Gold Road 2022 Annual Mineral Resource and Ore Reserve Statement

Gold Road Resources Limited (**Gold Road**), presents its Annual Mineral Resource and Ore Reserve Statement as at 31 December 2022 for the Gruyere Joint Venture (**Gruyere JV**)[1] and for its 100% owned Mineral Resources at Yamarna.

Highlights

- Gold Road's **attributable Mineral Resources of 4.79 million ounces have increased slightly** as a result of an extension of the Gruyere underground resource, offsetting mining depletion at the Gruyere pit and minor adjustments to Golden Highway open pit resource assumptions.

- On a 100% basis the **Gruyere JV Open Pit Mineral Resource[2] is 153 million tonnes at 1.36 g/t Au for 6.69 million ounces** (constrained within A$2,000 per ounce pit shells, which is unchanged from the 2021 Mineral Resource and Ore Reserve Statement), a decrease of 0.69 million ounces (after mining depletion). The Mineral Resource includes:

    - Updated **Gruyere Open Pit Mineral Resource of 137 million tonnes at 1.33 g/t Au for 5.88 million ounces**, a decrease of 0.64 million ounces (-10%) largely the result of mining depletion and a reduction in depth of the constraining pit shell due to increased cost assumptions

    - Updated Golden Highway Open Pit Resources of 14 million tonnes at 1.44 g/t Au for 0.67 million ounces representing a decrease of 0.06 million ounces (-8%) resulting from reduction in size of several of the constraining pit shells due to increased cost assumptions

- Gold Road's attributable Ore Reserves have decreased by 0.21 million ounces to 2.02 million ounces since 31 December 2021, mostly as a result of mining depletion.

- On a 100% basis **Gruyere JV Ore Reserve totals 98.8 million tonnes at 1.27 g/t Au for 4.05 million ounces**, a decrease of 0.41 million ounces mostly due to mining depletion. The Ore Reserve includes:

    - Updated Gruyere Ore Reserve of 91.8 million tonnes at 1.27 g/t Au for 3.76 million ounces

    - Updated Golden Highway Ore Reserve of 6.96 million tonnes at 1.29 g/t Au for 0.29 million ounces

- Gold Road's **Gruyere Underground Mineral Resource estimate** has increased by an attributable 0.43 million ounces (84%) due to extensions to the Inferred category defined by a drilling program[3] completed in 2021 and the shallower open pit resource shell. The evaluation (constrained within A$2,000 per ounce stope shapes) now defines an inventory of 42 million tonnes at 1.40 g/t Au for a total of 1.89 million ounces from which Gold Road reports an attributable Underground Inferred Mineral Resource of **21 million tonnes at 1.40 g/t Au for a total of 0.95 million ounces** of gold.

- Gold Road's 100% owned Yamarna Mineral Resources (Renegade, Gilmour, Smokebush and Warbler) remain unchanged year on year at 6.5 million tonnes at 2.44 g/t Au for 0.51 million ounces (constrained within A$2,200 per ounce pit shells).

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[1] Mineral Resources and Ore Reserves are reported on a 100% basis unless otherwise specified, the Gruyere JV is a 50:50 joint venture with Gruyere Mining Company Pty Ltd, a member of the Gold Fields Ltd Group (**Gold Fields**), the Gruyere JV is 50% attributable to Gold Road
[2] Comprising the Gruyere, YAM14 and Golden Highway Open Pits and the Central Bore Underground for simplicity
[3] ASX announcement dated 27 April 2022

Gold Road Attributable Mineral Resource Summary

The Gold Road attributable Mineral Resource at Yamarna comprises 50% of the Gruyere JV Mineral Resources (Gruyere, Golden Highway and YAM14 Open Pits and Central Bore Underground), the Company's Gruyere Underground Mineral Resource (as reported 50% attributable) and Gold Road's 100% owned Yamarna Mineral Resources (Renegade, Gilmour, Smokebush and Warbler Open Pits and Gilmour Underground) (Figure 1).

Gold Road's total attributable Mineral Resource has increased year on year by 0.08 million ounces (+2%) to **104 million tonnes at 1.44 g/t Au for 4.79 million ounces** (Figure 2 and Table 1). The increase is predominantly due to the extension of the Company's Gruyere Underground resource offsetting mining depletion and decreases to the Gruyere and Golden Highway Open Pits due to smaller constraining shells as a result of increased costs.

The Gold Road 100% owned Yamarna Mineral Resources remain unchanged year on year at 6.5 million tonnes at 2.44 g/t Au for 0.51 million ounces.
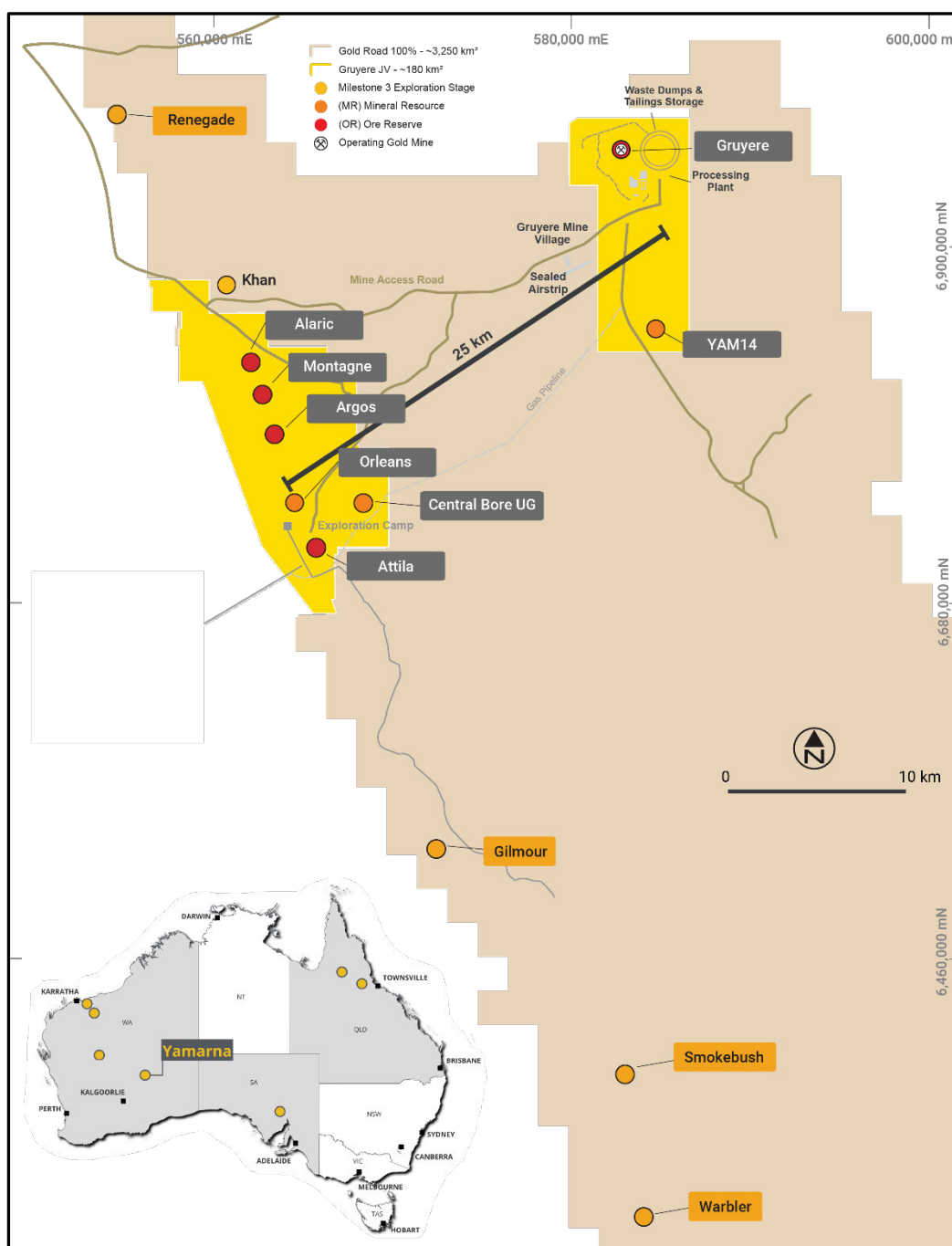

Figure 1: *Gruyere JV (50%) and Yamarna (100%) Mineral Resource and Ore Reserve location map. Inset map of Australian shows location of Yamarna and Gold Roads exploration projects (yellow dots)*
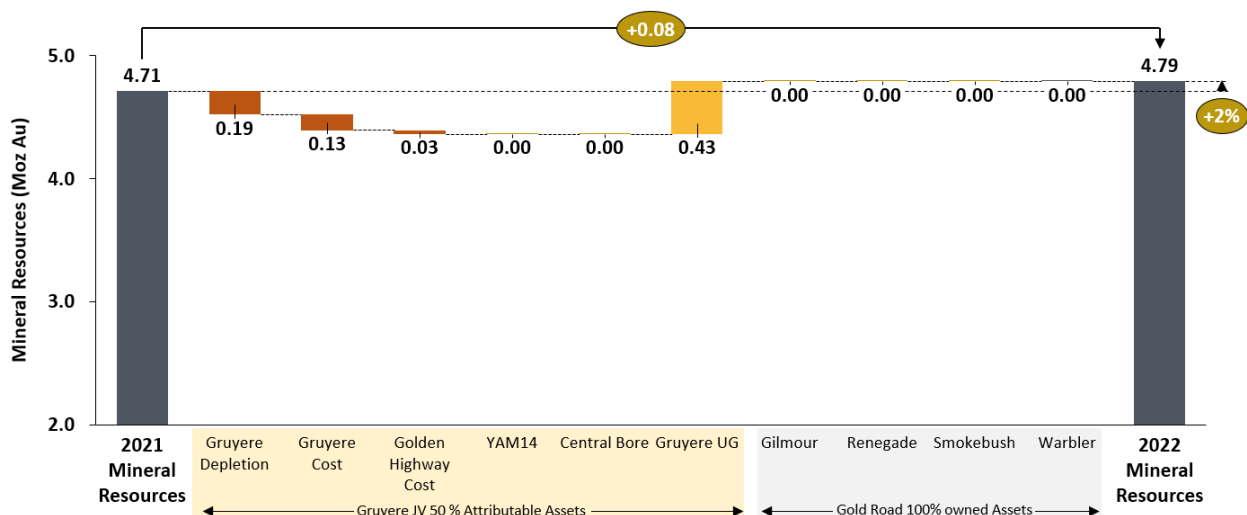
Figure 2: Waterfall chart showing year on year variations to the Mineral Resource - Gold Road Attributable contained metal

Table 1: Year on year Gold Road Attributable Mineral Resource comparison (total Measured, Indicated and Inferred categories)

Group / Deposit	Gold Road Attributable Mineral Resource 2022 December			Gold Road Attributable Mineral Resource 2021 December			Change %			Change		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
	Mt	g/t Au	Moz Au	Mt	g/t Au	Moz Au	Mt	g/t Au	Moz Au	Mt	g/t Au	Moz Au
Gruyere JV (50% Basis)												
Gruyere OP	68.49	1.33	2.94	76.31	1.33	3.26	-10%	1%	-10%	-7.81	0.01	-0.32
Golden Highway OP Total	7.19	1.44	0.33	7.80	1.44	0.36	-8%	0%	-8%	-0.61	-0.00	-0.03
Attila OP	*2.16*	*1.67*	*0.12*	*2.45*	*1.70*	*0.13*	*-12%*	*-2%*	*-14%*	*-0.29*	*-0.03*	*-0.02*
Orleans OP	*0.59*	*1.50*	*0.03*	*0.59*	*1.50*	*0.03*	*0%*	*0%*	*0%*	*-*	*-*	*-*
Argos OP	*1.93*	*1.20*	*0.07*	*2.01*	*1.18*	*0.08*	*-4%*	*2%*	*-2%*	*-0.08*	*0.02*	*-0.00*
Montagne OP	*1.64*	*1.27*	*0.07*	*1.79*	*1.25*	*0.07*	*-9%*	*2%*	*-7%*	*-0.16*	*0.02*	*-0.01*
Alaric OP	*0.88*	*1.67*	*0.05*	*0.96*	*1.65*	*0.05*	*-8%*	*1%*	*-7%*	*-0.08*	*0.02*	*-0.00*
YAM14 OP	0.57	1.27	0.02	0.57	1.27	0.02	0%	0%	0%	-	-	-
Central Bore UG	0.12	13.05	0.05	0.12	13.05	0.05	0%	0%	0%	-	-	-
Total Gruyere JV	**76.37**	**1.36**	**3.34**	**84.79**	**1.35**	**3.69**	**-10%**	**1%**	**-9%**	**-8.42**	**0.01**	**-0.35**
Gruyere UG - Inferred Only (50% Basis)												
Gruyere UG	20.99	1.40	0.95	10.93	1.46	0.51	92%	-4%	84%	10.07	-0.06	0.43
Total Gruyere JV + Gruyere UG	**97.37**	**1.37**	**4.29**	**95.72**	**1.37**	**4.21**	**2%**	**0%**	**2%**	**1.65**	**0.00**	**0.08**
Gold Road 100%												
Renegade OP	1.86	1.13	0.07	1.86	1.13	0.07	0%	0%	0%	-	-	-
Gilmour OP + UG Total	2.87	3.28	0.30	2.87	3.28	0.30	0%	0%	0%	-	-	-
Gilmour OP	*2.29*	*2.80*	*0.21*	*2.29*	*2.80*	*0.21*	*0%*	*0%*	*0%*	*-*	*-*	*-*
Gilmour UG	*0.59*	*5.14*	*0.10*	*0.59*	*5.14*	*0.10*	*0%*	*0%*	*0%*	*-*	*-*	*-*
Smokebush OP	1.09	2.61	0.09	1.09	2.61	0.09	0%	0%	0%	-	-	-
Warbler OP	0.62	2.14	0.04	0.62	2.14	0.04	0%	0%	0%	-	-	-
Total Gold Road (100% Owned)	**6.45**	**2.44**	**0.51**	**6.45**	**2.44**	**0.51**	**0%**	**0%**	**0%**	**-**	**-**	**-**
Total Gold Road	**103.82**	**1.44**	**4.79**	**102.17**	**1.43**	**4.71**	**2%**	**0%**	**2%**	**1.65**	**0.00**	**0.08**

Notes: OP = Open pit, UG = Underground

- *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. Gruyere Measured category includes Surface Stockpiles (6.25 Mt at 0.72 g/t Au for 0.14 Moz). Mineral Resources are depleted for mining*
- *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, 50% is attributable to Gold Road. Gold Road's 50% attributable Mineral Resource for Gruyere Underground is reported independently of the Gruyere JV*
- *The Gruyere and Golden Highway (except Orleans) Open Pit Mineral Resources are reported between 0.45 to 0.58 (oxide) and 0.48 to 0.61 (fresh) g/t Au cut-off grade allowing for dilution, processing costs, recovery and haulage to the Gruyere Mill. The Orleans and YAM14 Open Pit Mineral Resources are reported at 0.4 g/t Au cut-off grade and the Renegade, Gilmour, Smokebush and Warbler Mineral Resource are reported at 0.5 g/t Au cut-off grade allowing for processing costs, recovery and haulage to the Gruyere Mill*
- *All Open Pit Mineral Resources are constrained within a A$2,000 per ounce (Gruyere JV) or a A$2,200 per ounce (Gold Road 100%) optimised pit shell derived from mining, processing and geotechnical parameters from the Golden Highway PFS, the Gruyere FS in progress and current Gruyere JV operational cost data*
- *The Underground Mineral Resource at Gruyere was evaluated by Gold Road on the same geology model used to estimate the December 2022 Open Pit Mineral Resource. The model was evaluated exclusively below the A$2,000 per ounce pit optimisation shell utilised to constrain the Open Pit Mineral Resource and is reported as 100% in the Inferred category*
- *The Underground Mineral Resource at Gruyere is constrained by Mineable Shape Optimiser (MSO) shapes of dimensions consistent with underground mass mining methods. The MSO shapes are optimised at cut-off grades based on benchmarked mining costs, current Gruyere operating costs and processing recoveries at a A$2,000 per ounce gold price*
- *Underground Mineral Resources at Gruyere considered appropriate for potential mass mining exploitation in the Central Zone are constrained within MSO shapes of 25 metre minimum mining width in a transverse orientation and 25 metre sub-level interval, and are optimised to a cut-off grade of 1.0 g/t Au*
- *Underground Mineral Resources at Gruyere considered appropriate for potential mass mining exploitation in the Northern Zone are constrained within MSO shapes of 5 metre minimum mining width in longitudinal orientation and 25 metre sub-level interval and are optimised to a cut-off grade of 1.5 g/t Au*
- *Underground Mineral Resources at Central Bore are constrained by a 1.5 metre minimum stope width that are optimised to a 3.5 g/t Au cut-off reflective of a A$1,850 per ounce gold price*
- *Underground Mineral Resources at Gilmour are constrained by an area defined by a 2 metre minimum stope width and a 3.0 g/t Au cut-off reflective of a A$2,200 per ounce gold price*
- *Underground Mineral Resources are reported with diluted tonnages and grades based on minimum stope widths*

Gruyere JV Mineral Resource Summary

The Gruyere JV Mineral Resource, as at 31 December 2022, includes the open pit portion of the Gruyere Deposit, the Golden Highway (including Attila, Orleans, Argos, Montagne and Alaric) and YAM14 Open Pits, and Central Bore Underground (Figure 1 and Table 1), all of which are within the Gruyere JV. Mineral Resources are reported on a 100% basis and are constrained within optimised pit shells based on a A$2,000 per ounce gold price (unchanged year on year) and deposit-specific modifying factors and cut-off grades. The Central Bore Inferred Resource is constrained within underground stope shapes based on a A$1,850 per ounce gold price.

The year on year decrease of 0.64 million ounces associated with the Gruyere Open Pit Mineral Resource is discussed in the following section, and is the main contributor to the overall decrease to the Gruyere JV Mineral Resource of 0.69 million ounces (-9%) (0.34 million ounces attributable) to 153 million tonnes at 1.36 g/t Au for 6.69 million ounces exclusive of Gold Road's Underground Mineral Resource.

The Golden Highway geology models informing the December 2022 Mineral Resource estimates remain unchanged year on year. Increases to cost assumptions has produced slight reductions in pit shell volumes and combined with increases to reporting cut-off grades (+0.09 to +0.16 g/t Au) has resulted in the Mineral Resource estimates decreasing by 0.06 million ounces (-10%) (0.03 million ounces attributable). The largest change (-0.04 million ounces) has been at a higher strip/lower grade area at the north end of Attila. Orleans remains unchanged from December 2021.

The Golden Highway geology models will be updated in 2023 with drilling completed in H2 2022[4] and drilling planned for 2023 that is designed to better define and extend mineralisation that could potentially grow the Resources and Reserves with a view to optimising their inclusion in the overall Gruyere Mine Plan. Further drilling will be based on the results of the ongoing evaluation.

The YAM14 and Central Bore Mineral Resources remain unchanged from December 2021.
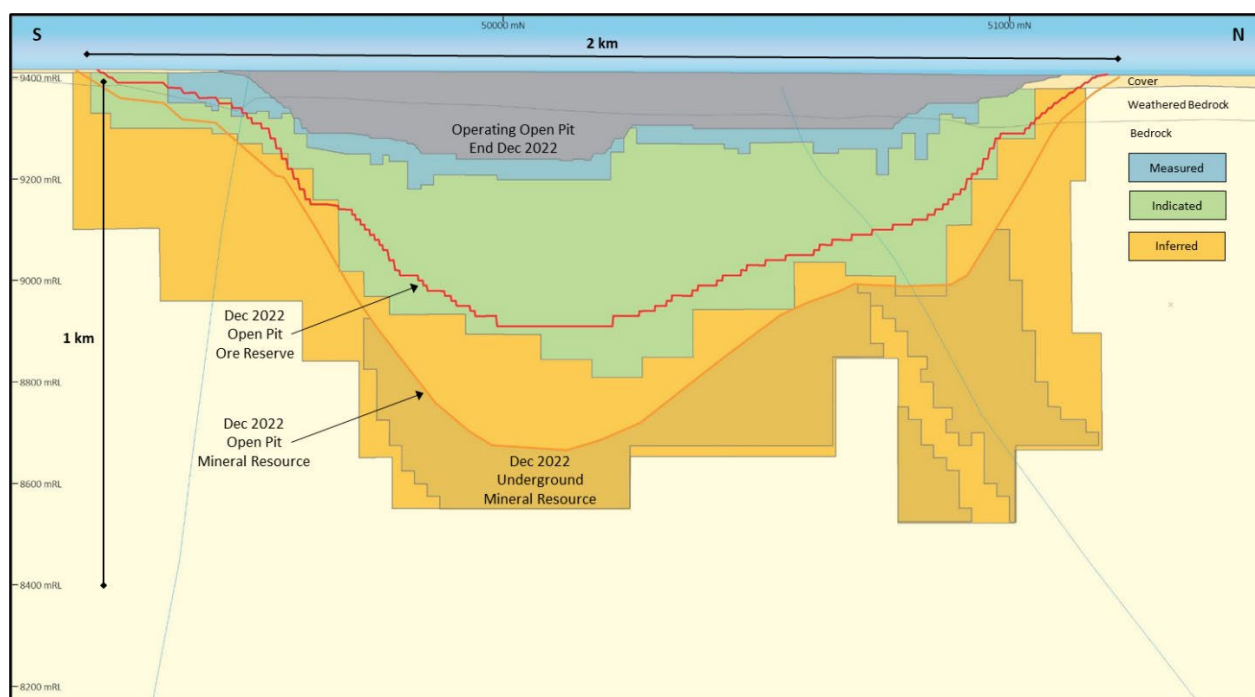

Figure 3: Gruyere Mine long projection (looking west) illustrating the December 2022 Mineral Resource and Ore Reserve outlines

[4] ASX announcement dated 27 October 2022

Table 2: Year on year Mineral Resource comparison (total Measured, Indicated and Inferred categories) 100% basis (excludes Gold Road's Underground Mineral Resource)

Gruyere JV Deposit	Mineral Resource 2022 December			Mineral Resource 2021 December			Change %			Change		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
	Mt	g/t Au	Moz Au	Mt	g/t Au	Moz Au	Mt	g/t Au	Moz Au	Mt	g/t Au	Moz Au
Gruyere OP	136.99	1.33	5.88	152.61	1.33	6.51	-10%	1%	-10%	-15.62	0.01	-0.64
Golden Highway OP Total	14.38	1.44	0.67	15.60	1.44	0.72	-8%	0%	-8%	-1.22	0.00	-0.06
Attila OP	*4.31*	*1.67*	*0.23*	*4.90*	*1.70*	*0.27*	*0%*	*-2%*	*-14%*	*-0.59*	*-0.03*	*-0.04*
Orleans OP	*1.17*	*1.50*	*0.06*	*1.17*	*1.50*	*0.06*	*0%*	*0%*	*0%*	*-*	*-*	*-*
Argos OP	*3.86*	*1.20*	*0.15*	*4.02*	*1.18*	*0.15*	*0%*	*2%*	*-2%*	*-0.16*	*0.02*	*-0.00*
Montagne OP	*3.27*	*1.27*	*0.13*	*3.59*	*1.25*	*0.14*	*0%*	*2%*	*-7%*	*-0.32*	*0.02*	*-0.01*
Alaric OP	*1.76*	*1.67*	*0.09*	*1.91*	*1.65*	*0.10*	*0%*	*1%*	*-7%*	*-0.15*	*0.02*	*-0.01*
YAM14 OP	1.13	1.27	0.05	1.13	1.27	0.05	0%	0%	0%	-	-	-
Central Bore UG	0.24	13.05	0.10	0.24	13.05	0.10	0%	0%	0%	-	-	-
Total Gruyere JV (100% Basis)	**152.74**	**1.36**	**6.69**	**169.58**	**1.35**	**7.38**	**-10%**	**1%**	**-9%**	**- 16.84**	**0.01**	**-0.69**

Notes: OP = Open pit, UG = Underground

- *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. Gruyere Measured category includes Surface Stockpiles (6.25 Mt at 0.72 g/t Au for 0.14 Moz). Mineral Resources are depleted for mining*
- *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, 50% is attributable to Gold Road*
- *The Gruyere and Golden Highway (except Orleans) Open Pit Mineral Resources are reported between 0.45 to 0.58 (oxide) and 0.48 to 0.61 (fresh) g/t Au cut-off grade allowing for dilution, processing costs, recovery and haulage to the Gruyere Mill. The Orleans and YAM14 Open Pit Mineral Resources are reported at 0.4 g/t Au cut-off grade allowing for processing costs, recovery and haulage to the Gruyere Mill*
- *All Open Pit Mineral Resources are constrained within a A$2,000 per ounce optimised pit shell derived from mining, processing and geotechnical parameters from the Golden Highway PFS, the Gruyere FS, in progress, and current Gruyere JV operational cost data*
- *Underground Mineral Resources at Central Bore are constrained by 1.5 metre minimum stope widths that are optimised to a 3.5 g/t Au cut-off reflective of a A$1,850 per ounce gold price. Diluted tonnages and grades are reported based on minimum stope widths*

Gruyere Open Pit Mineral Resource

The updated Gruyere Open Pit Mineral Resource is the main contributor to changes in the Gruyere JV Mineral Resource. The estimate incorporates new drilling information including 161 reverse circulation (**RC**) grade control holes for 10,700 metres completed through 2022. The grade control drilling validated the existing resource model, and converted 0.48 million ounces from Indicated to Measured category before mining depletion.

The Open Pit Mineral Resource has decreased by 0.64 million ounces (-10%) to 137 million tonnes at 1.33 g/t Au for 5.88 million ounces (Table 3), with the main points of variance being:

- A 0.24 million ounce decrease in the Inferred Resource as a result of increased cost assumptions reducing the depth of the constraining pit shell by 25 metres;

- An increase in Measured Resource of 0.12 million ounces as a result of conversion from grade control drilling after **mining depletion[5] of 0.39 million ounces**; a corresponding decrease in Indicated Resource of 0.40 million ounces; and

- Minor overall decrease as a result of increases to reporting cut-off grades (+0.04 g/t Au).

Reconciliation of the Mineral Resource estimate against actual mining performance is tracked and managed via the mine reconciliation system. The resource model continues to reconcile well against production with both the 12 month moving average and mine-to-date mine call factors close to 100%.

Table 3: Year on year Mineral Resource comparison for Gruyere Open Pit (total Measured, Indicated and Inferred categories) 100% basis

Gruyere OP / Category	Mineral Resource 2022 December			Mineral Resource 2021 December			Change %			Change		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
	Mt	g/t Au	Moz Au	Mt	g/t Au	Moz Au	Mt	g/t Au	Moz Au	Mt	g/t Au	Moz Au
Measured	19.95	1.08	0.69	16.62	1.07	0.57	20%	1%	21%	3.33	0.01	0.12
Indicated	93.21	1.37	4.10	106.33	1.35	4.62	-12%	1%	-11%	-13.12	0.02	-0.52
Measured + Indicated	**113.16**	**1.32**	**4.80**	**122.95**	**1.31**	**5.19**	**-8%**	**0%**	**-8%**	**-9.79**	**0.00**	**-0.40**
Inferred	23.83	1.41	1.08	29.67	1.38	1.32	-20%	2%	-18%	-5.83	0.03	-0.24
Total Gruyere OP (100% Basis)	**136.99**	**1.33**	**5.88**	**152.61**	**1.33**	**6.51**	**-10%**	**1%**	**-10%**	**-15.62**	**0.01**	**-0.64**

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. Gruyere Measured category includes Surface Stockpiles (6.25 Mt at 0.72 g/t Au for 0.14 Moz). Mineral Resources are depleted for mining*
- *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, 50% is attributable to Gold Road*
- *The Gruyere Open Pit Mineral Resource is reported between 0.45 (oxide) to 0.48 (fresh) g/t Au cut-off grade allowing for dilution, processing costs and recovery at the Gruyere Mill*
- *The Gruyere Open Pit Mineral Resource is constrained within a A$2,000 per ounce optimised pit shell derived from mining, processing and geotechnical parameters from the Gruyere Feasibility Study and current Gruyere JV operational cost data*

[5] Calculated depletion of the Mineral Resource model (prior to addition of modifying factors) of 392,000 ounces is used in relation to Mineral Resource. Forecasted production figure of 374,000 ounces at end November 2022 is used in relation to Ore Reserve

Gold Road Gruyere Underground Inferred Mineral Resource

Gold Road's December 2022 Gruyere Underground Mineral Resource estimate is an evaluation of the updated geology model exclusively below the December 2022 A$2,000 per ounce Open Pit Mineral Resource optimisation shell.

A deep diamond drilling program completed late in 2021 delineated the mineralised system at depth beneath the current open pit resource[6]. The remaining seven holes of the 13 hole program were incorporated into the geology model and allowed refinement of the northern high-grade domain providing confidence to extend the Inferred category boundary down dip in the northern end of the Deposit (Figure 4).
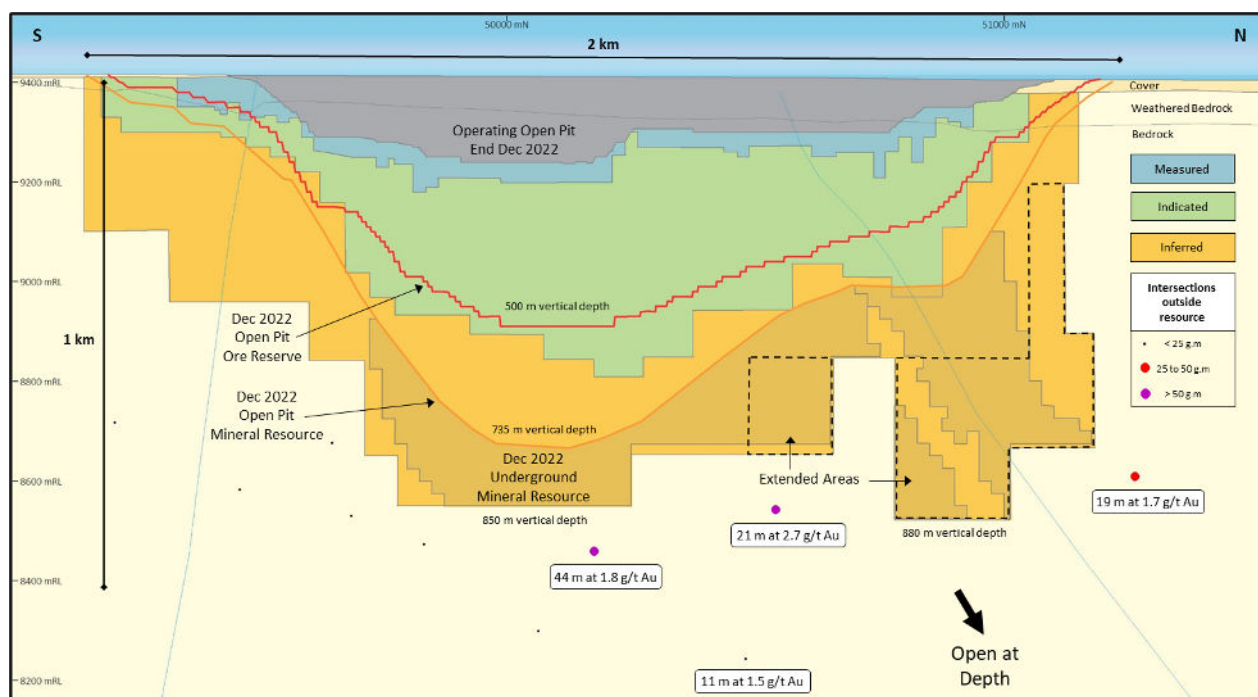

Figure 4: Gruyere Mine long projection (looking west) illustrating the December 2022 Mineral Resource and Ore Reserve outlines, the year on year extension to the Inferred boundary and selected drill intersections in gram.metres (g.m) outside of the resource boundaries at depth

The updated Mineable Shape Optimiser (**MSO**) evaluation included continuous improvements to the zone coding and stope shape parameters. The evaluation reports an inventory of 42 million tonnes at 1.40 g/t Au for a total of 1.89 million ounces from which Gold Road reports a **50% attributable Underground Inferred Mineral Resource of 21 million tonnes at 1.40 g/t Au for a total of 0.95 million ounces of gold** (Table 4). As a result of the shallower open pit shell (Figure 4) and extension of the Inferred category boundary, the Underground Mineral Resource estimate has increased by an attributable 0.43 million ounces (84%).

Table 4: Gruyere Underground Mineral Resource, Gold Road attributable (50%), Inferred category only

Gruyere UG - Inferred Only / Zone	Mineral Resource 2022 December			Mineral Resource 2021 December			Change %			Change		
	Tonnes Mt	Grade g/t Au	Metal Moz Au	Tonnes Mt	Grade g/t Au	Metal Moz Au	Tonnes Mt	Grade g/t Au	Metal Moz Au	Tonnes Mt	Grade g/t Au	Metal Moz Au
Central Zone (1.0 g/t Au cut-off)	18.42	1.31	0.77	9.46	1.37	0.42	95%	-5%	85%	8.96	-0.07	0.36
Northern Zone (1.5 g/t Au cut-off)	2.57	2.07	0.17	1.47	2.04	0.10	75%	1%	77%	1.11	0.02	0.07
Total Gruyere UG - Inferred Only Attributable (50% Basis)	**20.99**	**1.40**	**0.95**	**10.93**	**1.46**	**0.51**	**92%**	**-4%**	**84%**	**10.07**	**-0.06**	**0.43**

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[6] ASX announcement dated 27 April 2022

Notes: UG = Underground

- *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. Mineral Resources are depleted for mining*
- *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. Gold Road's 50% attributable Mineral Resource for Gruyere Underground is reported independently of the Gruyere JV*
- *The Underground Mineral Resource at Gruyere was evaluated by Gold Road based on the same geology model used to estimate the December 2022 Open Pit Mineral Resource. The model was evaluated exclusively below the A$2,000 per ounce pit optimisation shell utilised to constrain the Open Pit Mineral Resource and is reported as 100% in the Inferred category*
- *Underground Mineral Resources at Gruyere are constrained by Mineable Shape Optimiser (MSO) shapes of dimensions consistent with underground mass mining methods. The MSO shapes are optimised at cut-off grades based on benchmarked mining costs, current Gruyere operating costs and processing recoveries at a A$2,000 per ounce gold price*
- *Mineral Resources considered appropriate for potential mass mining exploitation in the Central Zone are constrained within MSO shapes of 25 metre minimum mining width in a transverse orientation and 25 metre sub-level interval and are optimised to a cut-off grade of 1.0 g/t Au*
- *Mineral Resources considered appropriate for potential mass mining exploitation in the Northern Zone are constrained within MSO shapes of 5 metre minimum mining width in longitudinal orientation and 25 metre sub-level interval and are optimised to a cut-off grade of 1.5 g/t Au*
- *Diluted tonnages and grades are reported based on minimum stope widths*

Gold Road's Alternative Mineral Resource Estimate Beneath Open Pit Ore Reserves

In accordance with guidance point 14 of The JORC Code 2012 Edition, Gold Road presents an alternative, underground only, Mineral Resource estimate for Gruyere below the Open Pit Ore Reserve. This estimate does not form part of the declared Mineral Resource statement.

Adopting the same evaluation method used in the determination of Gold Road's December 2022 Underground Mineral Resource (see section above), Gold Road has constrained the geology model within MSO shapes from below the base of the Ore Reserve to the base of the December 2022 Underground Mineral Resource. An alternative, entirely underground, Inferred Mineral Resource of **39 million tonnes at 1.41 g/t Au for 1.79 million ounces** (50% basis), is estimated beneath the Ore Reserve (Figure 5 bottom). An increase of 0.31 million ounces year on year.

This assessment provides an alternative approach to estimating resources beneath the Gruyere Ore Reserve when compared to the portion of the December 2022 Gruyere Open Pit Attributable Mineral Resource of 23 million tonnes at 1.46 g/t Au for 1.06 million ounces that sits beneath reported Ore Reserves and Gold Road's December 2022 Underground Attributable Mineral Resource of 11 million tonnes at 1.40 g/t Au for 0.95 million ounces (Table 5).

Table 5: Gold Road's alternative, entirely underground, Mineral Resource estimate (50% basis) compared to Attributable Mineral Resources beneath the Gruyere Ore Reserve (50% basis)

| Gruyere beneath Ore Reserve / Zone	Attributable Mineral Resource 2022 December			Alternative Mineral Resource Estimate 2022 December		
	Tonnes Mt	Grade g/t Au	Metal Moz Au	Tonnes Mt	Grade g/t Au	Metal Moz Au
Open Pit estimate beneath Ore Reserve (50% Basis)	22.58	1.46	1.06			
Underground estimate (50% basis)	20.99	1.40	0.95	39.26	1.42	1.79
Total Gruyere resource estimate beneath Ore Reserve Attributable (50% basis)	**43.58**	**1.43**	**2.00**	**39.26**	**1.42**	**1.79**
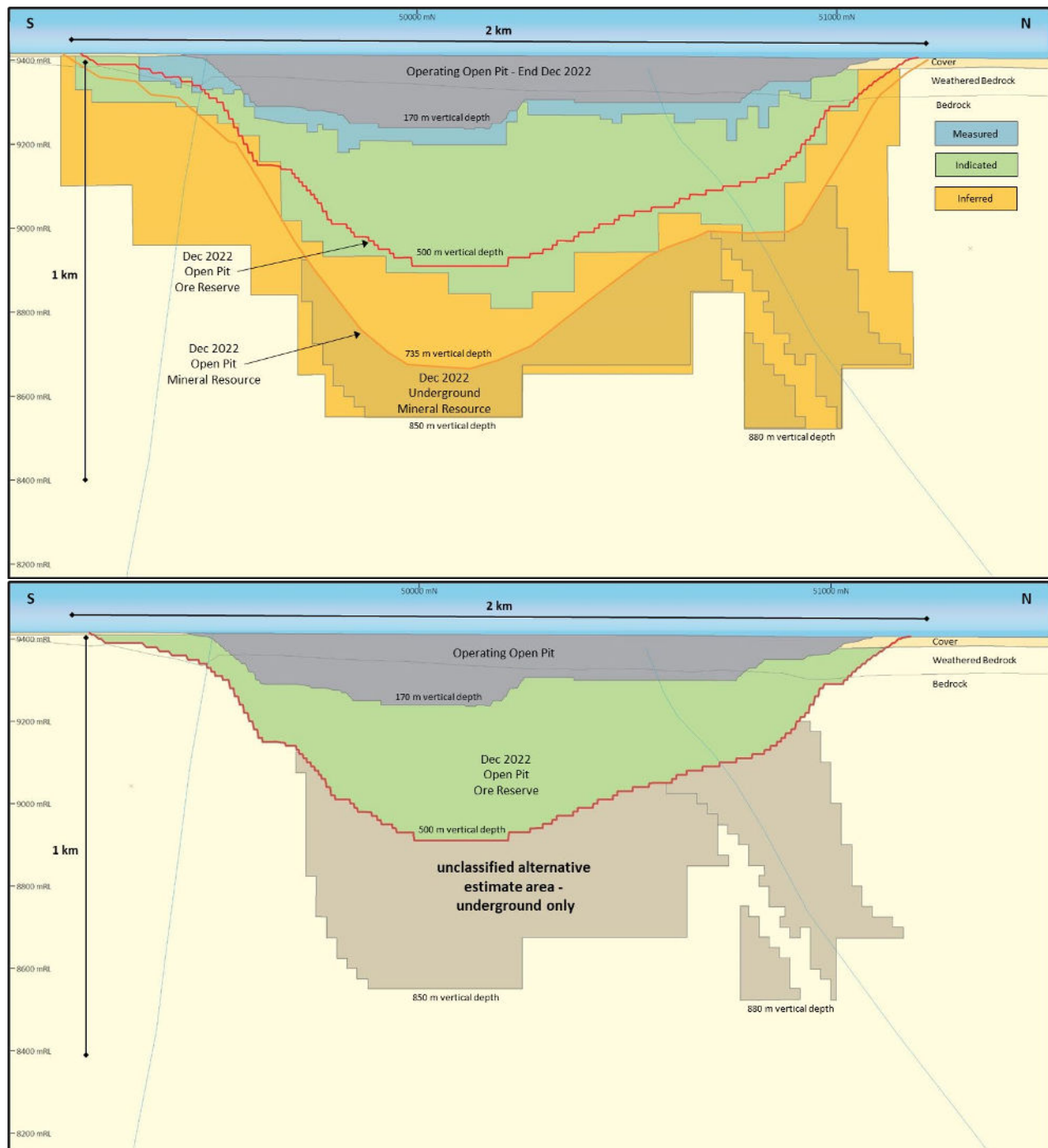
Figure 5: Side by side Gruyere Mine long projections (looking west) illustrating the Mineral Resource and Ore Reserve outlines (Top) and the alternative underground only Mineral Resource outlines (bottom)

Gruyere JV Ore Reserve Update – December 2022

The Gruyere JV Ore Reserve, as at 31 December 2022, is derived from the Gruyere and the Golden Highway Open Pit Deposits (Attila, Argos, Montagne and Alaric) all of which are located within the Gruyere JV (Figure 1).

On a 100% basis the Gruyere JV Ore Reserve totals **98.8 million tonnes at 1.27 g/t Au for 4.05 million ounces of gold** (Table 6) at a A$1,750 per ounce gold price.

The Gruyere JV Ore Reserve has decreased by 0.41 million ounces (-9%) since the Ore Reserve reported on 31 December 2021 (Figure 6). The majority (92%) of the reduction is attributed to mining depletion at Gruyere (-0.37 million ounces). Minor reductions (-0.05 million ounces) are associated with increased reporting cut-off grades (~+0.05 g/t Au) due to updated cost assumptions. No changes to Ore Reserve pit designs have been made year on year.

The Gruyere Ore Reserve estimate is based on the 2022 Mineral Resource model and incorporates updated mining and processing information based on actual performance, and comprehensive studies.

Reconciliation of the Ore Reserve estimate against actual mining performance is tracked and managed via the mine reconciliation system. Analysis of the data indicates that mining recovery and dilution are currently within acceptable levels, and the mine call factors for tonnes, grade and ounces are also within acceptable levels.

The Golden Highway Ore Reserve estimates are based on a Pre-feasibility Study (PFS) completed in 2020 and updated mining and processing information based on actual performance, and metallurgical test work for Alaric completed in 2021. The Golden Highway Ore Reserve is estimated by Gold Fields, and derived from the 2020 Mineral Resource geology models, with allowances for ore loss and dilution, and constrained within pit designs.

The Gruyere JV Ore Reserve is estimated 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.
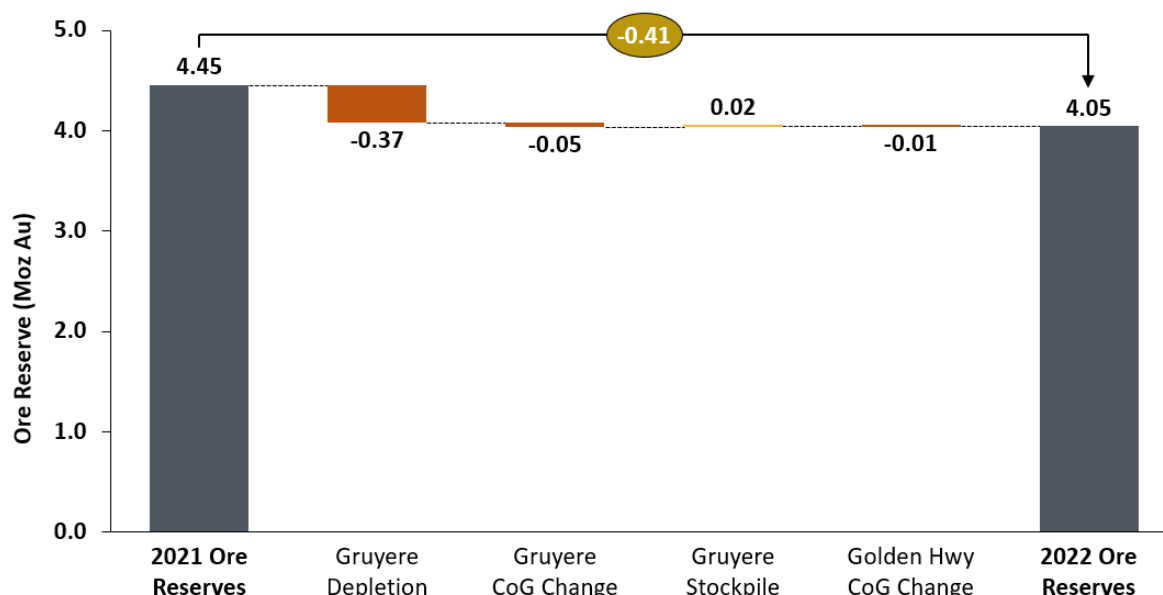

Figure 6: *Waterfall chart showing year on year variations in Ore Reserve - 100% basis contained metal.*
Apparent differences may occur due to rounding

The December 2022 Ore Reserve incorporates seven pit stages as shown in Figure 7. The Gruyere JV has completed mining of the Stage, with Stage 2 essentially completed. Current mining activities are focussed on Stages 3 and 4, with Stage 5 due to commence in 2023.
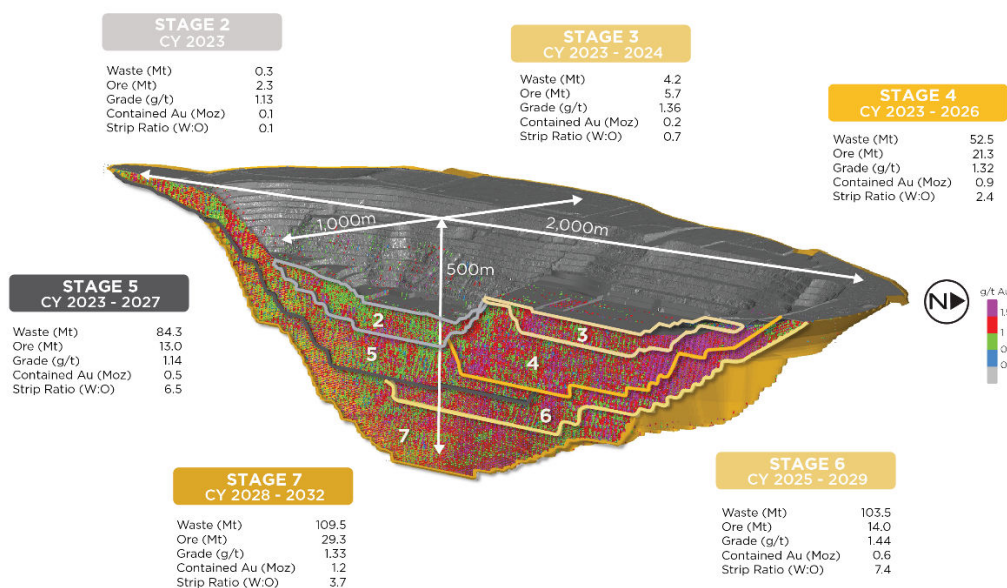

Figure 7: Gruyere Mine Stages 2 to 7, as per December 2022 Ore Reserves (100% basis)

Table 6: Year on year Ore Reserve comparison (total Proved and Probable) and mined depletion for 2022

Gruyere JV Deposit	Ore Reserve 2022 December			Ore Reserve 2021 December		
	Tonnes Mt	Grade g/t Au	Metal Moz Au	Tonnes Mt	Grade g/t Au	Metal Moz Au
Gruyere OP Total	**91.82**	**1.27**	**3.76**	**101.77**	**1.27**	**4.16**
Gruyere OP	*85.58*	*1.31*	*3.61*	*96.44*	*1.30*	*4.03*
Gruyere Surface Stockpile	*6.25*	*0.72*	*0.14*	*5.33*	*0.73*	*0.13*
Golden Highway OP Total	**6.96**	**1.29**	**0.29**	**7.32**	**1.26**	**0.30**
Attila OP	*4.13*	*1.33*	*0.18*	*4.26*	*1.31*	*0.18*
Argos OP	*0.48*	*1.16*	*0.02*	*0.50*	*1.15*	*0.02*
Montagne OP	*1.93*	*1.23*	*0.08*	*2.11*	*1.17*	*0.08*
Alaric OP	*0.42*	*1.37*	*0.02*	*0.46*	*1.30*	*0.02*
Total Gruyere JV (100% Basis)	**98.78**	**1.27**	**4.05**	**109.10**	**1.27**	**4.45**
Gold Road Attributable	**49.39**	**1.27**	**2.02**	**54.55**	**1.27**	**2.23**

Notes: OP = Open pit, UG = Underground

Category	Tonnes Mt	Grade g/t Au	Metal Moz Au
Mined Depletion 2022	9.79	1.19	0.37

Notes: OP= Open Pit, UG = Underground

- 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 Ltd. 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 Fields' share of production from the Gruyere JV once total gold production exceeds 2 million ounces
- The pit design for reporting the Gruyere Ore Reserve is derived from mining, processing and geotechnical parameters as defined by operational studies, PFS level studies completed between 2019 and 2021 and the 2016 FS. The Ore Reserve is reported using the 2022 Mineral Resource model constrained within the pit design (which is derived from a A$1,575 per ounce optimisation) and with Ore Reserves reported at A$1,750 per ounce gold price
- The Ore Reserve for the Golden Highway Deposits which include Attila, Argos, Montagne and Alaric is constrained within a A$1,750 per ounce mine design derived from mining, processing and geotechnical parameters as defined by 2020 PFS and operational studies
- The Ore Reserve is evaluated using variable cut-off grades (fresh, transitional and oxide respectively): Gruyere - 0.55, 0.54, 0.51 g/t Au. Attila - 0.69, 0.62, 0.58 g/t Au. Argos - 0.64, 0.64, 0.62 g/t Au. Montagne - 0.67, 0.60, 0.59 g/t Au. Alaric - 0.68, 0.68, 0.66 g/t Au
- Ore block tonnage dilution and mining recovery estimates: Gruyere - 4% and 99%. Attila - 21% and 99%. Argos - 17% and 89%. Montagne - 15% and 94%. Alaric - 31% and 99%
- Gruyere Proved category includes Surface Stockpiles. Ore Reserves are depleted for mining

JORC Code 2012 Edition and ASX Listing Rules Requirement

The Ore Reserves and Mineral Resources are reported in accordance with 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.

A Material Information Summary for the Gruyere Underground Mineral Resources (year on year change of +84% for ounces) is provided in accordance with ASX Listing Rules 5.8 and 5.9 and the Assessment and Reporting Criteria, and JORC Code 2012 Edition requirements. The summary can be found in Appendix 1 below.

There are no material changes to all other Mineral Resources and Ore Reserves.

The Gruyere JV 50% owned Orleans, YAM14 and Central Bore Mineral Resources remain unchanged from previously released statements[7]. The Gold Road 100% owned, Renegade, Gilmour, Smokebush and Warbler Mineral Resources remain unchanged from previously released statements[8].

The Gruyere and Golden Highway (Attila, Argos, Montagne, Alaric) Mineral Resource estimates were compiled by Gold Fields Competent Persons and reviewed by Gold Road Competent Persons. The Gruyere and Golden Highway (Attila, Argos, Montagne, Alaric) Ore Reserve estimates were compiled by Gold Fields Competent Persons and reviewed by Gold Road Competent Persons. The Central Bore, Orleans and YAM14 Mineral Resources were compiled by Gold Road Competent Persons and reviewed by Gold Fields Competent Persons.

The Renegade, Gilmour, Smokebush and Warbler Mineral Resource estimates were compiled and reviewed by Gold Road Competent Persons. The Gruyere Underground Mineral Resource estimate was compiled and reviewed by Gold Road Competent Persons and utilised the same Gruyere JV Mineral Resource model that informed the open pit evaluations.

This release is authorised by the Board of Directors.

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[7] ASX announcement dated 15 February 2021
[8] ASX announcement dated 31 January 2022

Gold Road Attributable Mineral Resource Estimate – December 2022

Group / Deposit / Category	Gold Road Attributable			Gruyere JV - 100% basis		
	Tonnes Mt	Grade g/t Au	Metal Moz Au	Tonnes Mt	Grade g/t Au	Metal Moz Au
Gruyere JV Mineral Resources						
Gruyere OP Total	68.49	1.33	2.94	136.99	1.33	5.88
Measured	9.98	1.08	0.35	19.95	1.08	0.69
Indicated	46.60	1.37	2.05	93.21	1.37	4.10
Measured and Indicated	56.58	1.32	2.40	113.16	1.32	4.80
Inferred	11.92	1.41	0.54	23.83	1.41	1.08
Golden Highway + YAM14 OP Total	7.76	1.43	0.36	15.51	1.43	0.71
Indicated	5.07	1.50	0.24	10.13	1.50	0.49
Inferred	2.69	1.30	0.11	5.38	1.30	0.23
Central Bore UG Total Inferred	0.12	13.05	0.05	0.24	13.05	0.10
Total Gruyere JV	**76.37**	**1.36**	**3.34**	**152.74**	**1.36**	**6.69**
Measured	9.98	1.08	0.35	19.95	1.08	0.69
Indicated	51.67	1.38	2.30	103.34	1.38	4.59
Measured and Indicated	**61.65**	**1.33**	**2.64**	**123.29**	**1.33**	**5.28**
Inferred	14.73	1.48	0.70	29.45	1.48	1.41
Gruyere Underground Mineral Resources						
Gruyere UG Total Inferred	**20.99**	**1.40**	**0.95**			
Gold Road Yamarna 100% Mineral Resources						
Renegade OP Total Inferred	1.86	1.13	0.07			
Gilmour OP Total	2.29	2.80	0.21			
Indicated	0.59	6.78	0.13			
Inferred	1.70	1.42	0.08			
Gilmour UG Total	0.59	5.14	0.10			
Indicated	0.06	4.17	0.01			
Inferred	0.53	5.25	0.09			
Smokebush OP Total Inferred	1.09	2.61	0.09			
Warbler OP Total Inferred	0.62	2.14	0.04			
Total Gold Road 100% Owned	**6.45**	**2.44**	**0.51**			
Indicated	**0.65**	**6.55**	**0.14**			
Inferred	5.80	1.98	0.37			
Gold Road Attributable Mineral Resources						
Total Gold Road Attributable	**103.82**	**1.44**	**4.79**			
Measured	9.98	1.08	0.35			
Indicated	52.32	1.45	2.43			
Measured and Indicated	**62.30**	**1.39**	**2.78**			
Inferred	41.52	1.51	2.02			

Gold Road Attributable and Gruyere JV Ore Reserve Estimate - December 2022

Gruyere JV Deposit / Category	Gold Road Attributable			Gruyere JV - 100% Basis		
	Tonnes Mt	Grade g/t Au	Metal Moz Au	Tonnes Mt	Grade g/t Au	Metal Moz Au
Gruyere Total	**45.91**	**1.27**	**1.88**	**91.82**	**1.27**	**3.76**
Proved	9.92	1.06	0.34	19.83	1.06	0.67
Probable	35.99	1.33	1.54	71.99	1.33	3.08
Golden Highway Total	**3.48**	**1.29**	**0.14**	**6.96**	**1.29**	**0.29**
Proved	-	-	-	-	-	-
Probable	3.48	1.29	0.14	6.96	1.29	0.29
Total Gruyere JV	**49.39**	**1.27**	**2.02**	**98.78**	**1.27**	**4.05**
Proved	**9.92**	**1.06**	**0.34**	**19.83**	**1.06**	**0.67**
Probable	**39.47**	**1.33**	**1.69**	**78.95**	**1.33**	**3.37**

OP = open pit, UG = Underground

Mineral Resource 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. Gruyere Measured category includes Surface Stockpiles (6.25 Mt at 0.72 g/t Au for 0.14 Moz). Mineral Resources are depleted for mining*
- *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, 50% is attributable to Gold Road. Gold Road's 50% attributable Mineral Resource for Gruyere Underground is reported independently of the Gruyere JV*
- *The Gruyere and Golden Highway (except Orleans) Open Pit Mineral Resources are reported between 0.45 to 0.58 (oxide) and 0.48 to 0.61 (fresh) g/t Au cut-off grade allowing for dilution, processing costs, recovery and haulage to the Gruyere Mill. The Orleans and YAM14 Open Pit Mineral Resources are reported at 0.4 g/t Au cut-off grade and the Renegade, Gilmour, Smokebush and Warbler Mineral Resource are reported at 0.5 g/t Au cut-off grade allowing for processing costs, recovery and haulage to the Gruyere Mill*
- *All Open Pit Mineral Resources are constrained within a A$2,000 per ounce (Gruyere JV) or a A$2,200 per ounce (Gold Road 100%) optimised pit shell derived from mining, processing and geotechnical parameters from the Golden Highway PFS, the Gruyere FS in progress and current Gruyere JV operational cost data*
- *The Underground Mineral Resource at Gruyere was evaluated by Gold Road on the same geology model used to estimate the December 2022 Open Pit Mineral Resource. The model was evaluated exclusively below the A$2,000 per ounce pit optimisation shell utilised to constrain the Open Pit Mineral Resource and is reported as 100% in the Inferred category*
- *The Underground Mineral Resource at Gruyere is constrained by Mineable Shape Optimiser (MSO) shapes of dimensions consistent with underground mass mining methods. The MSO shapes are optimised at cut-off grades based on benchmarked mining costs, current Gruyere operating costs and processing recoveries at a A$2,000 per ounce gold price.*
- *Underground Mineral Resources at Gruyere considered appropriate for potential mass mining exploitation in the Central Zone are constrained within MSO shapes of 25 metre minimum mining width in a transverse orientation and 25 metre sub-level interval, and are optimised to a cut-off grade of 1.0 g/t Au*
- *Underground Mineral Resources at Gruyere considered appropriate for potential mass mining exploitation in the Northern Zone are constrained within MSO shapes of 5 metre minimum mining width in longitudinal orientation and 25 metre sub-level interval, and are optimised to a cut-off grade of 1.5 g/t Au*
- *Underground Mineral Resources at Central Bore are constrained by a 1.5 metre minimum stope width that are optimised to a 3.5 g/t Au cut-off reflective of a A$1,850 per ounce gold price*
- *Underground Mineral Resources at Gilmour are constrained by an area defined by a 2.0 metre minimum stope width and a 3.0 g/t Au cut-off reflective of a A$2,200 per ounce gold price*
- *Underground Mineral Resources are reported with diluted tonnages and grades based on minimum stope widths*

Ore Reserve 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 Ltd. 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 Fields' share of production from the Gruyere JV once total gold production exceeds 2 million ounces*
- *The pit design for reporting the Gruyere Ore Reserve is derived from mining, processing and geotechnical parameters as defined by operational studies, PFS level studies completed between 2019 and 2021 and the 2016 FS. The Ore Reserve is reported using the 2021 Mineral Resource model constrained within the pit design (which is derived from a A$1,575 per ounce optimisation) and with Ore Reserves reported at A$1,750 per ounce gold price*
- *The Ore Reserve for the Golden Highway Deposits which include Attila, Argos, Montagne, and Alaric is constrained within a A$1,750 per ounce mine design derived from mining, processing and geotechnical parameters as defined by 2020 PFS and operational studies*
- *The Ore Reserve is evaluated using variable cut-off grades (fresh, transitional and oxide respectively): Gruyere - 0.55, 0.54, 0.51 g/t Au. Attila - 0.69, 0.62, 0.58 g/t Au. Argos - 0.64, 0.64, 0.62 g/t Au. Montagne - 0.67, 0.60, 0.59 g/t Au. Alaric - 0.68, 0.68, 0.66 g/t Au*
- *Ore block tonnage dilution and mining recovery estimates: Gruyere - 4% and 99%. Attila - 21% and 99%. Argos - 17% and 89%. Montagne - 15% and 94%. Alaric - 31% and 99%*
- *Gruyere Proved category includes Surface Stockpiles (6.25 Mt at 0.72 g/t Au for 0.14 Moz). Ore Reserves are depleted for mining*

Competent Persons Statements

Exploration Results

The information in this report which relates to Exploration Results is based on information compiled by Mr Andrew Tyrrell, General Manager - Discovery. Mr Tyrrell is an employee of Gold Road, and a Member of the Australasian Institute of Geoscientists (MAIG 7785). Mr Tyrrell is a holder of Gold Road Performance Rights.

Mr Tyrrell 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 Tyrrell 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 the Gruyere, Attila, Argos, Montagne and Alaric Open Pits is based on information compiled by Mr Mark Roux. Mr Roux is a consultant for RSC and a former employee of Gold Fields Australia, and is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM 324099).

Mr John Donaldson, Principal Resource Geologist for Gold Road has endorsed the Open Pit Mineral Resource estimates for Gruyere, Attila, Argos, Montagne and Alaric on behalf of Gold Road. 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 Gruyere and Central Bore Underground, and the Orleans, YAM14, Renegade, Gilmour, Smokebush and Warbler Open Pits is based on information compiled by Mr John Donaldson, Principal Resource Geologist for Gold Road

Messrs Roux and Donaldson 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 and Donaldson 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, Attila, Montagne, Argos, and Alaric is based on information compiled by Mr Neil Morriss. Mr Morriss is an employee of Gold Fields Australia and a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM 208320). Mr Jeff Dang, Manager - Mining and Corporate Development for Gold Road has endorsed the Ore Reserve estimation for Gruyere on behalf of Gold Road.

Mr Dang is an employee of Gold Road and is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM 307499). Mr Dang is a holder of Performance Rights.

Messrs Morriss and Dang 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'. Messrs Morriss and Dang 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 Summary

Gruyere Underground Mineral Resource

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 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 Maiden Mineral Resource estimate of 3.8 million ounces 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 ore mining in January 2019. Process plant commissioning commenced in May 2019 with first gold produced in June 2019[9], and commercial production achieved in September 2019[10]. As at 31 December 2022 mined production totals 35 million tonnes at 1.03 g/t Au for 1.15 million ounces and the mill has processed 28.7 Mt at 1.09 g/t Au and produced 0.92 Moz at a recovery of 91.5%.

Gold Road instigated two conceptual underground studies with AMC in 2015 and Orelogy in 2019 and used these as a basis for the February 2021 Maiden Underground Mineral Resource. The December 2021 Open Pit Ore Reserve (4.2 million ounces) and Mineral Resource (0.65 million ounces) were significantly extended at depth, primarily from steeper geotechnical slopes. Deep diamond drilling completed in 2021 confirmed the geology at depth and resulted in extensions to the underground resource in 2022.

Geology

The Gruyere Deposit is situated at the north end of the Dorothy Hills Camp 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 of the Yamarna Terrane in the eastern part of the Archaean Yilgarn Craton. The Dorothy Hills Greenstone Belt is the most easterly known occurrence of outcropping to sub-cropping greenstone in the Yilgarn province of Western Australia.

The Gruyere Deposit comprises a wide porphyry intrusive dyke (Gruyere Porphyry - a Quartz Monzonite) within the Dorothy Hills Shear Zone. The Gruyere Porphyry is between 5 to 10 metres wide, at its northern and southern extremities, to a maximum 190 metres in width in the Central Zone and on average is 90 metres wide. It has a mineralised strike over a length of 2,200 metres and a vertical extent of over 1,100 metres below surface. The Gruyere Porphyry dips steeply (65-80°) to the east. A sequence of intermediate to mafic (Toto) volcaniclastic rocks defines the stratigraphy to the west of the intrusive, while intermediate to mafic (Wizard) volcanics and a tholeiitic (Kansas) basalt unit occur to the east.

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[9] ASX announcement dated 1 July 2019
[10] ASX announcement dated 9 October 2019

Gold mineralisation is confined to the Gruyere Porphyry which is mineralised almost ubiquitously at greater than 0.3 g/t Au with pervasive overprinting albite-sericite-chlorite-pyrite (±pyrrhotite ±arsenopyrite) alteration associated with quartz veining and increased deformation which has obliterated the primary texture of the rock. 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° to the south-southeast, with strike extents of over 100 metres. Lower grade zones are associated with hematite alteration and pyrite. Barren to very weakly mineralised porphyry less than 0.3 g/t Au is associated hematite-magnetite alteration. Minor fine quartz-carbonate veining occurs throughout. Pyrite is the primary sulphide mineral. Some visible gold has been observed in logged diamond drill core. Geological mapping of open pit exposures continues to confirm and refine the geological model.

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

The sampling has been carried out using a combination of RC and diamond drilling. RC drill samples are collected through a rig-mounted cone splitter designed to capture a 1 metre sample with optimum 2-3 kilogram sample weight. Drill core is logged geologically and marked up for assay at approximate 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. All exploration, resource definition and grade control samples were analysed at Perth laboratories using a 50 gram Fire Assay.

Geological Interpretation and Estimation Methodology

The seven new diamond and 161 new RC grade control holes confirmed the existing interpretation and grade estimates within acceptable limits. The Gruyere Porphyry is the host to gold mineralisation and is sub-divided into three primary domains:

1.   Main domain reflective of internal mineralisation controls at an ~0.3 g/t Au cut-off.

2.   Southerly plunging higher grade domain reflective of stronger mineralisation intensity internal to the main domain.

3.   Northern higher grade domain reflective of stronger mineralisation intensity generally full width of the Gruyere Porphyry associated with the Northern Fault. The northern extent of this domain has been constrained by a sub-domain in the 2022 geology model.

Domains 1 and 2 correspond to the Central Zone and Domain 3 corresponds to the Northern Zone with respect to the Underground Mineral Resource.

The gold grade estimation method for the primary domains are 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 recoverable resource and linear estimates. 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.   Estimation technique is selected based on the geological model, data spacing and statistical and spatial analysis of the data.

3.   The Indicated and Inferred component of the Mineral Resource utilises a Localised Recoverable estimate using an information corrected Conditional Simulation. The technique represents a recoverable resource enabling more effective and realistic mine planning.

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).

Criteria Used for Classification

The Underground Mineral Resource has been constrained by optimised stope shapes below the 2022 Open Pit Mineral Resource shell using a A$2,000 per ounce gold price. The constrained blocks from the geological model have been classified as Inferred. There is an immaterial amount of Indicated classified material that reports to the stope shapes, these have been re-classified as Inferred to reflect the confidence level of the underground evaluation.

Several factors including drill hole spacing (Table 7), geological continuity, grade continuity and estimation quality parameters are used to classify the confidence in the estimate.

Table 7: Classification of fresh Gruyere Mineral Resource by drill spacing and extrapolation parameters

	Criteria	Measured	Indicated	Inferred
Fresh	**Target Spacing**	25 m X by 25 m Y	50 m X by 100 m Y	100 m X by 100 m Y
	Actual Spacing	12.5 m X by 12.5 m Y to 25 m X by 25 m Y	25 m X to 65 m X by 100 m Y with extra holes on 50 m Y	100 m X by 100 m Y
				Footwall contact of along strike hole 14GYDD0061
	Boundary Extension	10 to 15 m along strike	25 m along strike	50 to 100 m along strike
		Closest 5 mRL from bottom of hole	Minimal down dip - except North end 30 m from drilling. Drilling needs to define full width of intrusive host.	Minimal down dip - except North end 50 m from Indicated boundary

Cut-off Grade, Mining and Metallurgy

The update to the Gruyere Underground Mineral Resource was completed by Gold Road and implies a mass mining method with no internal selectivity and all potential ore processed at the Gruyere Mill. Key parameters used to estimate the Mineral Resource include:

- Exclusively below the December 2022 A$2,000 per ounce pit optimisation shell
- Utilises the same geology model used to evaluate the December 2022 Open Pit Mineral Resource
- Classifiable mineralisation is constrained by MSO shapes to determine the portion of the available mineralised inventory that has a reasonable prospect of eventual economic extraction
- Mineralisation within the shapes is reported as Inferred Mineral Resource only with further drilling and studies required to improve confidence
- MSO orientations were controlled using the Gruyere Porphyry wireframe to govern dip and strike of the stope shapes
- MSO shapes are optimised at cut-off grades based on benchmarked mining costs, Gruyere operating costs and processing recoveries at a A$2,000 per ounce gold price;
    - Mineral Resources considered appropriate for potential mass mining exploitation in the Central Zone are constrained within MSO shapes of 25 metre minimum mining width in a transverse orientation and 25 metre sub-level interval and are optimised to a cut-off grade of 1.0 g/t Au
    - Mineral Resources considered appropriate for potential mass mining exploitation in the Northern Zone are constrained within MSO shapes of 5 metre minimum mining width in longitudinal orientation and 25 metre sub-level interval and are optimised to a cut-off grade of 1.5g/t Au
- Diluted tonnages and grades are reported based on minimum stope widths.

Appendix 2 – JORC Code 2012 Edition Table 1 Report

Gruyere Underground Mineral Resource

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 diamond drilling (DD) and Reverse Circulation (RC) drilling. **DD**: Drill core is logged geologically and marked up for assay at approximate 1.0 m (0.20 to 1.20 m) intervals based on geological observations. Drill core is cut in half by a diamond saw at the Yamarna Exploration facility and half core samples submitted for assay analysis. Core is cut referencing the downhole orientation lines. Where core is highly fractured and/or contains coarse gold, whole core samples may be selected for sample submission. **RC**: Samples were collected as drilling chips from the RC rigs 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 1 m samples. The entire sample from each drilling type was sent to the laboratory for analysis. DD, RC, aircore (AC) and Rotary Air Blast (RAB) drilling are used to create the geological model, but only DD and RC are used in gold grade estimation. The sample quality of AC and RAB sampling is generally not appropriate for gold grade estimation. No further reference to AC or RAB will be made in this section.
Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.	Supervision of drilling operations and sampling was carried out under Gold Road or Gruyere JV protocols and QAQC procedures. Laboratory QAQC was also conducted.
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.*	The samples were analysed by Fire Assay at Perth based laboratories. Sample preparation for Fire Assay was undertaken in Kalgoorlie or Perth where the samples were dried, and the entire sample pulverised to 85% passing 75 µm using LM5 pulverisers and split to produce a 200 g sub-sample for the 50 g charge. Finish was by either ASS, ICPES and/or gravimetric for grades > 10 g/t Au. The method is considered appropriate for the material and mineralisation present in the samples.
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).*	DD drilling rigs operated by various contractors collected the diamond core as HQ (61.1 mm) and NQ (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 Gold Road or Gruyere JV field staff at the Yamarna Exploration facility or the Gruyere Mine site respectively. In broken ground, triple tube diamond core may be selected to improve recovery. Diamond tails are drilled from RC pre-collars to extend holes when abandoned, reduce drilling costs when appropriate and/or collect diamond core in mineralisation zones. RC drill rigs, operated by various contractors were used to collect the RC samples. The face-sampling RC bit has a diameter of 5.25 inches (140 mm).
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.*	**DD**: 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 metre 'run'. Core recovery can be calculated as a percentage recovery. Almost 100% recoveries were achieved, with minimal core loss recorded. **RC**: The majority of RC samples were dry. Ground water egress occurred in some holes at variable depths between 100 and 400 m. 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. The procedure is to record wet or damp samples in the database. 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. Gold Road procedure is to stop RC drilling if water cannot be kept out of hole and continue with a DD tail at a later time if required.

Criteria and JORC Code explanation	Commentary
Measures taken to maximise sample recovery and ensure representative nature of the samples.	**DD**: 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. RC samples are collected in a calico bag through a cyclone and static cone splitter, a 2 to 3 kg lab sample and field duplicate are collected, and the reject deposited in a plastic bag. The rejects from in pit RC grade control are deposited on the ground in piles.
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.	**DD**: No sample bias or material loss was observed to have taken place during drilling activities. **RC**: No significant sample bias or material loss was observed to have taken place during drilling activities. Some material loss from the upper portions of the holes which drilled through the sand dune cover is observed but doesn't impact mineralised samples.
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 Gold Road or Gruyere JV logging scheme. Detail of logging was sufficient for mineral resource estimation and technical studies. Approximately 30% of resource definition 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 which are now being refined with open pit mapping. A weathering profile guide was developed as part of the process to document the features and provide a guide for further logging and ongoing 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. This is being refined with ongoing 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. An appropriate number of selected and specifically drilled DD holes post FS have been geotechnically logged by the Gruyere JV and, along with pit mapping, provide further data for ongoing operational geotechnical studies. 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 DD core records lithology, mineralogy, mineralisation, alteration, veining, 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, alteration, veining, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Chip trays are photographed.
The total length and percentage of the relevant intersections logged	All RC and DD 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 diamond saw. Half core samples were collected for assay, and the remaining half core samples stored in the core trays. Samples are collected consistently from the same side. For heavily broken ground not amenable to cutting, whole core sampling may be taken but is not a regular occurrence.
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 static cone-splitter, installed directly below a rig mounted cyclone, and an average 2-3 kg sample is collected in a numbered calico bag. >95% of samples were dry, and whether wet or dry is recorded.
For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation for Fire Assay was undertaken in Kalgoorlie or Perth where the samples were dried and the entire sample pulverised to 85% passing 75 µm using LM5 pulverisers and split to produce a 200 g sub-sample for the 50 g charge. The method is considered appropriate for the material and mineralisation present in the samples.
Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.	**DD**: No duplicates were collected for DD holes. A twinned half core sample was taken up until 2017 at a frequency of 1 in 40 samples, with one half representing the primary result and the second half representing a twinned result.

Criteria and JORC Code explanation	Commentary
	RC: A field duplicate sample is taken from the cone splitter at the same time as the primary sample a rate of approximately 1 in 30 to 40 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.	**DD**: Analysis of twin samples shows satisfactory performance. **RC**: Analysis of field duplicates shows satisfactory performance.
Whether sample sizes are appropriate to the grain size of the material being sampled.	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.
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.*	Fire Assay samples are analysed in Perth. The analytical method used was a 50 g Fire Assay for gold only, which is considered to be total and appropriate for the material and mineralisation.
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.	Portable XRF (**pXRF**) analysis in the lab is completed by Lab Staff. pXRF machines are calibrated at beginning of each shift. Read times for all analyses are recorded and included in the Lab Assay reports. Detection limits for each element are included in Lab reports. pXRF 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 data for the Resource Model and for geotechnical analysis.
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.	The Gold Road protocol for RC programs at the time was 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 DD 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. Previous QAQC reports and audits were completed and reported by Mr David Tullberg (Grassroots Data Services Pty Ltd at time of audit, and a Gold Road employee since 2014), Dr Paul Sauter (in-house consultant Sauter Geological Services Pty Ltd) and by Alex Mennie (Maxwell) responsible for the previous grade control (GC) program under management of the Gruyere JV company. The 2019 DD and RC data was reported by Gold Road personnel and gave acceptable results. QAQC protocols for RC grade control and 2021 DD are similar to those used by Gold Road. QAQC reports compiled by Gruyere JV geologists gave acceptable results.
Verification of sampling and assaying *The verification of significant intersections by either independent or alternative company personnel.*	Significant results were compiled by the Database Manager and reported for release by the competent person for Exploration Results or their delegate and checked by senior staff. All results, except for the RC grade control data, which is considered operational, have been reported in previous ASX announcements. This data has however been verified by both Gruyere JV and Gold Road geologists. 2021 DD results are checked by the mine based geology team and by Gold Road's Exploration Manager (or delegate), Principal Resource Geologist and General Manager - Discovery.

Criteria and JORC Code explanation	Commentary
The use of twinned holes.	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 DD 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 confirmed the short scale mineralisation continuity and refine statistical and geostatistical relationships in the data which are useful in resource estimation. The ongoing 25 by 25 m grade control drilling and open pit mapping confirms the continuity.
Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All exploration and definition drill hole field logging was carried out on Tough books using LogChief data capture software. Logging data was 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 Specialist. Mine based drilling data is store in an Acquire database, regular data transfers are stored in Gold Roads Datashed/SQL database system and maintained by the Database Manager. All field logging is carried out on mobile computers using industry standard geological logging applications. Logging data is synchronised electronically to the Acquire Database. Assay files are received electronically from the Laboratory.
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.*	Exploration and definition 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 differential GPS (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 and every 10 m for 2019. 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 conducted in Gruyere Grid.
Quality and adequacy of topographic control.	The Gruyere Mine area is under site based survey control utilising DGPS.
Data spacing and distribution *Data spacing for reporting of Exploration Results.*	No new exploration results reported. In the upper leached portion of the deposit, the drill spacing is at 25 m section interval and 12.5 m on section. In the portion below the leached zone to a depth of up to ~150 m the spacing is at 25 m section and 25 m on section, while below this to a maximum depth of ~500-600 m the section interval increases to 100 m with 50 m on section spacing. Below this to a depth of ~800 m the spacing on section increases to 100 m while maintaining the 100 m section spacing. 2021 DD spacing 400 m along 2 km of strike at ~900 m below surface with ~100 m spaced infill on the northern high grade shoot.
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 purposes. Drill spacing in relation to Resource Classification is discussed further in Section 3 below.
Whether sample compositing has been applied.	A small number of composite RC samples were collected with the spear method and have minimal impact on the estimation.

Criteria and JORC Code explanation	Commentary
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, 5 of these are deep DD 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 6 are drilled to the south. A sampling bias has not been introduced.
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 majority of drill testing is considered to have been near to perpendicular to the strike and dip of mineralisation. A sampling bias has not been introduced.
Sample security *The measures taken to ensure sample security.*	Pre-numbered calico sample bags were collected in plastic bags (5 calico bags per single plastic bag), sealed, and transported by Company transport to Kalgoorlie or Perth. Pulps prepared in Kalgoorlie were despatched by the laboratory to 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 laboratory in Perth. No relevant 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 nominated the Yilka Talintji Aboriginal Corporation as the registered native title body corporate (RNTBC), to hold native title rights in trust for the native title holders. 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.
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 deposit by other parties.
Geology *Deposit type, geological setting and style of mineralisation.*	The Gruyere Deposit is situated at the north end of the Dorothy Hills Camp 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 of the Yamarna Terrane 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. The Gruyere Deposit comprises a wide porphyry intrusive dyke (Gruyere Porphyry - a Quartz Monzonite) within the Dorothy Hill Shear Zone. The Gruyere Porphyry is between 5 to 10 m wide, at its northern and southern extremities, to a maximum 190 m in width in the Central Zone and on average is 90 m wide. It has a mineralised strike over a length of 2,200 m and a vertical extent of over 1,100 m below surface. The Gruyere Porphyry dips steeply (65-80°) to the east. A sequence of intermediate to mafic (Toto) volcaniclastic rocks defines the stratigraphy to the west of the intrusive, while intermediate to mafic (Wizard) volcanics and a tholeiitic (Kansas) basalt unit occur to the east. Gold mineralisation is confined ubiquitously to the Gruyere Porphyry and is associated with pervasive overprinting albite-sericite-chlorite-pyrite (±pyrrhotite ±arsenopyrite) alteration associated with quartz veining and increased deformation 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.
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 DD holes included in the reported Mineral Resource estimation have been previously reported in ASX announcements. The 25 by 25 m and 12.5 m spaced RC grade control data has not been reported in detail as it is operational.

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 reported. No top cuts have been applied to the reporting of the assay results. Significant high individual grades are reported where the result(s) impacts the understanding of an intersection. Intersection lengths and grades are reported as down-hole length-weighted averages of grades above a cut-off and may include up to 2 m (cut-offs of 0.3 g/t Au and higher) or 4 m (0.1 g/t Au cut-off) of grades below that cut-off. Cut-offs of 0.1, 0.5, 1.0 and/or 5.0 g/t Au are used depending on the drill type and results. Note that gram.metres (g.m) is the multiplication of the length (m) by the grade (g/t Au) of the drill intersection and provides the reader with an indication of intersection quality. Geologically selected intervals are used in later stage projects to honour interpreted thickness and grade from the currently established geological interpretation of mineralisation and may include varying grade lengths below the cut-off.
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 reported. Intersection lengths and grades are reported as down-hole length-weighted averages. No top cuts have been applied to the reporting of the assay results.
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, north-south 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.*	No new exploration results reported. 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 Mineral 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 the collection and re-processing of gravity data over the entire Yamarna Belt to allow more detailed interpretation of geology and further target definition. The Yamarna Terrane Tectonostratigraphic, or Geological Map has been updated with detailed understanding of age-constrained stratigraphic units. The compilation of this map provides direct stratigraphic correlation of major rock units at Yamarna with similar stratigraphic sequences in the other major gold-hosting greenstone belts (Kalgoorlie-Kambalda, Agnew, Laverton) of the Yilgarn in Western Australia. This understanding greatly improves the ability to effectively target for gold mineralisation in the Yamarna Terrane.
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 exploration activity will be guided by economic assessment of the updated geology model incorporating the full 2021 deep DD results.

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 Specialist who is responsible for the integrity and efficient use of the system. Only the Database Specialist or their Data Entry Clerk has permission to modify the data. The Gruyere JV mining company uses an Acquire database and a centralised team to manage the integrity of the database for the Gruyere JV tenement which is derived from the greater Gold Road database. Appropriately timed data transfers occur from the Gruyere JV to the Gold Road database and vice-versa. Sampling and geological logging data is collected in the field using industry standard software and uploaded digitally. The software has data validation controls 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 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 and Gruyere JV data. There is no historical data.
Data validation procedures used.	DataShed and Acquire 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 logging software has validation controls 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 and Gruyere JV utilises 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.*	John Donaldson and Jeff Dang are Gold Road's Competent Persons, both have completed site visits. Mr Donaldson is Gold Road's Principal Resource Geologist. He conducts regular site visits and was on site extensively throughout the resource development stage of the Gruyere Project and has visited the operating open pit several times. Jeff Dang is Gold Road's Manager – Mining and Corporate Development. Mr Dang has visited the operating open pit several times and is a member of the Technical Committee. Mark Roux is one of Gold Fields Competent Persons and has conducted site visits to view the DD core and RC chips and has visited the operating open pit several times. Neil Morriss is one of Gold Fields Competent Persons and has visited the operating open pit several times. All Competent Persons contribute to the continuous improvement of the relevant aspects of the operation.

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. Continued exploration drilling has shown that the approximate tenor and thickness of mineralisation is also predictable. Results from 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 mapping and logging data (lithology and structure), gold assay data (RC and DD), pXRF 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), mineral mapping and multi-element data from research conducted in partnership with the CSIRO and open pit mapping. 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.	In previous updates, 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 modelled and showed little effect on the global estimate of volume. Work was completed to test the sensitivity of the interpretation of the leached mineralisation. The model was previously modelled with a flat orientation, but the geology supports a steeper orientation. Comparison at a global scale showed no material difference between the results.
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 north-west (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 north-northeast dipping cross-cutting arcuate and linear faults have been interpreted from airborne magnetics. 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 3 m compositing to >0.3 g/t Au • the inclusion of up to 2 m internal waste (Au<0.15 g/t Au)

	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 Au 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 on a log probability plot; a value of 0.3 g/t Au 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 Au 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.
	Seven mineralisation Domains have been modelled; Primary (Main), Primary (South Plunge), Primary (North), Weathered (leached), Dispersion Blanket, SW Porphyry and background mineralisation (within host).
	1. The Primary Domain (Main) 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.
	2. The Primary Domain (South Plunge) corresponds to higher-grade mineralisation internal to the Main domain. The mineralisation trend is along strike and steeply down dip with a southerly plunge and supported by geological observations of alteration, sulphide, quartz veining and structure.
	The strike and dip components for this Domain are supported by modelled variography.
	3. The Primary Domain (North) corresponds to mineralisation hosted in fresh, transitional and saprock Gruyere Porphyry associated with and north of the Northern Fault. The tenor of the gold mineralisation increases in this region supported by elevated As values and reduced Rb. The mineralisation trend is along strike and steeply down dip and supported by geological observations of alteration and sulphides. The strike and dip components for this Domain are supported by modelled variography. The northern extent of this domain has been constrained by a sub-domain in the 2022 geology model.
	4. 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.
	5. 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.
	6. Background mineralisation – very weakly mineralised Gruyere Porphyry.
	7. Mineralisation within the adjacent SW Porphyry. Limited drilling has identified mineralisation associated with an adjacent porphyry intrusion.

The factors affecting continuity both of grade and geology.	Continuity of grade and geology at Gruyere is considered exceptional. 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. Other narrow (generally less than 1 m wide) mafic and intermediate intrusives / dykes occur but have shorter scale continuity and are insignificant to the scale of mineralisation. Open pit mapping and grade control data will be used to refine the interpretation of these dykes.
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: 2,000 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 800 m. The deposit has been intersected in drilling at >1,100 m vertical depth.

Criteria and JORC Code explanation	Commentary
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: Acquire database 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 Pro – Drill hole validation, cross-section, plan and long-section plotting, block modelling, block model validation, classification, reporting, mineable shape optimiser Isatis – grade estimation and Geostatistics Deswik and Maptek Vulcan – open pit optimisation 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 2 m node spacing and then sampled to represent planned Grade control drilling. Thereafter 50 ordinary kriged estimates are generated for each SMU block (5 mE by 12.5 mN by 5 mRL) which inform the Grade distribution of larger Panels (25 mE by 25 mN by 20 mRL). 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.
	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. 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. Top cut range – 20 to 30 g/t Au 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.

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.	Several internal models and numerous public models were produced prior to the publication of this Mineral Resource. These were used to plan exploration and grade control 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. The resource model reconciles well against production with both the 12 month moving average and mine to date mine call factors close to 100%.
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).*	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.
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Panel and SMU sizes per Domain: | Domain	SMU	Panel
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Leached	5mN x 12.5mE x 5mRL	N/A (linear estimate)
Primary North	5mN x 12.5mE x 5mRL	25mN x 25mE x 20mRL
Primary South	5mN x 12.5mE x 5mRL	25mN x 25mE x 20mRL
Dispersion blanket	5mN x 12.5mE x 5mRL	25mN x 25mE x 20mRL
Background mineralisation	5mN x 12.5mE x 5mRL	25mN x 25mE x 20mRL	 Sample spacing discussed below.
Any assumptions behind modelling of selective mining units.	The selective mining unit (SMU) of 5 m X by 12.5 m Y by 5 m Z was chosen for grade estimation as it corresponds well with currently utilised open pit mining equipment and drill spacing/spatial analysis. It is also an appropriate SMU for underground evaluation.
Any assumptions about correlation between variables.	No correlation between variables was analysed or made with respect to grade estimation.
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 ▪ Reconciliation to actual mining All validation checks gave suitable results.
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 Mineral Resource for the Gruyere underground deposit is reported using a 1.0 and 1.5 g/t Au cut-off grade. This cut-off grade is based on a gold price of A$2,000/oz and mine costs using Australian industry benchmarking, delivering an overall mining, processing, and G&A operating cost estimate of about A$60/t and A$90/t, respectively.
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 underground the stope optimisation was completed using Alford Mining Systems Mineable Shape Optimiser, which is an industry recognised package for producing a stope wireframe. The estimate assumes that a mass mining method (sub-level cave and open stoping) with no internal selectivity would be used. Stope dimensions were controlled using the Gruyere Porphyry wireframe to control dip and strike of the stope shapes. The Gruyere Porphyry wireframe hangingwall and footwall contacts are sub-parallel to the overall dip and strike of the mineralisation. Areas of the resource model considered appropriate for potential mass mining exploitation in the Central Zone are constrained within MSO shapes of 25 metre minimum mining width in a transverse orientation and 25 metre sub-level interval, and are optimised to a cut-off grade of 1.0 g/t Au. Areas of the resource model considered appropriate for potential mass mining exploitation in the Northern Zone are constrained within MSO shapes of 5 metre minimum mining width in longitudinal orientation and 25 metre sub-level interval, and are optimised to a cut-off grade of 1.5g/t Au.

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.*	The Gruyere processing facility consists of 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. This process is appropriate for the Gruyere ore, which has been classified as free-milling. The 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. Since commissioning of the Gruyere processing facility, gold recovery averages between 92 and 93%. The metallurgical recovery used in the underground evaluation is assumed to be between 90% and 92%.
	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 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. DD 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 3. In pit sampling 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 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. Approximately 100 grab samples are taken from the pit each month and tested for moisture and density using wax clog specific gravity method. The results confirm existing assumptions.

Criteria and JORC Code explanation	Commentary
Classification *The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource has been constrained within MSO shapes. Blocks in the geological model within those wireframes are classified as Inferred only. Several factors have been used in combination to aid the classification; ▪ Drill hole spacing ▪ Level of geological continuity ▪ Level of grade continuity
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 estimates appropriately reflects the relevant Competent Person's view of the deposit.
Audits or reviews *The results of any audits or reviews of Mineral Resource estimates.*	The underground Mineral Resource estimate has been reviewed internally by Gold Road Competent Persons and board members.
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. Reconciliation has shown, and 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.	Confidence in the Mineral Resource estimate is such that the Measured portions of the model will provide adequate accuracy for open pit 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.	The open pit reconciliation process reviews operational planning parameters against actual performance considering model performance and dilution. Reconciliation performance is comprehensively tracked and managed via the mine reconciliation system with revision of modifying factors as necessary. Reconciliation data indicates that recovery and dilution are currently within acceptable levels, and the mine call factors for tonnes, grade and ounces are also within acceptable levels. No factoring has been applied to the tonnes, grade or metal in the resource model.