duplicates for RC drilling are generally inserted at a rate of approximately 1 in 40. No duplicates are collected for diamond drill holes. At the Lab, regular assay Repeats, Lab Standards, Checks and Blanks are analysed.
For drilling at Central Bore the relevant assays and QAQC numbers are as follows:

<table><tr><th>Assay and QAQC Numbers</th><th>RAB</th><th>RC</th><th>DDH</th></tr><tr><td>Total Sample Submission</td><td>488</td><td>16,488</td><td>3,222</td></tr><tr><td>Assays</td><td>483</td><td>15,465</td><td>2,366</td></tr><tr><td>Field Blanks</td><td>1</td><td>350</td><td>720</td></tr><tr><td>Field Standards</td><td>4</td><td>441</td><td>136</td></tr><tr><td>Field Duplicates</td><td>-</td><td>232</td><td>28</td></tr><tr><td>Laboratory Checks</td><td>17</td><td>433</td><td>163</td></tr><tr><td>Umpire Checks</td><td>-</td><td>-</td><td>-</td></tr></table>
Historical drilling QAQC has been reviewed by and deemed satisfactory and fit for use in Resource Estimation.</td></tr>
<tr><td>Verification of sampling and assaying
The verification of significant intersections by either independent or alternative company personnel.</td><td>Significant results are checked by the Principal Resource Geologist, General Manager Geology and Executive Director. Additional checks are completed by the Database Manager.</td></tr>
<tr><td>The use of twinned holes.</td><td>No true twin holes exist in the dataset. Holes drilled close together do display variability associated with narrow vein gold deposits. The nature and location of the shear vein is predictable.</td></tr>
<tr><td>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</td><td>All logging data is stored in a Datashed/SQL database system and maintained by the Gold Road Database Manager.</td></tr>
<tr><td>Discuss any adjustment to assay data.</td><td>No assay data was adjusted. The lab's primary Au field is the one used for plotting and resource purposes. No averaging is employed.</td></tr>
</table>

Criteria and JORC Code explanation	Commentary
Location of data points *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource Estimation.*	The drill hole locations were initially picked up by handheld GPS, with an accuracy of 5 m in northing and easting. RC & DDH holes were later picked using DGPS to a level of accuracy of 1 cm in elevation and position. For angled drill holes, the drill rig mast is set up using a clinometer, and rigs aligned by surveyed positions and/or compass. Drillers use an electronic single-shot camera to take dip and azimuth readings inside the stainless steel rods, at 50 m intervals, prior to August 2014, and 30 m interval, post August 2014. Downhole directional surveying using north-seeking gyroscopic tool was completed on site and live (down drill rod string) or after the rod string had been removed from the hole. Most diamond drill holes were surveyed live whereas most RC holes were surveyed upon exiting the hole.
Specification of the grid system used.	A local grid (Attila Grid) is used at Central Bore.
Quality and adequacy of topographic control.	A topographic surface was generated using LIDAR data collected in December 2015.
Data spacing and distribution *Data spacing for reporting of Exploration Results.*	Drill spacing at surface is approximately 50mE by 100mN with a small area of 25mE by 50mN, and this spacing extends to 50mE by 200mN at the margins of the deposit.
Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Spacing of the reported drill holes is sufficient for the geological and grade continuity of the deposit, is appropriate for Resource Estimation procedures and to report an Inferred Resource.
Whether sample compositing has been applied.	In most cases, samples were composited to the width of the interpreted wireframe. The narrow width of the shear vein means this is generally only one sample. Where more than one sample was selected, these were composited to a maximum of 1 m, allowing for minimum composite size of 10 cm.
Orientation of data in relation to geological structure *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The orientation of the drill lines (250 degrees azimuth 270 degrees local) is approximately perpendicular to the regional strike of the targeted mineralisation. Holes intersected the near vertical lode at angles of between 11 and 38 degrees. Holes were drilled from both the east and west. Mineralisation is hosted in a single planar body and no directional bias is noted.
Sample security *The measures taken to ensure sample security.*	Pre-numbered calico bags are collected in plastic bags and transported to the laboratory. Details regarding sample security of drilling prior to 2010 are not readily available.
Audits or reviews *The results of any audits or reviews of sampling techniques and data.*	Sampling and assaying techniques are industry-standard. Audit on sample methodology was completed by Ravensgate as a part of a Mineral Resource Update (2012), and QAQC report by Paul Sauter (2013).

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria and JORC Code explanation	Commentary
Mineral tenement and land tenure status *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The RC and Diamond exploration drilling was managed by Gold Road, which since November 2016 has formed part of the 50:50 Gruyere JV with Gold Fields. This tenement is located on the Yamarna Pastoral Lease which is owned and managed by Gold Road. Tenement M38/1255 is located on tenements granted in respect of land in which non-exclusive native title has been determined to exist and to be held by a group of native title holders which includes the persons on whose behalf the Yilka (WAD297/2008) and Sullivan Edwards (WAD498/2011) native title claims were brought. The determination was made by the Federal Court on 27 September 2017. The native title holders are required to nominate a body corporate to act as trustee of, or as their agent in future dealings relating to, their native title. Exploration activities in the specified "Gruyere and Central Bore Project Areas" within the Pastoral Lease are conducted in accordance with the 2016 "Gruyere and Central Bore Native Title Agreement" between Gold Road, the Yilka native title claim group and Cosmo Newberry Aboriginal Corporation. Exploration activities within the balance of the Pastoral Lease are conducted in accordance with the 2004 "Yamarna Pastoral Lease Heritage Protection Agreement" between Gold Road and Harvey Murray (the applicant in relation to the Yilka native title claim).
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area	The tenement is in good standing with the WA DMIRS.
Exploration done by other parties *Acknowledgment and appraisal of exploration by other parties.*	Two previous exploration companies completed work at Central Bore ▪ 1994- 1995 WMC and Kilkenny (minor RAB/AC drilling) ▪ 2006-2010 Eleckra Mines Limited (renamed Gold Road in 2010) ▪ 2010-November 2016 Gold Road ▪ November 2016 – Present Gruyere JV Gold Road understands that previous exploration has been completed to industry standard.
Geology *Deposit type, geological setting and style of mineralisation.*	Gold mineralisation has been defined over 1500 metres in strike in a package of intercalated volcanics and sediments of predominantly dacitic composition east of the Yamarna Shear Zone. The sequence is generally under formed, with areas of localised strain and narrow shear zones. High-grade mineralisation at Central Bore occurs as a 0.2 – 0.5 m near vertical mineralised lode, defined by a quartz-carbonate± pyrite± molybdenite mylonised lode. High-grade shoots have developed where subtle changes in the dip & dip direction of major structure have occurred. A narrow mineralisation halo occurs around the high-grade lode with a noted calcite alteration in the hangingwall and footwall of the shears. The host volcaniclastic sequence is generally unmineralised and weakly chlorite altered due to regional upper greenschist metamorphism.
Drill hole Information *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ▪ *easting and northing of the drill hole collar* ▪ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ▪ *dip and azimuth of the hole* ▪ *down hole length and interception depth* ▪ *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	A total of 4 diamond holes have been completed within the deposit area since the previous Resource Estimate, refer ASX announcement dated 8 April 2013. Details of this drilling are included in the ASX announcement dated 26 October 2017 and 19 December 2017.
Data aggregation methods *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	No weighting or averaging of grades was undertaken. Grades are reported as down-hole length-weighted average grades across the full width of mineralised domains. The drill angle generates an approximation of the true-width intersection.
Relationship between mineralisation widths and intercept lengths *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for*	No new exploration results are reported. Intersections quoted may not match those previously reported as they are selected for Resource Estimation purposes.

Criteria and JORC Code explanation	Commentary
such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	
The assumptions used for any reporting of metal equivalent values should be clearly stated. *These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	No metal equivalent values are used. Mineralisation is hosted within a sub-vertical to vertical North striking package of intermediate volcaniclastic rocks. Mineralisation is hosted in a narrow shear zone parallel to stratigraphy. The general drill direction of 60^0 to 250 and 60^0 to 070 is approximately perpendicular to the lithological package and is a suitable drilling direction to avoid directional biases.
Diagrams *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to Figures and Tables in the body of text.
Balanced reporting *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results used in this resource have been published in previous releases; please refer to Appendix 2 for a summary of previous releases.
Other substantive exploration data *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Regional Aeromagnetic and gravity data cover the project area and assist in the geological interpretation; including the strike orientation of the stratigraphy, location of cross-cutting faults and dykes, and general regional geology. A Sub-Audio Magnetic (SAM) survey was completed over Central Bore in 2012 and has assisted in refining interpretation of local structures. Internal studies were completed by structural geologist consultant Dr. Roger Bateman regarding the formation of the Central Bore mineralisation and associated micro- & local structures. Handheld XRF data exists for some drill holes and assists in lithogeochemical analysis. Significant metallurgical work carried out by ALS has been completed at Central Bore, evaluating comminution, Bond Work Index, grind size optimisation, gravity recovery, cyanide leach and acid mine drainage. Testwork indicates no deleterious elements are present and mineralisation is amenable to conventional cyanidation. Minor tellurides are present with gold mineralisation. Geotechnical studies have been completed by Dempers & Seymour consultants.
Further work *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Further drilling is required to evaluated mineralised shoots and depth and along strike.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria and JORC Code explanation	Commentary
Database integrity *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource Estimation purposes.*	Geological metadata is stored centrally in a relational SQL database with a DataShed front end. Gold Road employs a Database Manager who is responsible for the integrity and efficient use of the system. Only the Database Manager or the Data Entry Clerk has permission to modify the data. Sampling and geological logging data is collected in the field using LogChief software and uploaded digitally. The software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Sampling data is sent to, and received from, the assay laboratory digitally. Drill hole collars are picked up by differential GPS and delivered to the database digitally. Down hole surveys are delivered to the database digitally. The Mineral Resource estimate only uses a selection of RC and DDH assay data available; historical data is used, and measures of integrity applied by previous companies are not readily available
Data validation procedures used.	DataShed software has validation procedures that include constraints, library tables, triggers and stored procedures. Data that does not pass validation must be corrected first. The LogChief software utilises lookup tables, fixed formatting and validation routines to ensure data integrity prior to upload to the central database. Geological logging data is checked visually in three dimensions against the existing data and geological interpretation. Assay data must pass company QAQC hurdles. Gold Road utilises QAQCR software to further analyse QAQC data, and batches which do not meet criteria are requested to be re-assayed. Sample grades are checked visually in three dimensions against the logged geology and geological interpretation. Drill hole collar pickups are checked against planned and/or actual collar locations. A hierarchical system is used to identify the most reliable down hole survey data. Drill hole traces are checked visually in three dimensions. Data validation procedures of previous companies are not readily available.
Site visits *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case*	Justin Osborne is Gold Road's Executive Director of Exploration & Growth and a Competent Person. He conducts regular site visits and covers all aspects of the Project. John Donaldson is Gold Road's General Manager Geology and a Competent Person. He has completed specific site visits to focus on understanding the geology of Central Bore. Jane Levett is Gold Road's Principal Resource Geologist and a Competent Person and has completed several specific site visits to focus on understanding the geology of Central Bore from field observations, historic diamond core and RC chips. Max Sheppard is Gold Road's Principal Mining Engineer and has undertaken several site visits.
Geological interpretation *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Diamond drilling allows a robust geological interpretation to be developed. Airborne magnetic data and SAM data gives weight to the broad interpretation and subtle strike changes continuity of the shear provide an explanation for strike extents of mineralisation. The location of the shear is predictable along strike and down dip. As the deposit has good geological continuity the Competent Persons regard the confidence in the geological interpretation as high. Further understanding on mineralisation controls and potential will result in higher classification.
Nature of the data used and of any assumptions made.	All available data has been used to help build the geological interpretation. This includes geological logging data (lithology and structure), portable XRF multi-element data, gold assay data, induced polarisation and airborne magnetic surveys.
The effect, if any, of alternative interpretations on Mineral Resource Estimation.	During 2018 a desktop review of all available data was undertaken at Central Bore. New understanding of stratigraphy, controls on mineralisation and associated alteration assemblages were incorporated into the mineral resource estimate. Resulting in a tighter interpretation that defines the central shear vein as the primary gold host. This tighter interpretation has reduced the tonnage of the resource but increased the mean grade.

Criteria and JORC Code explanation	Commentary
The use of geology in guiding and controlling Mineral Resource Estimation.	Gold mineralisation is hosted within a continuous north striking (Attila local grid), sub-vertical to steep west dipping shear zone. Very high grade mineralisation (25 to >200 g/t Au) is associated with a narrow carbonate vein (20 to 50 cm wide) central to the shear. Accessory minerals include molybdenite, pyrite and pyrrhotite. A proximal halo of carbonate-chlorite-biotite±albite±sericite alteration is present in the hangingwall and footwall to the mineralised shear. The Central Bore shear zone has been delineated over 1,000 metres in strike length. The high grade core is modelled to the width of the vein in diamond core, or the first 1 metre of a mineralised interval in RC chip samples. Low grade mineralisation adjacent to the vein comprises a proximal halo approximately 3 to 5 metres wide. The bulk of the gold inventory is contained within the high grade Imperial shoot which is controlled by a subtle strike change (< 5°) and steep plunge. The imperial Shoot has a maximum 100 metres strike length and has a currently defined 700 m dip extent, it remains open at depth.
The factors affecting continuity both of grade and geology.	A Proterozoic dyke cuts the high grade mineralisation close to the southern boundary of the Imperial shoot.
Dimensions *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Central Bore is an underground mining proposition and the near-surface weathered portion of the deposit has been excluded from the estimate. The Mineral Resource is centred on the Imperial shoot which has a strike length of 100m, widths of 0.3m to 0.5m, and a down-plunge extent of 500m starting from 70m below surface. The Mineral Resource has been constrained by a mineable stope optimiser that considers all mineralisation in the geological model. The optimisation utilises appropriate minimum mining widths and cut-off grades appropriate for underground operations. Only Measured, Indicated and Inferred categories within this shell are reported as Mineral Resource. Mineralisation in the geology model outside the shell is not reported.
Estimation and modelling techniques. *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Software used: Leapfrog Geo – Drill hole validation, lithology, material type, mineralisation and fault wireframes Datamine Studio RM – Drill hole validation, cross-section, plan and long-section plotting, block modelling, estimation, block model validation, classification, reporting. Snowden Supervisor – Statistics, variography, kriging neighbourhood analysis, block model validation Block model and estimation parameters: Treatment of extreme grade values (top cuts): 15 to 25 g/t Au top-cut applied to 1 m composites selected within mineralisation wireframes. Top cuts were determined by domain through analysis of histograms, log histograms, log probability plots and spatial analysis. Estimation technique: Ordinary Kriging. KNA was undertaken to optimise the search neighbourhood used for the estimation and test the parent block size. The search ellipse and selected samples by block were viewed in three dimensions to verify the parameters. A local grid is used with a rotation 20 degrees west of true north from MGA. Parent block size - 5 m X by 25 m Y by 5 m Z (parent cell estimation with full subset of points). Smallest sub cell – 1 m X by 5 m Y by 1 m Z (small X dimension is required to fill mineralisation wireframes and a small Z dimension is required to fill to material type boundaries). Discretisation - 3 X by 5 Y by 2 Z (using number of points method). Search ellipse – aligned to mineralisation trend, dimensions are 165 m X by 150 m Y by 40 m Z for all sub-vertical domains. Number of samples – maximum per drill hole = 5, first search 12 min / 30 max, second search 10 min / 60 max, volume factor 2, third search 5 min / 60 max, volume factor 4. Domain boundary conditions – A hard boundary is applied to all domains.

Criteria and JORC Code explanation	Commentary
The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The Central Bore Deposit was removed from the Yamarna Mineral Resource in 2017 as, at the time, the cut-off grade applied was deemed too low for potential economic underground extraction. As such, this Mineral Resource estimation and evaluation is considered an update. This resource differs from previous in that it considers a more selective definition of the main shear, and applies mineable shapes to report the Mineral Resource, rather than a cut-off grade. This has resulted in lower Mineral Resource total. The overall interpretation, and estimation is not appreciably different from previous iterations.
The assumptions made regarding recovery of by-products.	No assumptions are made on recovery of by-products.
Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	No deleterious elements have been considered or estimated for this deposit.
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The parent block size of 5 m X by 25 m Y by 5 m Z is approximately one quarter of the average drill spacing of 20 m X by 20 m Y in Inferred areas.
Any assumptions behind modelling of selective mining units.	No Selective Mining Units were assumed in this estimate.
Any assumptions about correlation between variables.	No assumptions about correlation between variables were required in developing this resource model and estimate.
Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation was used at all stages to control the estimation. If geostatistics, variography and/or visual checks of the model were difficult to understand then the geological interpretation was questioned and refined.
Discussion of basis for using or not using grade cutting or capping.	Top-cuts were used in the estimate as this is the most appropriate way to control outliers when using Ordinary Kriging.
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation checks performed: ▪ QQ plot of RC vs DDH input grades. ▪ Volume of wireframe vs volume of block model ▪ Sum of gram metres prior to compositing vs sum of gram metres post compositing ▪ Negative gold grade check ▪ Model average grade vs declustered top-cut sample grade by Domain. ▪ Swath plots by Northing and elevation by Domain. ▪ Visual check of drill data vs model data in plan, section and three dimensions. All validation checks gave acceptable results. No mining therefore no reconciliation data available.
Moisture *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The tonnages have been estimated on a dry basis.
Cut-off parameters *The basis of the adopted cut-off grade(s) or quality parameters applied.*	For Mineral Resources, the cut-off grade (COG) is generated using a A$1,850/oz gold price and 92% metallurgical recovery. Costs incorporated in the COG calculation are derived from various case studies of narrow open stoping operations of similar dimensions to Central Bore and are built from first principals or based on actual cost history, contractor estimates or budget estimates. The COG considers all directly incurred costs involved in the development and extraction of the ore panel (e.g., drill & blast, surface haulage, processing, administration costs, sustaining capital, refining and royalties on sales.). The COG does not include capital development or fixed costs (i.e., costs not directly associated with extraction, processing and selling gold).
Mining factors or assumptions *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	It is assumed that mining at Central Bore will be from underground utilising narrow long hole open stoping methods with 15m level access horizons. 'Mineable Shape Optimiser' (MSO) software was utilised to constrain the Mineral Resource in order to determine that there are reasonable prospects for eventual economic extraction and generate optimal mining shapes based on a 1.5m minimum mining width, and an appropriately costed cut-off grade of 3.5g/t at a A$1,850/oz gold price. The Mineral Resource reported is the Measured, Indicated & Inferred material within the MSO shape generated.

Criteria and JORC Code explanation	Commentary
Metallurgical factors or assumptions *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Ore extracted from Central Bore will be processed at the neighbouring Gruyere process plant (under construction). Metallurgical test work completed at Central Bore indicates that gold liberation from ore is relatively straightforward through standard milling physical and chemical processes with good recovery ranging between 93.7% and 97.2% from 5 samples tested. The recovery applied to calculate the cut-off grade constraining the Mineral Resource is 92%.
Environmental factors or assumptions *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	All mining at Central Bore will be by underground methods. Local surface waste dumps will be established to store waste material excavated from the access box-cut and other waste mined from underground. Initial Acid Mine Drainage test-work reported by a consultant metallurgist was conducted on both cyanide leach residues and waste rock including Transitional waste and Fresh waste. Transitional waste was potentially slightly acid forming; Fresh waste was non-acid forming and the leach residues from three ore samples were all non-acid forming. The potential acid forming waste will be managed appropriately. Ore from Central Bore will be transported on established roads via road train to the nearby Gruyere Mill (under construction) for processing. A conventional tailings storage facility at Gruyere will be utilised for tailings disposal.
Bulk density *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density has been determined using limited data available from the diamond drilling. Density data including historical data from Central Bore was collected using the weight in air / weight method for diamond drill core, and downhole density tool in several 2010 RC holes.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Bulk density is applied by weathering (material) type.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Data was coded by weathering type (material) and domain (mineralisation). The tonnages have been estimated on a dry basis. No assumptions for moisture percentages were made and accounted for in the final value used for bulk density.
Classification *The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource is constrained within a Whittle shell. Blocks in the geological model above that shell have been classified as Inferred. Several factors have been used in combination to aid the classification: ▪ Drill hole spacing ▪ Inferred – 50 m East by 100m North. Depth of drilling and 50 m along strike from extent of drilling. Extrapolation 20 m down dip from last drill hole intercept ▪ Geological continuity ▪ Grade continuity ▪ Estimation quality parameters derived from the Ordinary Kriging process
Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	All relevant factors have been taken into account in the classification of the Mineral Resource.
Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Persons' view of the deposit.
Audits or reviews *The results of any audits or reviews of Mineral Resource estimates.*	Internal geological peer reviews were held and documented. Reviews were completed with appropriate Gold Fields staff as part of the Gruyere JV requirements and considered geology, estimation and inputs to optimisation.
Discussion of relative accuracy/ confidence *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The quality of the underlying drill data is high, having all been undertaken post 2009 using modern equipment, latest methodologies and QAQC. The dataset includes no historical drilling eliminating the inherent uncertainties of historical data.

Criteria and JORC Code explanation	Commentary
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource relates to global tonnage and grade estimates.
These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No previous mining.