



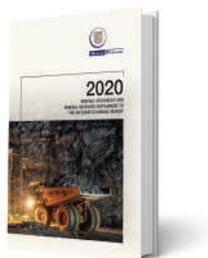
**GOLD FIELDS**

# 2020

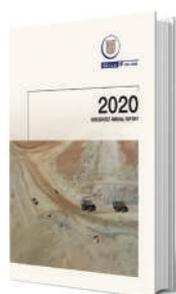
MINERAL RESOURCES AND  
MINERAL RESERVES SUPPLEMENT TO  
THE INTEGRATED ANNUAL REPORT



# Delivering **value** for a sustainable future



Gold Fields is a globally diversified gold producer with nine operating mines in Australia, Peru, South Africa and West Africa (including the Asanko joint venture (JV)) and one project in Chile. We have total attributable annual gold-equivalent production of 2.24Moz (2.46Moz managed production), attributable gold-equivalent Mineral Reserves of 52.1Moz and Mineral Resources of 116.0Moz. Our shares are listed on the Johannesburg Stock Exchange (JSE), with our American Depositary Shares trading on the New York Exchange (NYSE).



To be read in conjunction with the Gold Fields 2020 Integrated Annual Report (IAR). For abbreviations refer to p114; and for glossary of terms refer to p116 of this Mineral Resources and Mineral Reserves Supplement

*An annexure to the Mineral Resources and Mineral Reserves Supplement is included on the Gold Fields website to provide additional information on the regional geology for each of Gold Fields' four operating regions and summarises a brief history for each of the assets.*

*This supplementary information should be referenced in conjunction with the Supplement itself and aims to streamline the effective review of the Company information provided.*

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# INTRODUCTION

## Aim of this report

This report contains Gold Fields' Mineral Resources and Mineral Reserves Statement (the Supplement) as at December 2020. It provides key technical information to supplement the information summarised in the Integrated Annual Report (IAR) and it is available on the Company website at [www.goldfields.com](http://www.goldfields.com). In addition to providing information in accordance with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves, 2016 edition (SAMREC Code), this Supplement highlights key developments and issues viewed as material to the reporting of Mineral Resources and Mineral Reserves per asset. Gold Fields' commitment to materiality, transparency and competency in its public reporting remains of paramount importance, and continues to be endorsed by the Group's internal and external audit assurance protocols.

This Supplement comprises a number of sections that should be read in their totality to gain a full understanding of the Group's Mineral Resource and Mineral Reserve reporting process, protocols, historical performance, key developments, material issues and strategic context.

### STRATEGIC FIT

The custodianship and management of the Company's fundamental asset base, the Mineral Resources and Mineral Reserves, are central to delivering on its strategic goals and key performance targets. The seven strategic pillars that drive our performance are integrated across the business and are wired into our resource and reserve Group strategy and life-of-mine (LoM) plans:

Gold Fields' strategic pillars:

- Safety and wellbeing of our people
- Developing a fit-for-purpose workforce
- Creating a global, sustainable portfolio
- Profitable production and sustainable cash-flow
- Capital allocation and sound balance sheet
- Value creation for our stakeholders
- Environmental stewardship

Four years ago, Gold Fields embarked on a reinvestment programme to ensure the Group's long-term, safe and sustainable production profile. This US\$1bn investment aimed to ensure that our portfolio continues to generate cash sustainably into the foreseeable future by lowering All-in costs (AIC) and extending mine life, while preserving a sound balance sheet. The Mineral Reserves reported in this Supplement demonstrate that the Group's portfolio is currently in a strong position to maintain production of 2.0Moz – 2.5Moz per year for the next 10 years, of which well over 2.0Moz will be outside of the South African base.

Over the past five years, since 2015, the Group has replaced ~11.5Moz in depleted Reserves and added a further ~4.5Moz through its successful exploration activities, technical studies and project investment, equating to a 9% growth in Reserves over this period, net of annual depletions. In 2018, the approximate 4.6Moz negative adjustment to South Deep's Reserve, mainly due to the increased cut-off grade (COG), revised geological losses and tail-end management applied that year, was partly offset by the maiden declaration of the Salares Norte 3.48Moz Reserve.

### FIVE YEAR Y-O-Y RESERVE – GOLD – GOLD FIELDS

koz (Reserve)



# INTRODUCTION

## Aim of this report *continued*

This year's Mineral Resources and Mineral Reserves Statement again reflects the Company's strategy in action, specifically the consistent funding of brownfield or near-mine exploration, reinvestment in the sustainability and growth of the operations, embedded Business Improvement (BI) and modernisation programmes, and the advancement of value-accretive projects. The strong pipeline of reserve replacement and growth projects across the Group are configured to provide the flexibility and margin headroom needed to generate sustained free cash-flows (FCF). The robustness of the Mineral Resources and Mineral Reserves is shown in their ability to consistently underpin delivery on operational plans and is testimony to the quality of the assets in the portfolio. This is the result of a rigorous embedded annual planning process that enforces a strong linkage between strategic, business, operational and LoM planning.

The assessment and integration of environmental, social and governance (ESG) themes into the process of estimating and reporting Mineral Resources and Mineral Reserves continues as an important consideration for modifying factors, RPEEE assessments and to underpin the integrity of the life of mine plans. Table 1 of the SAMREC Code was amended in January 2020 to include additional ESG disclosure requirements. The Company's ESG Charter, issues and priorities are covered in more detail in Gold Fields' 2020 IAR (see [www.goldfields.co.za](http://www.goldfields.co.za)).

### HEADLINE NUMBERS – GROUP OVERVIEW AS AT DECEMBER 2020

This annual statement of Mineral Resources and Mineral Reserves has been prepared in accordance with the SAMREC Code and Section 12 of the JSE Listings Requirements. The annual review considered long-term metal prices, foreign exchange and cost assumptions, and mining and metallurgy performance to inform COGs, modifying factors and physical mining parameters. The Covid-19 pandemic impacted the entire reporting cycle in 2020 but, on the whole, the Group managed these disruptions very well, and our operating regions were able to complete the requisite drilling, resource modelling, technical studies and LoM planning as scheduled.

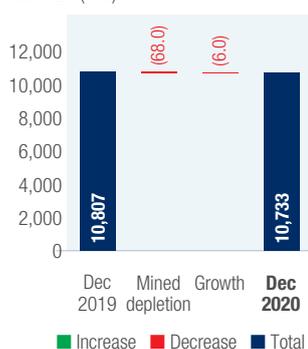
|                            |  | Managed          | Attributable    |
|----------------------------|--|------------------|-----------------|
| <b>December 2019</b>       | Au Mineral Resources                           | 123.4Moz         | 104.0Moz        |
|                            | Cu Mineral Resources                           | 10,807Mlb        | 4,851Mlb        |
|                            | Au Mineral Reserves                            | 53.2Moz          | 49.3Moz         |
|                            | Cu Mineral Reserves                            | 619Mlb           | 616Mlb          |
| <b>12-months depletion</b> | Au production depletion from Mineral Resources | 2.8Moz           | 2.5Moz          |
|                            | Cu production depletion from Mineral Resources | 68Mlb            | 68Mlb           |
|                            | Au production depletion from Mineral Reserves  | 2.4Moz           | 2.2Moz          |
|                            | Cu production depletion from Mineral Reserves  | 67Mlb            | 67Mlb           |
| <b>December 2020</b>       | Au Mineral Resources                           | <b>124.1Moz</b>  | <b>104.6Moz</b> |
|                            | Cu Mineral Resources                           | <b>10,733Mlb</b> | <b>4,777Mlb</b> |
|                            | Au Mineral Reserves                            | <b>54.3Moz</b>   | <b>50.3Moz</b>  |
|                            | Cu Mineral Reserves                            | <b>565Mlb</b>    | <b>563Mlb</b>   |

- Group total figures for 2020 are inclusive of Salares Norte and Far Southeast (FSE) but exclude the Asanko JV, and are net of annual production depletion
- Asanko JV is included in the 2019 figures
- The gold and copper prices used for the December 2020 Mineral Resources were US\$1,500/oz and US\$3.2/lb and, for the Mineral Reserves gold, US\$1,300/oz and copper US\$2.8/lb
- Measured and Indicated Mineral Resources are reported inclusive of those Mineral Resources modified to produce Mineral Reserves

**GFI – MANAGED MINERAL RESOURCE RECONCILIATION**  
GOLD (Moz)



**GFI – MANAGED MINERAL RESOURCE RECONCILIATION**  
COPPER (Mlb)



**GFI – MANAGED MINERAL RESERVE RECONCILIATION**  
GOLD (Moz)



**GFI – MANAGED MINERAL RESERVE RECONCILIATION**  
COPPER (Mlb)



## Group highlights\*

### Gold Resources increased by

**1%**

net of depletion

- 124.1Moz (123.4Moz) driven mainly by South Deep (+2.55Moz) resulting from a decrease in COG and updated resource models
- Strong Resources growth of 0.9Moz in Australia region, predominantly at Agnew (26%) and St Ives (13%)
- Strengthening of the Resources base and project pipeline in Australia and Ghana is providing the platform for the next generation mining fronts
- At Salares Norte, near-mine and district exploration continues to assess potential additional ore sources to enhance the current LoM
- Asanko is excluded from 2020

### Gold Reserves increased by

**2%**

net of depletion

- 54.3Moz (53.2Moz) driven mainly by South Deep (+2Moz), resulting from a reduced COG and updated mine design and scheduling
- Strong contributions from extensions to existing mines and new mining positions at Agnew (19%), St Ives (17%), Granny Smith (4%) and Tarkwa (3%)
- Largest Reserves at St Ives since 2011, and at Agnew since 2014, and the second consecutive year Tarkwa replaced Reserves in the last six years
- Technical studies underway at Gruyere, Granny Smith, St Ives, Agnew, Tarkwa, Damang and Cerro Corona to assess life extension opportunities
- Asanko is excluded from 2020

### Company strategy has delivered:

- Four years ago, Gold Fields embarked on a reinvestment programme to ensure long-term, safe and sustainable production - US\$1bn project capital was spent in 2017 - 2019
- Two new mines were built – Gruyere in Australia and the Damang Reinvestment project (DRP) in Ghana
- Bought 45% in the prospective Asanko mine in Ghana
- Constructing the Salares Norte project in Chile, to be operational in 2023
- South Deep's restructuring further embedded in 2020, incorporating a reduced workforce and mobile equipment levels aligned to the focus on the core productivity process and recalibrated cost base

### Portfolio management:

- Aimed at delivering our vision of being the global leader in sustainable gold mining. Value creation, embedded in the Group Balanced Scorecard (BSC), comprises four overarching focus areas – organisational capacity, internal business processes, stakeholders and financial performance
- Focus is on reducing Group AIC, capital discipline, increasing the FCF/oz and extending the life of the assets
- Consistent significant investment in brownfield exploration in Australia for 2020 A\$72m (US\$50m) continues to pay dividends at St Ives, Granny Smith and Agnew – A\$84m (US\$63m) is scheduled for 2020
- Extensional and near mine exploration at Damang and Tarkwa is ongoing to assess opportunities for further pit cut-backs and life extension

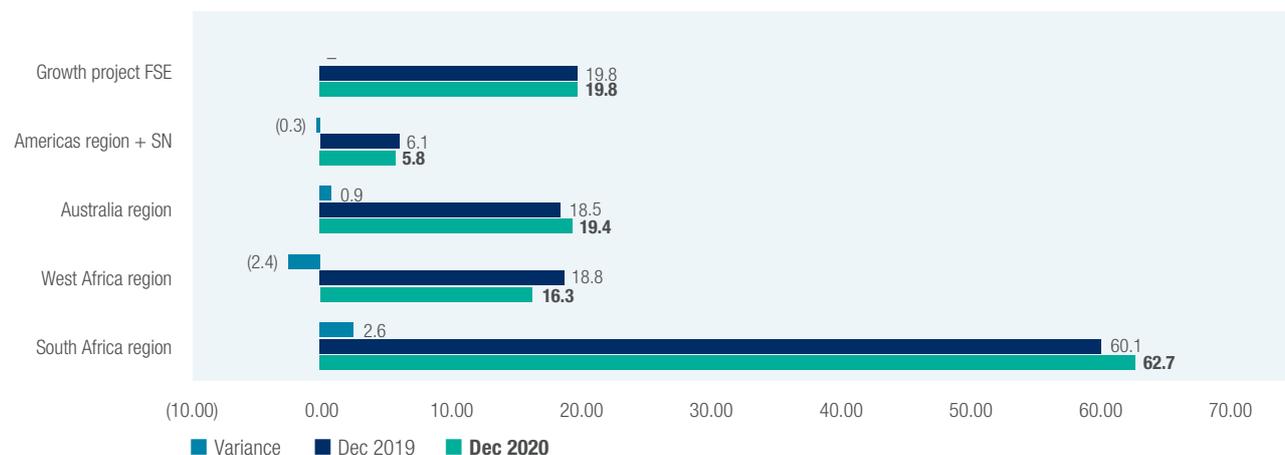
\* All figures are post annual depletion and managed (December 2019 Moz numbers are shown in brackets)

\* Percentages in brackets show year-on-year movement

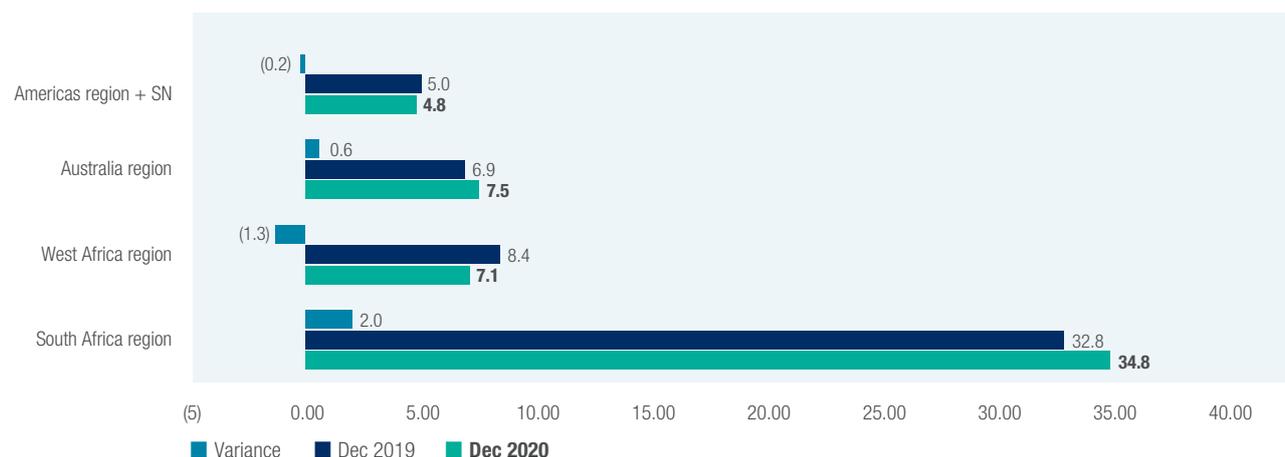
\* US\$ in brackets show 2019 figures

## Group highlights\* continued

### Mineral resource change per region (Moz)



### Mineral reserve change per region (Moz)



The charts above depict the Group's comparative 2020 versus 2019 managed gold Mineral Resources and Mineral Reserves ounces split by region and growth projects. The project Resources only reflect the FSE asset. Mineral Resources (excluding FSE) comprise 18% Australia, 16% West Africa, 6% Americas and 60% South Deep. Mineral Reserves comprise 14% Australia, 13% West Africa, 9% Americas and 64% South Deep.

### ASSESSMENT AND REPORTING CRITERIA

The assessment and reporting criteria as outlined in the SAMREC Code have been used in the preparation of an internal Competent Person's Report (CPR) or pre-feasibility study (PFS) document for each operating asset and significant growth project, from which the numbers stated in this Supplement were drawn. The CPR principally comprises a techno-economic review of the Mineral Resources

and Mineral Reserves, together with a full appraisal of the resource models, relevant mining, processing assets, security of water/power, operating and capital costs and the status of permitting/licensing to support the LoM plan. Each item under Table 1 of the SAMREC Code has been considered using the 'if not, why not' principle, and any material year-on-year variance is explained in this document. This Supplement is in effect a short-form summary of all the individual CPRs as submitted from the portfolio assets and kept on record.

This Supplement contains information as at 31 December 2020 (the effective date of this report). The statements and information set out in this report pertain only to the effective date of this report. Shareholders and affected parties are therefore urged to review all public disclosures made by Gold Fields after the effective date of this report, as some of the information contained in the report may have changed or been updated.

### Metal prices and exchange rates

The table below summarises the metal price deck approved by Gold Fields for the December 2020 Mineral Resources and Mineral Reserves estimate and which is in accordance with the SEC three-year trailing average gold price guidance. A review of metal prices to be used for Business and LoM planning purposes is typically undertaken in June to monitor any significant changes in price trends or exchange rates that would warrant recalibrating the price deck given that the Strategic Planning process is completed in Q2 each year. The Covid-19 pandemic has fuelled safe-haven demand for gold and has resulted in driving prices to their highest levels in several years. However, retaining the good discipline we have adopted in the last three year's through the use of a gold price that supports the Group's strategy and key scorecard performance metric of delivering a 15% FCF margin at a US\$1,300/oz gold price, remains an important consideration

in metal price selection. In addition, the annual mining industry inflation trend is anticipated to continue and incorporating adequate head room through selection of a gold price significantly below current spot

prices assists with securing free-cash flow margins given future gold price uncertainty.

The strategic positioning of the operations to be cash-generative at gold prices periodically trading lower, is central

to the phasing of the LoM plans. The Mineral Resources price has a premium of approximately 15% over the Mineral Reserves price.

| Commodity | Unit    | December 2020 |           | December 2019 |           |
|-----------|---------|---------------|-----------|---------------|-----------|
|           |         | Reserves      | Resources | Reserves      | Resources |
| Au        | US\$/oz | 1,300         | 1,500     | 1,200         | 1,400     |
|           | A\$/oz  | 1,750         | 2,000     | 1,600         | 1,850     |
|           | ZAR/kg  | 650,000       | 750,000   | 550,000       | 625,000   |
| Cu        | US\$/t  | 6,170         | 7,050     | 5,510 – 6,170 | 7,050     |
|           | US\$/lb | 2.8           | 3.2       | 2.6 to 2.8    | 3.2       |
| Ag        | US\$/oz | 17.5          | 20        | 17.5          | 20        |

The following exchange rates were used for planning purposes, with the comparative historic rates:

| Items         | Unit     | Dec 2019 (actual) | Dec 2020 (actual) | Dec 2020 (plan) |
|---------------|----------|-------------------|-------------------|-----------------|
| Exchange rate | ZAR/US\$ | 14.46             | 16.38             | 15.55           |
|               | ZAR/A\$  | 10.05             | 11.29             | 11.55           |
|               | US\$/A\$ | 0.70              | 0.69              | 0.74            |

Risks to the metal price assumptions used include, but are not limited to, adverse legislation or poor policies implemented by governments in operating regions, slow global growth, exchange rate volatility, international policies and global health threats such as the coronavirus pandemic (Covid-19).

**Quality assurance and quality control**

In accordance with the SAMREC Code, a comprehensive quality assurance and quality control (QA/QC) protocol is in place at all the Gold Fields operations and projects. It draws on industry leading practice for data acquisition and utilises national standards authority accredited

laboratories, such as the South African National Accreditation System (SANAS) in South Africa, which are regularly reviewed both internally and externally. Analytical QA/QC is maintained and monitored through the submission of blanks, certified reference material and duplicates, and umpire laboratory checks.



Cerro Corona mineral processing plant

## Group highlights\* continued

### IMPORTANT NOTICES AND CONSIDERATIONS

The following list of notices are consolidated to provide a reference for the important elements considered and embodied in the Mineral Resources and Mineral Reserves estimates:

1. This Supplement should be read in conjunction with the IAR, which provides additional information regarding the operations and their financial performance
2. The Group's Mineral Resources and Mineral Reserves numbers were subjected to internal review and scrutiny by the relevant regional technical and financial disciplines, and peer reviewed for technical assurance and compliance in reporting by the Corporate Technical Services (CTS), Sustainable Development and Head Office Finance teams
3. All Mineral Resources and Mineral Reserves figures reported are 100% managed or owned by Gold Fields unless otherwise stated
4. The Gruyere JV project is reported as 50% of the 'managed JV'. Gruyere is reported by Gold Fields as part of the Gruyere JV with Gold Road Resources
5. Mineral Resources are reported inclusive of Mineral Reserves, and Mineral Resources include stability pillars when appropriate
6. Mineral Resources tonnages and grades are estimated *in situ* over a minimum mining width, and may include mineralisation below the selected COG to ensure that the Mineral Resources comprise practical mining blocks of adequate size and continuity
7. Mineral Resources categories are assigned with consideration given to geological complexity, grade variance, drill hole intersection spacing and proximity of mining development
8. Mineral Resources are estimates, being dependent on interpretation of limited information about the location, shape, and continuity of the occurrence and available sampling results. As the understanding of the ore body improves and the methods and modifying factors that determine its extraction criteria gain increased resolution, the estimates may also change and the Mineral Resources and Mineral Reserves data modified accordingly
9. A Mineral Reserve is that portion of the Mineral Resource which, as technical and economic studies have demonstrated, can justify extraction at the time of disclosure (to a minimum of a PFS level). Estimates of tonnages and grades quoted as Mineral Reserves include allowances for all mining dilution, all other mining factors (modifying factors) and are consequently reported as net tonnes and grades delivered to the mill
10. The Mineral Resources and Mineral Reserves are estimated at a point in time and can be affected by changes in the gold price, US Dollar currency exchange rates, permitting, legislation, costs and operating parameters
11. Open pit Mineral Resources are confined to pit shells that are defined by the price, costs and relevant modifying factors used for their estimates. These pit shells are used to constrain the mineralisation to that which is economically and practically extractable under assumed economic conditions



Salares Norte: Access roadways for exploration and resource definition drilling at Brecha Principal

12. Underground Mineral Resources are typically confined using Mineable Shape Optimiser (MSO) software which assists with generating optimised stope designs to maximise the volume of recovered ore within the given ore body and design constraints, including minimum mining widths and mining COG
13. All regions and operations have documented the assumptions, inputs and modifying factors that underpin the LoM plans, which are supported by mine designs and schedules
14. Although all permitting may not be finalised, there is no reason to expect that these will not be granted based on existing processes and protocols. However, the duration taken for final approval may impact the production schedules
15. Caution should be exercised when interpreting the grade tonnage curves provided within this report. The ability to high-grade (selectively mine) the deposits may be precluded by the deposit geometry, mining method and the need for practical development of the ore body
16. Operations are entitled to mine all declared material located within their respective mineral rights and/or mining rights, and all necessary statutory mining authorisations and permits are in place or have reasonable expectation of being granted
17. All references to tonnes (t) are metric units
18. The 31 December 2020 Mineral Resources and Mineral Reserves figures are net of 2020 production depletion
19. Locations on maps are indicative only
20. All metals (gold, silver and copper) are reported individually and not as metal equivalents, except where alternatively specified as described in the SAMREC Code
21. The limited metal from Inferred Mineral Resources material considered in the LoM plans is not converted to Mineral Reserves and is omitted from all economic studies
22. Where metal equivalents are quoted, it should be noted that the selling cost, including refining and royalties, plus metallurgical recovery rate, are excluded from the calculation. However, in the CP's opinion, all metals so converted have a reasonable potential to be recovered and sold. As Gold Fields is primarily a gold producer, all copper and silver metal equivalents have been converted to gold
23. Rounding of figures in this report may result in minor computational discrepancies
24. The Gold Fields Mineral Resources and Mineral Reserves reporting for fiscal 2021 (i.e. December 2021 annual reporting) will comply with the new SEC SK-1300 modernisation rules for technical disclosure. These amendments will rescind Industry Guide 7 and consolidate the disclosure requirements for registrants in a new subpart of Regulation SK
25. Gold Fields uses K2Fly<sup>®</sup> RCubed propriety software in combination with SharePoint to ensure accuracy, governance and auditability in the reporting of Mineral Reserves and Mineral Resources



Agnew mineral processing plant

# Headline Mineral Resources and Mineral Reserves Statement

## GOLD FIELDS MINERAL RESOURCES AND MINERAL RESERVES ESTIMATES

### Mineral Resources headline numbers<sup>1</sup>

|   | Managed Mineral Resources                 |             |              |               |             |          | Attributable ounces |          |
|---|---|-------------|--------------|---------------|-------------|----------|---------------------|----------|
|   | December 2020                             |             |              | December 2019 |             |          | Dec 2020            | Dec 2019 |
|   | Tonnes (Mt)                               | Grade (g/t) | Au (Moz)     | Tonnes (Mt)   | Grade (g/t) | Au (Moz) | Au (Moz)            |          |
| <b>Gold (Au) only</b>                                 |   |             |              |               |             |          |                     |          |
| <b>Total regions<sup>2</sup></b>                      | <b>1,076.1</b>                            | <b>3.01</b> | <b>104.3</b> | 1,097.8       | 2.93        | 103.6    | <b>96.7</b>         | 96.1     |
| <b>Total projects<sup>3</sup></b>                     | <b>891.7</b>                              | <b>0.69</b> | <b>19.8</b>  | 891.7         | 0.69        | 19.8     | <b>7.9</b>          | 7.9      |
| <b>Total operating mines and projects</b>             | <b>1,967.8</b>                            | <b>1.96</b> | <b>124.1</b> | 1,989.4       | 1.93        | 123.4    | <b>104.6</b>        | 104.0    |
| <b>Copper (Cu) and Silver (Ag) as Au equiv. (Moz)</b> | Individual metals detailed in table below |             |              |               |             |          |                     |          |
| Cerro Corona Cu as Au equiv <sup>5</sup>              |   |             | 1.7          |               |             | 2.0      | <b>1.7</b>          | 2.0      |
| FSE Cu as Au equiv <sup>6</sup>                       |   |             | 22.7         |               |             | 22.7     | <b>9.1</b>          | 9.1      |
| Salares Norte Ag as Au equiv <sup>7</sup>             |   |             | 0.6          |               |             | 0.6      | <b>0.6</b>          | 0.6      |
| <b>Grand total as Au equivalents</b>                  |   |             | <b>149.1</b> |               |             | 148.7    | <b>116.0</b>        | 115.7    |

### Operational summary<sup>1</sup>

|  | Managed Mineral Resources |             |                |               |             |          | Attributable ounces     |          |
|--|---------------------------|-------------|----------------|---------------|-------------|----------|-------------------------|----------|
|  | December 2020             |             |                | December 2019 |             |          | Dec 2020                | Dec 2019 |
|  | Tonnes (Mt)               | Grade (g/t) | Au (koz)       | Tonnes (Mt)   | Grade (g/t) | Au (koz) | Mineral Resources (koz) |          |
| <b>Au</b>                                |                           |             |                |               |             |          |                         |          |
| <b>Australia region</b>                  |                           |             |                |               |             |          |                         |          |
| Agnew                                    | 18.6                      | 5.31        | 3,178          | 14.0          | 5.60        | 2,521    | <b>3,178</b>            | 2,521    |
| Granny Smith                             | 45.0                      | 5.49        | 7,936          | 49.4          | 5.23        | 8,310    | <b>7,936</b>            | 8,310    |
| St Ives                                  | 41.7                      | 3.70        | 4,964          | 34.5          | 3.97        | 4,403    | <b>4,964</b>            | 4,403    |
| Gruyere <sup>1</sup>                     | 77.9                      | 1.34        | 3,356          | 76.8          | 1.34        | 3,309    | <b>3,356</b>            | 3,309    |
| <b>Total Australia region</b>            | <b>183.1</b>              | <b>3.30</b> | <b>19,433</b>  | 174.7         | 3.30        | 18,544   | <b>19,433</b>           | 18,544   |
| <b>South African region</b>              |                           |             |                |               |             |          |                         |          |
| South Deep                               | 382.5                     | 5.10        | 62,684         | 355.1         | 5.27        | 60,130   | <b>56,753</b>           | 54,534   |
| <b>Total South Africa region</b>         | <b>382.5</b>              | <b>5.10</b> | <b>62,684</b>  | 355.1         | 5.27        | 60,130   | <b>56,753</b>           | 54,534   |
| <b>Americas region</b>                   |                           |             |                |               |             |          |                         |          |
| Cerro Corona – Peru                      | 104.8                     | 0.56        | 1,890          | 114.6         | 0.60        | 2,213    | <b>1,881</b>            | 2,203    |
| Salares Norte – Chile                    | 25.6                      | 4.76        | 3,913          | 25.6          | 4.76        | 3,913    | <b>3,913</b>            | 3,913    |
| <b>Total Americas region</b>             | <b>130.4</b>              | <b>1.38</b> | <b>5,803</b>   | 140.1         | 1.36        | 6,126    | <b>5,794</b>            | 6,116    |
| <b>West Africa region</b>                |                           |             |                |               |             |          |                         |          |
| Asanko <sup>10</sup>                     |                           |             |                | 35.5          | 1.69        | 1,931    |                         | 1,738    |
| Damang                                   | 83.1                      | 2.13        | 5,693          | 84.4          | 2.18        | 5,918    | <b>5,124</b>            | 5,326    |
| Tarkwa – open pits                       | 224.1                     | 1.32        | 9,529          | 233.1         | 1.30        | 9,774    | <b>8,576</b>            | 8,797    |
| Tarkwa – stockpiles                      | 72.9                      | 0.47        | 1,111          | 74.8          | 0.47        | 1,138    | <b>1,000</b>            | 1,025    |
| Tarkwa – total                           | 297.0                     | 1.11        | 10,640         | 307.9         | 1.10        | 10,913   | <b>9,576</b>            | 9,822    |
| <b>Total West Africa region</b>          | <b>380.1</b>              | <b>1.34</b> | <b>16,333</b>  | 427.8         | 1.36        | 18,762   | <b>14,700</b>           | 16,886   |
| <b>Gold Fields operations – total Au</b> | <b>1,076.1</b>            | <b>3.01</b> | <b>104,254</b> | 1,097.8       | 2.93        | 103,562  | <b>96,680</b>           | 96,080   |

### Operational summary<sup>1</sup> continued

|                         | Managed Mineral Resources |              |          |               |              |          | Attributable ounces   |          |
|-------------------------|---------------------------|--------------|----------|---------------|--------------|----------|-----------------------|----------|
|                         | December 2020             |              |          | December 2019 |              |          | Dec 2020              | Dec 2019 |
|                         | Tonnes (Mt)               | Grade (% Cu) | Cu (Mlb) | Tonnes (Mt)   | Grade (% Cu) | Cu (Mlb) | Attributable Cu (Mlb) |          |
| Americas region         |                           |              |          |               |              |          |                       |          |
| <b>Cu</b>               |                           |              |          |               |              |          |                       |          |
| Cerro Corona (Cu) only  | 104.3                     | 0.35         | 812      | 112.5         | 0.36         | 886      | <b>809</b>            | 882      |
| Americas region         |                           |              |          |               |              |          |                       |          |
| <b>Ag</b>               |                           |              |          |               |              |          |                       |          |
| Salares Norte (Ag) only | 25.6                      | 53.14        | 43,662   | 25.6          | 53.14        | 43,662   | <b>43,662</b>         | 43,662   |

Mineral Reserves headline numbers<sup>1</sup>

|   | Managed Mineral Reserves                         |             |             |               |             |          | Attributable ounces |          |
|---|--|-------------|-------------|---------------|-------------|----------|---------------------|----------|
|   | December 2020                                    |             |             | December 2019 |             |          | Dec 2020            | Dec 2019 |
|   | Tonnes (Mt)                                      | Grade (g/t) | Au (Moz)    | Tonnes (Mt)   | Grade (g/t) | Au (Moz) | Au (Moz)            |          |
| <b>Au only</b>  |  |             |             |               |             |          |                     |          |
| <b>Total operating mines and projects<sup>2</sup></b> | <b>599.4</b>                                     | <b>2.82</b> | <b>54.3</b> | 609.5         | 2.72        | 53.2     | <b>50.3</b>         | 49.3     |
| <b>Cu and Ag as Au equiv.</b>                         | <b>Individual metals detailed in table below</b> |             |             |               |             |          |                     |          |
| Cerro Corona Cu as Au equiv <sup>8</sup>              |  |             | <b>1.2</b>  |               |             | 1.4      | <b>1.2</b>          | 1.4      |
| Salares Norte Ag as Au equiv <sup>9</sup>             |  |             | <b>0.6</b>  |               |             | 0.6      | <b>0.6</b>          | 0.6      |
| <b>Grand Total as Au equivalents</b>                  |  |             | <b>56.1</b> |               |             | 55.2     | <b>52.1</b>         | 51.3     |

Operational summary<sup>1</sup>

|  | Managed Mineral Reserves |             |               |               |             |          | Attributable ounces    |          |
|--|--------------------------|-------------|---------------|---------------|-------------|----------|------------------------|----------|
|  | December 2020            |             |               | December 2019 |             |          | Dec 2020               | Dec 2019 |
|  | Tonnes (Mt)              | Grade (g/t) | Au (koz)      | Tonnes (Mt)   | Grade (g/t) | Au (koz) | Mineral Reserves (koz) |          |
| <b>Au</b>                                |                          |             |               |               |             |          |                        |          |
| <b>Australia region</b>                  |                          |             |               |               |             |          |                        |          |
| Agnew                                    | 5.3                      | 5.39        | 917           | 4.6           | 5.17        | 772      | <b>917</b>             | 772      |
| Granny Smith                             | 12.6                     | 5.34        | 2,167         | 12.5          | 5.18        | 2,078    | <b>2,167</b>           | 2,078    |
| St Ives                                  | 25.5                     | 3.25        | 2,665         | 20.9          | 3.40        | 2,283    | <b>2,665</b>           | 2,283    |
| Gruyere <sup>1</sup>                     | 43.4                     | 1.24        | 1,738         | 45.2          | 1.24        | 1,795    | <b>1,738</b>           | 1,795    |
| <b>Total Australia region</b>            | <b>86.8</b>              | <b>2.68</b> | <b>7,487</b>  | 83.2          | 2.59        | 6,928    | <b>7,487</b>           | 6,928    |
| <b>South Africa region</b>               |                          |             |               |               |             |          |                        |          |
| South Deep <sup>4</sup>                  | 205.7                    | 5.27        | 34,834        | 183.3         | 5.57        | 32,817   | <b>31,538</b>          | 29,763   |
| <b>Total South Africa region</b>         | <b>205.7</b>             | <b>5.27</b> | <b>34,834</b> | 183.3         | 5.57        | 32,817   | <b>31,538</b>          | 29,763   |
| <b>Americas region</b>                   |                          |             |               |               |             |          |                        |          |
| Cerro Corona                             | 67.0                     | 0.64        | 1,368         | 73.5          | 0.66        | 1,553    | <b>1,362</b>           | 1,546    |
| Salares Norte                            | 21.1                     | 5.13        | 3,476         | 21.1          | 5.13        | 3,476    | <b>3,476</b>           | 3,476    |
| <b>Total Americas region</b>             | <b>88.1</b>              | <b>1.71</b> | <b>4,844</b>  | 94.6          | 1.65        | 5,029    | <b>4,838</b>           | 5,022    |
| <b>West Africa region</b>                |                          |             |               |               |             |          |                        |          |
| Asanko <sup>10</sup>                     |                          |             |               | 26.7          | 1.38        | 1,189    |                        | 1,070    |
| Damang                                   | 21.2                     | 1.52        | 1,031         | 25.0          | 1.68        | 1,349    | <b>928</b>             | 1,214    |
| Tarkwa – open pits                       | 124.8                    | 1.24        | 4,984         | 121.8         | 1.21        | 4,756    | <b>4,486</b>           | 4,280    |
| Tarkwa – stockpiles                      | 72.9                     | 0.47        | 1,111         | 74.8          | 0.47        | 1,138    | <b>1,000</b>           | 1,025    |
| Tarkwa – total                           | 197.7                    | 0.96        | 6,095         | 196.7         | 0.93        | 5,894    | <b>5,486</b>           | 5,305    |
| <b>Total West Africa region</b>          | <b>218.8</b>             | <b>1.01</b> | <b>7,127</b>  | 248.4         | 1.06        | 8,432    | <b>6,414</b>           | 7,589    |
| <b>Gold Fields operations – total Au</b> | <b>599.4</b>             | <b>2.82</b> | <b>54,292</b> | 609.5         | 2.72        | 53,207   | <b>50,276</b>          | 49,302   |

|  | Managed Mineral Reserves |              |          |               |              |          | Attributable ounces   |          |
|--|--------------------------|--------------|----------|---------------|--------------|----------|-----------------------|----------|
|  | December 2020            |              |          | December 2019 |              |          | Dec 2020              | Dec 2019 |
|  | Tonnes (Mt)              | Grade (% Cu) | Cu (Mlb) | Tonnes (Mt)   | Grade (% Cu) | Cu (Mlb) | Attributable Cu (Mlb) |          |
| <b>(Peru) – Cerro Corona<sup>8</sup></b>   |                          |              |          |               |              |          |                       |          |
| <b>Cu</b>                                  |                          |              |          |               |              |          |                       |          |
| Cu only                                    | 67.00                    | 0.38         | 565      | 73.5          | 0.38         | 619      | <b>563</b>            | 616      |
| <b>(Chile) – Salares Norte<sup>9</sup></b> |                          |              |          |               |              |          |                       |          |
| <b>Ag</b>                                  |                          |              |          |               |              |          |                       |          |
| Ag only                                    | 21.1                     | 57.94        | 39,263   | 21.1          | 57.94        | 39,263   | <b>39,263</b>         | 39,263   |

<sup>1</sup> Managed unless otherwise stated; Gruyere reports 50% share attributable to Gold Fields; Measured and Indicated Mineral Resources are reported inclusive of those Mineral Resources modified to produce Mineral Reserves

<sup>2</sup> Salares Norte and FSE are included in the Americas and Australia regions, respectively

<sup>3</sup> Projects – FSE Inferred Resources only

<sup>4</sup> Reserves grade is inclusive of in section development tonnes, which cannot be separated from the ore flow; however, capital waste is excluded as there is a potential to separate it in the future

<sup>5</sup> Metal prices used for equiv oz: US\$1,500/oz Au and US\$3.2/lb Cu. The metallurgical recovery rate (Au = 68% and Cu = 86%) and selling cost, have not been applied to the conversion.

Calculation: CuMlbs\*Cu Price (812\*3.2)/Au price (1,500) = 1.7 Au equivalent (eq.) Moz

<sup>6</sup> Metal prices used for eq. oz: US\$1,400/oz Au and US\$3.2/lb Cu. The selling cost, including refining and royalties, plus metallurgical recovery rate (Au = 82% and Cu = 93%), have not been applied to the conversion. Calculation: CuMlbs\*Cu price (9,921\*3.2)/Au price (1,400) = 22.7 Au eq. Moz

<sup>7</sup> Metal prices used for eq. oz: US\$1,400/oz Au and US\$20/oz Ag. Equivalency is based on the price ratio only – metallurgical recoveries (92.7% Au, 67.5% Ag) and selling costs (US\$16.76/oz Au, US\$1.41/oz Ag), including refining and royalties (1%) have not been included. (43.7\*20/1,400 = 0.6Moz Au eq.)

<sup>8</sup> Metal prices used for eq. oz: US\$1,300/oz Au and US\$2.8/lb Cu. The selling cost, including refining and royalties, plus metallurgical recovery rate (Au=68% and Cu=86%), has not been applied to the conversion. Calculation: CuMlbs\*Cu price (565\*2.8)/Au price (1,300) = 1.2 Au eq. Moz

<sup>9</sup> Metal prices used for eq. oz: US\$1,200/oz Au and US\$17.5/oz Ag. The selling cost, including refining and royalties, plus metallurgical recovery rate (Au=92.7% and Cu=67.5%), has not been applied to the conversion. Calculation: AgMoz\*Ag price (39.3\*17.5)/Au price/oz (1,200) = 0.6 Au eq. Moz

<sup>10</sup> Asanko 50% Gold Fields JV share – 45% attributable to Gold Fields Mineral Resources and Mineral Reserves managed by Galiano Gold (the operator) not reported in 2020 figures and reported in 2019 figures only (see West Africa section for explanation)

# Headline Mineral Resources and Mineral Reserves Statement

continued

The year-on-year changes for managed gold Mineral Resources and Mineral Reserves are shown in the charts below, ranked from lowest to highest as at December 2020.

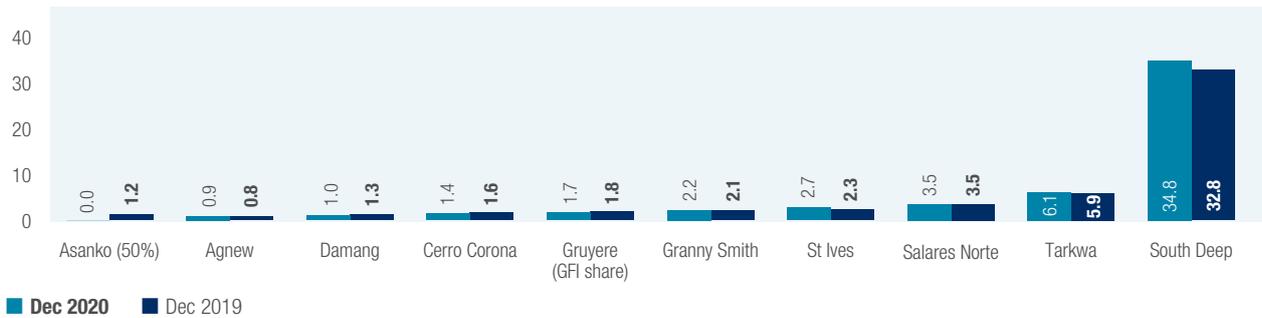
## MANAGED RESOURCES

Au (Moz)



## MANAGED RESERVES

Au (Moz)



## Global presence



## Brownfield (on-lease) exploration

The Group's strategy of focusing on brownfields (on-lease or near-mine) exploration to extend mine life continued during the year. The strategy that brownfields exploration offers the best route to low-cost, low-risk Resources and Reserves growth in well-understood environments remains key. The exploration is configured to deliver a balanced project pipeline that includes identifying early-stage targets (Milestones 1 – 2) with project lead times of typically four to five years, combined with progressing more advanced projects that can potentially deliver new mining opportunities within the next two to three years.

### 2020 EXPLORATION FOCUS

Summarised Group exploration spend indicates that US\$79.0m was spent in 2020 (US\$86.4m in 2019), with the bulk of the Group's brownfield exploration activity taking place in the Australia (63%), South America (24%) and West Africa (13%) regions, where the mines have strong growth and/or discovery potential.

### AMERICAS REGION

The priority for Cerro Corona during 2020 was to maintain operational production while managing the impact of Covid-19. As a result, exploration work was deferred until 2021. Routine functions in support of mining activity, such as grade control (GC) drilling, continued during 2020. At Salares Norte, district scale exploration was primarily focused over the Horizonte Project (formerly known as Pircas), where 10,652m of diamond drilling (DD) was executed over multiple targets, receiving encouraging results (Punta de Ópalo and Cruz Sur targets) during the year. Additional drilling surrounding the Salares Norte open pit,

4,225m of DD, was executed in the Agua Amarga North extension, Brecha West and Aguila targets. Limited drilling (2,626m of DD) was executed over the NW extension of the Brecha Principal and Agua Amarga deposits and an extension to Aster 3.

### AUSTRALIA REGION

The region's strategic focus is on Resources and Reserves replacement for each operation on an annual basis to maintain and support extension of the LoM profiles. This is achieved by collecting and interpreting foundational datasets and systematically testing the highest probability targets. Foundational datasets include all broad-spaced drilling for geochemistry and geology, high-resolution geophysical surveys, plus detailed interpretation of all datasets. Future site strategy and production requirements are considered as part of the annual and longer-term exploration budget allocation, further ensuring timeous Resources and Reserves replacement and alignment to the strategic plan objectives.

### SOUTH AFRICA REGION

The Resource definition programme at South Deep is aimed at increasing definition of the Upper Elsburg ore body to improve resource block model resolution in support of increased accuracy in mine design and scheduling. The approach employs a staged sequence of activities based on resource definition drilling, which includes long inclined boreholes (LIB) ahead of the advancing de-stress cuts, GC drilling and fit-for-purpose geological, geotechnical and cover drilling. The objective of the broader-spaced resource definition drilling is to improve geological confidence ahead of the mining corridors for optimum

corridor infrastructure and cut positioning. The closer-spaced GC drilling aims to optimise stope design for maximum mining extraction.

The drilling output for 2020 exceeded the plan by 8%. The continued good drilling performance over the years has culminated in the mine being well positioned in terms of the required close spaced data support for optimal short to medium term mine planning over a two year period. LIB drilling targeting South of Wrench (SoW) will commence in 2021 to confirm the Wrench fault structural integrity, detailed ore body geometry and to enhance grade estimation in this area that starts contributing to gold production in approximately 18 years' time (circa 2038).

### WEST AFRICA REGION

Exploration activities remain focused on brownfield exploration, with 74% of funds allocated to resources infill and extensional drilling on known ore bodies at Damang and Tarkwa. Gold Fields' 50% ownership of the Asanko JV focused on infill drilling at Abore, Akwasiso, Nkran and Adubiaso aimed at replacing depletion in 2021 and 2022. Resource infill drilling at Esaase was executed to supplement the improved geological modelling and enhance confidence in the mineral resource estimate update scheduled by Galiano Gold for H2, 2021. Medium-term infill drilling was completed at Miradani North, Miradani Central and Fromenda to generate the next stage Mineral Resource growth and improve the five-year business plan.

The actual exploration expenditure for the Group in 2020 and 2019 is shown in the table below:

| Region                   | December 2020  |              | December 2019  |              |
|--------------------------|----------------|--------------|----------------|--------------|
|                          | Metres         | Cost (US\$m) | Metres         | Cost (US\$m) |
| Australia <sup>1</sup>   | 276,561        | 49.8         | 367,447        | 58.3         |
| West Africa <sup>2</sup> | 71,223         | 9.8          | 46,168         | 12.8         |
| South Africa             | 2,918          | 0.3          | 3,700          | 0.4          |
| Americas <sup>3, 4</sup> | 17,504         | 19.1         | 27,191         | 14.9         |
| <b>Total<sup>4</sup></b> | <b>368,206</b> | <b>79.0</b>  | <b>444,506</b> | <b>86.4</b>  |

#### Notes:

- Costs in US Dollar (2020 foreign exchange: R16.38/US\$; A\$0.6894/US\$)
- Expenditure includes non-drilling items (e.g. geophysics)

<sup>1</sup> The year-on-year reduction in total metres drilled in the Australia region (~25%) is largely due to the increased portion from DD as exploration targets deeper underground deposits, the main drilling method is DD which has a higher cost per metre rate. Aligned to this, major aircore programmes at Granny Smith were completed in 2019, resulting in significantly less aircore drilling in 2020

<sup>2</sup> The 54% increase in metres drilled in West Africa is due to an aggressive exploration programme at Asanko, which saw drilling increase from 6.0km in 2019 to 42.9km in 2020

<sup>3</sup> There was no exploration drilling undertaken at Cerro Corona during 2020, as the mine focused on maintaining operational production

<sup>4</sup> Despite the impacts from Covid-19, exploration drilling in the Salares Norte district in 2020 (17.5km) was maintained at a similar level to 2019 (15.5km)

## Brownfield (on-lease) exploration continued

### 2021 EXPLORATION OUTLOOK

The Group's 2021 brownfield exploration programme continues to support the organic growth strategy with a budget of US\$107m (US\$81m in 2020). The emphasis remains on replacing production depletion, growing Reserves and adding mine life with ounces capable of sustaining and improving the AIC/oz. The key 2021 focus areas for each of the regions are summarised below:

#### AUSTRALIA



Agnew: Leaf gold from New Holland

#### St Ives

- Completion of foundational data collection on drilling the Lefroy JV and fully owned southern and western tenements
- Further extensional and Resources definition drilling within the Invincible complex to support future mine design and growth
- Initial concept drilling and validation of several near-mine and regional exploration priority targets across the property
- Continued interpretation and drill testing of deeper potentially underground targets

#### Granny Smith

- Continued in-mine Resource Optimisation Drilling (ROP) at Wallaby
- Extensional and infill drilling of Zone 135 to define ore body extent as support for future mine design and feasibility studies (FS)
- Consolidation and testing of all regional targets defined over the past few years

#### Agnew

- Extensional exploration and growth of the greater Redeemer complex (Redeemer Zone 2 North and Barren Lands)
- Resources and Reserves extension of the Waroonga North and Kath Lower ore bodies
- Continued extensional drilling on the Sheba South and Spitfire projects, as well as New Holland
- Initial concept drilling and validation of a number of brownfield targets

#### Gruyere JV

- A two-stage deep drilling programme is planned below the Gruyere pit to test for extensions to the current mineralisation

#### WEST AFRICA



Damang: Resource extension drilling

#### Tarkwa

- Infill drilling at the southern part of the Akontansi Underlap North extension, conversion drilling at Ridge North and initial drilling over the West Hill target
- Further initial drilling will be conducted over the eastern part of Underlap North
- Generative work is set to continue, looking for new search space and opportunities

#### Damang

- 40m x 40m infill drilling at proposed Damang main pit cutback
- Trench testing the ground between the Tomento West and the Lima Corridor
- Infill soil sampling will take place over nine anomalies outlined at Epieso
- Additional drilling aimed at providing more mill feed flexibility to the Damang plant during the DRP and beyond has been profiled

#### Asanko

- Carried over 17.6km drilling for US\$3m from 2020 to 2021 to complete Abore North extension, Aburi, Fromenda, Kaniago West and Midras South
- Framework and resource estimation infill drilling totalling about 10.5km for ~US\$1.5m planned on current economic deposits
- Step-out drilling targeting the expansion of existing Mineral Resources, totalling 25.6km for US\$3.5m
- Reconnaissance drilling to test prioritised brownfield exploration targets, mostly in the prospective greater Miradani trend - 39km for US\$5m

#### AMERICAS



Salares Norte: Exploration drill rig at Fernando Sur

#### Cerro Corona

- Drilling planned to assess low resistivity geophysical anomalies in the west wall of the pit. These anomalies are located at the contact between the porphyry and the lower Yumagual/Pariatambo sequence and could potentially be indicative of skarn style mineralisation
- Exploration drilling within the porphyry to test geophysical and geochemical anomalies at depth

#### Salares Norte

- Extensional and exploratory drilling over priority targets in Horizonte and Fernando Sur (Pan Pacific Copper and Gold Fields Option Agreement)
- Target preparation within Gold Fields' tenements (Piedra and Pedernales), as well as new opportunities, are also being evaluated for future exploration campaigns

#### SOUTH AFRICA



South Deep: Diamond drill rig conducting mine definition drilling

#### South Deep

- Attain required GC grid to support LHS activity in 2021 and build on good traction achieved in resource definition drilling
- Reprocessing current seismic data in 2020 - 2021 to enhance resolution of 2004 three-dimensional (3D) seismic survey cube
- Updating geodomains for the entire lease area to enhance geological and resource model confidence
- SoW Phase 1 LIB drilling to commence in 2021 and run for three years. Commence with Phase 2 LIB drilling to improve Resources definition SoW from new exploration drives to commence in 2025

# The annual mine planning cycle

## STRATEGIC PLANNING

The intent of the Strategic Planning process is to provide a mechanism for mines to assess planning options at varying levels of technical, operational and financial risk, with reference to the Company's strategic goals and Balanced Score Card. The latter incorporates the core themes of (1) improving the capital discipline process, (2) improving the quality of our portfolio, (3) building resilience to climate change (water and energy) and, (4) improving innovation and technology – modernisation and all these are embedded in the strategic planning rationale.

Strategic key performance indicators and the capital ranking index (LoM AIC versus LoM capex) for each asset are pivotal around quality, life, licence to operate, cash-generation and scale, based on either annual metal produced or cash flow. The strategic planning process allows Gold Fields to develop an understanding of the medium and long-term growth and investment opportunities within the portfolio, beyond the definition of the existing LoM Mineral Reserves and enables the business to direct resources and management's attention to implement studies and projects aligned with our strategic objectives.



Optionality is assessed against strategic scenarios that profile (1) low metal price, (2) sustaining the business, (3) upside potential and (4) blue-sky opportunities. This also provides essential guidance for operating strategies, required investment, and risk and reward management. By necessity, strategic plans include an assessment of factored Inferred Mineral Resources and a view on property endowment blue-sky potential, in addition to the Proved and Probable Mineral Reserves that define LoM plans.

In 2020, all sites presented internal growth options as part of Gold Fields' strategic planning process. This process allows Gold Fields' management to rank projects and allocate capital to those projects consistent with the Gold Fields strategic goals and provide guidance as to which projects have the capacity to improve the portfolio.

### Business planning

Each year, the Business Plan represents a refinement of the preferred strategic plan option for each mine. This process allows each site to develop a 12-month detailed Operational Plan that defines each year's budget, which is done in the context of the long-term potential of the asset and allows the business to deploy essential resources to maximise the use of capital across the Group portfolio. The Business Plan includes factored Inferred Mineral Resources that provide important information on realistic potential Mineral Resource to Mineral Reserve conversion trends in the medium to long term.

### Life-of-mine planning

In accordance with the SAMREC Code, the compliant Mineral Resources and Mineral Reserves that define the LoM plan and cash-flow model for each asset, are restricted to Proved and Probable Reserves. Importantly, the LoM plan and resultant Mineral Reserves demonstrate a strong linkage to the Strategic and Business Plans that profile the Company's medium to longer-term approach to realising full site potential and delivering value from the portfolio.

### Operational planning

The Operational Plan is the 12-month budget plan and aligns to year one of both the Business and LoM plans. It details the key safety, production and cost metrics and deliverables that constitute the annual plan for each operating asset.

### Key criteria embedded in the Life-of-Mine plans

The table on page 14 provides an important summary of the key principles and considerations entrenched in all the Company's LoM plans. The various key criteria applicable to the Mineral Resources and Mineral Reserves estimates for all reported assets are consolidated here to avoid repetition throughout this Supplement. Accordingly, this table should be read and referenced in conjunction with all the assets reported on in this report for the South Africa, Australia, Americas and West Africa regions.

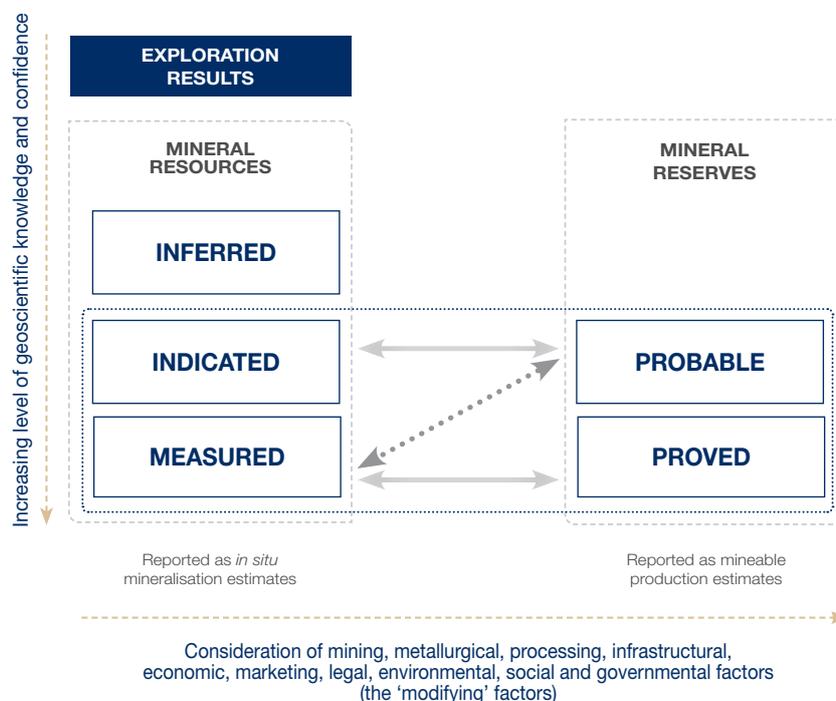
## The annual mine planning cycle continued

| KEY PRINCIPLES AND CRITERIA ENTRENCHED IN THE LOM PLANS |   |
|---|---|
| <b>Mineral Resources</b>                                | <ul style="list-style-type: none"> <li>Resources are tested through the application of realistic modifying factors and ESG criteria to ensure reasonable prospects for eventual economic extraction RPEEE</li> <li>Resources are quoted at an approximate in situ economic COG, with tonnages and grades based on the latest available Resource block models and include estimates of any material below the COG required to be mined to extract the complete pay portion of the Resources</li> <li>Open-pit Resources comprise the material above the nominated COG within a diluted optimised pit shell and are constrained to an optimised minimum mining width shape</li> <li>Underground Resources comprise the material above the nominated COG and are constrained to a practical mining shape and a minimum mining width</li> </ul>   |
| <b>Mine planning and Mineral Reserves</b>               | <ul style="list-style-type: none"> <li>All Reserves are based on appropriately detailed and engineered LoM plans and are supported by relevant studies completed to PFS level, at the minimum, or appropriate LoM plan</li> <li>All design and scheduling is completed by experienced engineers using appropriate mine planning software and incorporates relevant modifying factors, the use of COGs and results from other techno-economic investigations</li> <li>Mining rates, fleet productivities, operational and plant capacities and constraints are accounted for in the plan and typically based on historical performance trends</li> <li>All geotechnical protocols and constraints are accounted for in the plan, including the provision for suitable mining geometries, mining losses in pillars, mining recovery and dilution</li> <li>The provision of sufficient waste storage and tailings management requirements and plans is in place to meet the LoM requirements</li> <li>Reserves are quoted in terms of run-of-mine (RoM) grades and tonnages as delivered to the metallurgical processing facility and are therefore fully diluted</li> </ul>   |
| <b>Modernisation</b>                                    | <ul style="list-style-type: none"> <li>The Group-wide innovation and technology (I&amp;T) modernisation strategy is incorporated into the LoM plans. It is underpinned by a five-year implementation plan to support the Company's strategy, which is aimed at enhancing safety, production volumes and cost metrics through a staged process of modernisation, integration, digitalisation, optimisation and automation</li> <li>This will be achieved by following the modernisation roadmap, which is based on achievement of the three-programme horizons focusing on the delivery of five strategic pillars which constitute the new operating platform environment</li> </ul>   |
| <b>Tailings management</b>                              | <ul style="list-style-type: none"> <li>All Gold Fields' managed operations have tailings management plans in place that promote risk minimisation to operators and stakeholders over the lifecycle of each tailings storage facility (TSF)</li> <li>All Gold Fields' managed TSFs are operated and managed in accordance with the Gold Fields' Group TSF Management Guidelines</li> <li>The Group's TSF Management Guidelines are aligned with the International Council on Metals &amp; Mining's (ICMM) Position Statement on preventing catastrophic failure of TSFs (December 2016), and require that all operations are compliant with the ANCOLD guidelines on tailings dams, as well as any other local jurisdictional design requirements</li> <li>All Gold Fields' active TSFs are subject to an independent, external audit every three years - or more frequently as and when required by local circumstances or regulations - as well as regular inspections and formal dam safety reviews by formally appointed Engineers of Record (EoR). The last external review was completed in 2020 and concluded that Gold Fields complied with the intent of the Group TSF Management Guidelines, and that its TSFs were well managed and designed. The next round of external audits is scheduled to be completed during 2023</li> <li>Further improvements to TSF design, management and governance are expected through achievement of compliance with the new independently developed Global Industry Standard for Tailings Management (GISTM) issued in 2020. The GISTM provides a framework for safe tailings facility management and its development was facilitated by the ICMM. The final version of this new standard was released in August 2020. Gold Fields has committed to be in conformance with the GISTM within three years for Very High and Extreme consequence rated TSFs, and within five years for all other TSFs</li> </ul> |
| <b>Integrated mine closure planning</b>                 | <ul style="list-style-type: none"> <li>Our integrated mine closure planning processes ensure that our mine closure plans are regularly updated in line with good practice and Gold Fields' requirements for our operations. Our mine closure plans comply with in-country legal requirements and are approved by the regulator</li> <li>Integrated mine closure plans provide appropriate cost parameters for operational and LoM planning as well as end of life mine closure commitments</li> <li>The internal controls over financial reporting (SOX controls) relating to the closure cost estimates have been assessed as effective</li> </ul>   |
| <b>Energy and water security</b>                        | <ul style="list-style-type: none"> <li>All operations are developing and implementing strategies and plans to ensure security of energy and water supply at competitive costs while also focusing on improving energy efficiency, reducing energy costs, carbon footprint and freshwater use, while increasing recycling and reuse of water, and developing and implementing plans to adapt to the changing climate</li> <li>A greater use of renewable energy generation over the LoMs is a key commitment</li> </ul>  |
| <b>Social and regulatory licence to operate</b>         | <ul style="list-style-type: none"> <li>The implementation of sustainable development policies, including proactive stakeholder engagement strategies, continue to be key in reporting sustainable Mineral Reserves</li> <li>Responsible environmental stewardship in the context of certified environmental management systems remains central to the Group's regulatory and social licence to operate</li> <li>Tenure over land, Shared Value with communities, mining, prospecting and environmental permits are in good standing. Our Shared Value approach includes giving focused attention to maximising the proportion of our workforce that we draw from host communities and the goods and services we procure from these communities</li> </ul>   |
| <b>Financial models</b>                                 | <ul style="list-style-type: none"> <li>LoM plans are net present value (NPV) positive, inclusive of end of mine closure cost estimates, with FCF margins broadly aligned to the Company strategy</li> <li>Capital scheduling is incorporated in the cash-flow model to ensure appropriately funded and sustainable operations over the LoM</li> <li>Power and utility cost escalation and fuel prices have been factored into all financial models</li> <li>Estimated closure plan and rehabilitation costs have been included in all financial models</li> <li>All financial models are based on existing tax laws as at 31 December 2020</li> </ul>   |

# Corporate governance

## REPORTING CODE AND CODE OF PRACTICE

The Group's December 2020 Mineral Resources and Mineral Reserves estimate is in accordance with the requirements of the SAMREC Code, the South African Code for the Reporting of Mineral Asset Valuation (2016 SAMVAL Code) and Industry Guide 7 for reporting on the United States (US) Securities and Exchange Commission (SEC). The SAMREC Code covers public reporting and information that is prepared for investors, or potential investors and their advisers, as well as other interested parties.



Reporting is also in accordance with Section 12 of the JSE Listings Requirements, and takes cognisance of other relevant international codes where geographically applicable. The definitions contained in the SAMREC Code are either identical to, or not materially different from, international codes.

The relationships between Mineral Resources and Mineral Reserves are depicted in the SAMREC classification diagram. Technical and operating procedures are designed to be compliant with the Sarbanes-Oxley Act framework as adopted by Gold Fields for Mineral Resources and Mineral Reserves estimation, auditing and reporting.

The US Securities Exchange Commission (SEC) permits mining companies, in their filings with the commission, to disclose only those Mineral Reserves that a company can economically and legally extract or produce. In accordance with the SEC guidelines, companies are not permitted to report Mineral Resources in their Form 20-F submissions. However, certain terms referring to Mineral Resources are used in this Supplement, such as Measured, Indicated and Inferred Mineral Resources. Consequently, US investors are urged to consider closely the disclosure in our Form 20-F.

The Gold Fields Mineral Resources and Mineral Reserves reporting for fiscal 2021 (i.e. next December 2021 annual reporting) will comply with the new SEC SK-1300 modernisation rules for technical disclosure. These amendments will rescind Industry Guide 7 and consolidate the disclosure requirements for registrants in a new subpart of Regulation SK.

### COMPETENT PERSONS

The Annual Mineral Resources and Mineral Reserves estimates reported in this Supplement to the IAR and all explanatory notes have been compiled by Mr. T Rowland, a full-time employee of Gold Fields. He is a Fellow of the South African Institute of Mining and Metallurgy, a Fellow of the Geological Society of South Africa and a registered member of the South African Council for Natural Scientific Professions (SACNASP). Mr. Rowland has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person (CP) as defined in the SAMREC Code (2016). Mr. Rowland consents to the inclusion of the material in this Supplement in the form and context in which it appears.

The lead CPs designated in terms of the SAMREC Code, who take responsibility for the reporting of Gold Fields' Mineral Resources and Mineral Reserves within each Region and at every mine site, are the respective regional and operation-based geologists, resource estimators, geotechnical engineers, mine planning engineers, processing engineers, technical managers, as well as relevant project managers and financial managers, as listed in the supplementary information section of this Supplement.

The CPs have sufficient experience relative to the type and style of mineral deposit under consideration and, unless otherwise stated, are full-time employees of Gold Fields. Corporate governance on the overall regulatory compliance of these figures has been overseen and consolidated by Gold Fields' CP, Tim Rowland, who is a member of the Corporate Technical Services (CTS) team. The CTS team, under the leadership of Mr Richard Butcher EVP and Head of Group Technical Services, who provide technical assurance and coverage for the full Mineral Resources and Mineral Reserves value chain are listed in the CP table on page 16.

## Corporate governance continued

Corporate governance on the overall compliance of these figures and responsibility for the generation of the consolidated statement has been overseen by the respective corporate CPs and discipline experts listed below:

| Competent Person <sup>6</sup>   | Title  | Qualifications  | Years' experience |
|---|--|---|-------------------|
| <b>Tim Rowland</b> <sup>1,3,6</sup><br>Number 400122/00                           | Vice President (VP): Group Geology, Resources Estimation and Mine Planning | BSc (Hons) Geology; MSc Mineral Exploration; GDE Mining Engineering; Pr Sci Nat, FSAIMM (702861); FGSSA | <b>34</b>         |
| <b>Richard Butcher</b> <sup>2</sup><br>CEng reg. number – 438305<br>AusIMM 211182 | Executive Vice President (EVP) and Head of GTS                             | MSc Mining Engineering, CEng, FAusIMM (CP), MIMMM, MSAIMM   | <b>40</b>         |
| <b>Winfred Assibey-Bonsu</b> <sup>1,3</sup><br>Number 400112/00                   | Group Geostatistician and Evaluator  | BSc Mining; PhD Eng; EDP Wits Business School; FSAIMM (700632)  | <b>34</b>         |
| <b>Malcolm Thomas</b> <sup>2</sup><br>Number 204703                               | Group Geologist  | BSc (Hons) Geology; MSc Geology; BCom (Hons); MAusIMM; MAIG   | <b>33</b>         |
| <b>Andre Badenhorst</b> <sup>2</sup><br>AusIMM 309882                             | Group Manager: Survey and Planning   | NHD (Mine Survey); MAusIMM  | <b>40</b>         |
| <b>Peter Andrews</b> <sup>2</sup><br>AusIMM (CP) 302255                           | VP: Geotechnical   | BSc (Hons) Geology and Geophysics; MEngSci Geomechanics; MAusIMM  | <b>24</b>         |
| <b>David McGowan</b> <sup>2</sup><br>AusIMM (CP) 112946                           | VP: Mining   | BAppSc Mining   | <b>30</b>         |
| <b>Daniel Hillier</b> <sup>2</sup><br>AusIMM (CP) 227106                          | VP: Metallurgy   | Ba. Eng. Chemical; FAusIMM CP Metallurgy  | <b>30</b>         |
| <b>Johan Boshoff</b> <sup>6</sup>   | Group Head of Tailings   | M Eng Geotechnical; FIEAust CPEng 4072554, RPEQ 21023   | <b>25</b>         |
| <b>Matthew Hochen</b> <sup>5</sup>  | VP: Capital Projects   | BEng Elec   | <b>23</b>         |
| <b>Pieter Coetzee</b> <sup>5</sup>  | VP and Head of Finance: Operations   | BCom Internal Auditing; Mining Taxation   | <b>26</b>         |

<sup>1</sup> Registered SACNASP members

<sup>2</sup> Registered AusIMM members

<sup>3</sup> Registered SAIMM members

<sup>4</sup> Registered IMMSA member

<sup>5</sup> Not registered with SAMREC recognised professional organisation, however are contributors to this report

<sup>6</sup> Tim Rowland assumes responsibility for the Company's Mineral Resources and Mineral Reserves process and is satisfied that the CPs in all regions have fulfilled their responsibilities

Tim Rowland Gold Fields lead CP – the address of the body recognised by SAMREC:

SACNASP (South African Council for Natural Scientific Professions)

Physical address: Management Enterprise Building, Mark Shuttleworth Street Innovation Hub Pretoria 0087, Gauteng Province South Africa

Postal address: Private Bag X540, Silverton, 0127

Contact number: Tel: +27 (012) 748-6500

### AUDITING AND RISK

This December 2020 Supplement aims to report on information that is rated as important for disclosure on Mineral Resources and Mineral Reserves, and reflects a level of detail required for completeness, transparency and materiality in reporting. Gold Fields' Mineral Resources and Mineral Reserves estimates are reviewed on an ongoing basis by an internal CP team administered by CTS, and cyclically by external and independent experts.

Gold Fields follows an embedded process of third-party reviews to provide expert independent assurance regarding the Mineral Resources and Mineral Reserves estimates and compliance to the appropriate reporting codes.

In line with Gold Fields' policy that each operation or material project will be reviewed by an independent third party on average no less than once every three years, or when triggered by a material new Mineral Resource and/or Mineral Reserve declaration, the following operations were subject to external review during 2020:

- Agnew - Mineral Resources and Mineral Reserves reviewed by Optiro (Perth, Australia)
- Granny Smith - Mineral Resources and Mineral Reserves reviewed by Snowden (Perth, Australia)
- Gruyere - Mineral Resources and Mineral Reserves reviewed by Golder (Perth, Australia)
- St Ives - Mineral Resources and Mineral Reserves reviewed by AMC (Perth, Australia)

Certificates of compliance have been received from all companies that conducted the external reviews, which state that the Mineral Resources and Mineral Reserves have been reported in accordance with the SAMREC Code and there are no material issues identified in the estimation processes and LoM plans. Importantly, third-party audits are also configured to assist with continuous improvement regarding leading practice in Resources and Reserves estimation and reporting.

# External auditors' certificates of compliance



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Our Ref: J2609

4 March 2021

Mr Tim Rowland  
Vice President – Geology and Group Planning  
Gold Fields Limited  
140 Helen Road, Sandton  
2196, Johannesburg  
South Africa

Dear Mr Rowland

## INDEPENDENT MINERAL RESOURCE AND RESERVE AUDIT – AGNEW GOLD MINE

Optiro has carried out an independent audit of the Mineral Resources and Mineral Reserves at the Gold Fields Agnew Gold Mine in Western Australia.

Optiro personnel visited the Agnew Gold Mine in December 2020 and subsequently completed an Independent Mineral Resource and Mineral Reserve audit of Gold Fields' statement of Mineral Resources and Mineral Reserves as of 31 December 2020, along with the underlying data, processes, methods and assumptions.

Optiro declares that the Mineral Resources and Mineral Reserves have been classified and reported in accordance with the SAMREC Code (2016), Section 12 of the JSE Listing Rules and the requirements of the US Securities and Exchange Commission (SEC) and have been generated, classified and reported to the appropriate technical standard, with no material areas of non-compliance identified.

The resource audit was carried out by Ian Glacken and the reserve audit was carried out by Andrew Grubb, both of whom have sufficient qualifications and experience to qualify as Competent Persons for this style of mineralisation under the SAMREC Code (2016).

Yours sincerely  
OPTIRO



Ian M Glacken FAusIMM(CP), FAIG, CEng  
Director of Geology



Andrew Grubb FAusIMM  
Director - Mining

Optiro Pty Ltd ABN 69 131 922 739  
www.optiro.com



17 March 2021

Reference No. 20368498-002-L-Rev0

Tim Rowland, Vice President: Geology and Group Planning  
Gold Fields  
150 Helen Road  
Sandown  
2031 Sandton  
South Africa

## COMPLIANCE STATEMENT: GRUYERE JV GOLD MINE

Dear Tim

Golder Associates Pty Ltd (Golder) carried out an independent review of the Mineral Resources and Mineral Reserves for the Gruyere JV Gold Mine in Western Australia. Golder visited the Gruyere JV Gold Mine in December 2020.

The Statement of Mineral Resources and Mineral Reserves as at 31 December 2020 has been examined. Golder considers that the Mineral Resources and Mineral Reserves are reported in accordance with the JORC Code (2012 Edition), the SAMREC Code (2016), and with Section 12 of the JSE Listing Rules.

Yours sincerely

GOLDER ASSOCIATES PTY LTD

David Reid  
Principal Geologist  
FAusIMM

Glenn Turnbull  
Principal Mining Engineer  
MAusIMM CP(Min)

RLG/RS/hn

<https://golderassociates.sharepoint.com/sites/134344/project/files/6/deliverables/20368498-002-l-rev0-ca-gold-fields-m-review.docx>

Golder Associates Pty Ltd  
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11 March 2021

Tim Rowland  
Vice President – Geology & Group Planning  
Gold Fields Ltd  
150 Helen Road  
Sandton Johannesburg 2196  
SOUTH AFRICA

Dear Tim

## Compliance Statement – St Ives Operation

AMC Consultants Pty Ltd has completed a review of the St Ives Mineral Resource and Mineral Reserve Estimates and finds the following:

- Areas of business reviewed were the main components of the Mineral Resources, the main components of the Mineral Reserves, and the Life-of-Mine plan.
- The work audited was compliant to SAMREC Code 2016 and JSE Section 12.
- The work was to an appropriate technical standard.
- No material technical / non-compliance issues were identified.

The Mineral Resource audit was carried out by Chris Arnold, a Principal Mining Geologist with AMC Consultants Pty Ltd. He is a Fellow of the AusIMM and has more than 30 years of experience working in this style of deposit and mining method. He is considered a Competent Person under the terms of AusIMM and SAMREC.

The Mineral Reserve audit was carried out by David Lee, a Principal Mining Engineer with AMC Consultants Pty Ltd. He is a Fellow of the AusIMM and has more than 30 years of experience working in this style of deposit and mining method. He is considered a Competent Person under the terms of AusIMM and SAMREC.

Yours sincerely

Chris Arnold  
Principal Geologist

David Lee  
Principal Mining Engineer

Unearth a smarter way



Trusted Mining Advisors

Mr Tim Rowland  
Gold Fields Limited  
150 Helen Road, Sandton  
2196, Johannesburg  
South Africa

17 March 2021

Dear Sir

## RE: Independent Mineral Resource and Mineral Reserve Audit - Granny Smith Gold Mine

Snowden Mining Industry Consultants (Snowden) has carried out an independent audit of the 2020 Mineral Resources and Mineral Reserves at the Granny Smith Gold Mine in Western Australia.

Snowden visited the mine in December 2020 and subsequently examined the 2020 Mineral Resource and Mineral Reserve statements and carried out independent checks. In Snowden's opinion, the 2020 Mineral Resources and Mineral Reserves have been reported in accordance with the SAMREC Code (2016).

The Mineral Resource audit was carried out by Elizabeth Haren, BSc, MAusIMM(CP), MAIG, Associate Principal Consultant who declares that the resources have been generated to a high technical standard, with no material issues of non-compliance. The Mineral Reserve audit was carried out by Allan Earl, AWASM, FAusIMM, Executive Consultant who declares that the reserves have been generated to a high technical standard, with no material issues of non-compliance. Both auditors have sufficient qualifications and experience to qualify as a Competent Persons for this type of operation under the SAMREC Code (2016).

Yours Sincerely

Allan Earl  
Snowden Mining Industry Consultants Pty Ltd (Snowden)

Elizabeth Haren

Snowden Mining Industry Consultants Pty Ltd (Snowden)  
Suite 178, Level 5, 580 Hay St, Perth  
WA, 6000, AUSTRALIA  
ABN 99 085 319 562  
[snowdengroup.com](http://snowdengroup.com)

# AMERICAS REGION

## SALIENT FEATURES

### MINERAL RESOURCES

**5.8Moz**  
GOLD,  
**43.7Moz**  
SILVER AND  
**812Mlb**  
COPPER

### MINERAL RESERVES

**4.8Moz**  
GOLD,  
**39.3Moz**  
SILVER AND  
**565Mlb**  
COPPER

*Cerro Corona 99.53% and Salares Norte, 100%*

Salares Norte: Commencement of installation of precast sections and foundations for the Leach (larger) and CIP (smaller) tanks

## AMERICAS REGION

### Cerro Corona mine – Peru

Cerro Corona’s life extension to 2030 is based on accelerated mining enabled by the provision of waste storage capacity and extensive stockpile management so that from 2025 onwards, when the stockpile balance peaks, the life-of-mine (LoM) plan is based on ore processed from stockpiles with in-pit tailings disposal.

A study to assess the viability of a further one to two-year life extension will be conducted in 2021, focusing on a potential east wall pit cut-back and further assessment of tailings storage facility (TSF) and waste storage facility (WSF) capacities.



#### PROJECT:

### Salares Norte – Chile

Currently on track with its construction phase, Salares Norte is expected to meaningfully change the future profile of Gold Fields by accelerating growth in production and reducing Group All-in costs (AIC). Once operational in 2023, average annual production is forecast to be ~450koz gold-equivalent for the first seven years, decreasing to around 355koz gold-equivalent for the following three years.

Aimed at defining additional ore sources to supplement or extend mine life, district exploration yielded encouraging results in 2020 at the Horizonte project - mainly over the Punta de Opalo and Cruz Sur targets. In addition, more work was done surrounding the Agua Amarga North extension.

## Regional overview

### Exploration drilling and expenditure

The Mineral Resource at Cerro Corona is defined by approximately 111km of exploration and resource definition drilling. No additional drilling was performed during 2020, however, a core relogging programme, as well as programmes relating to geology model

and geometallurgical model updates, were executed. These are expected to assist with further refinement of the mine production scheduling and mill feed blending to optimise mill throughput volumes and metal recovery as the pit mines deeper exposing increasingly harder ore.

At Salares Norte, step-out drilling near the Salares Norte pit is testing for potential extensions, and district exploration continues to return encouraging results warranting more detailed follow-up.

The table below indicates drilling completed in the Americas region during 2020.

|                                  | December 2020 |              | December 2019 |              |
|----------------------------------|---------------|--------------|---------------|--------------|
|                                  | Metres        | Cost (US\$m) | Metres        | Cost (US\$m) |
| Cerro Corona                     | —             | 0.1          | 11,665        | 2.6          |
| Salares Norte and Chile regional | 17,504        | 19.1         | 15,526        | 12.3         |
| Americas region                  | 17,504        | 19.1         | 27,191        | 14.9         |

### MINERAL RESOURCES AND MINERAL RESERVES

#### Americas region summary of the Mineral Resource and Mineral Reserve estimate<sup>1</sup>

|                                     | Mineral Resources |              |              |          |                                     | Mineral Reserves |              |              |          |
|-------------------------------------|-------------------|--------------|--------------|----------|-------------------------------------|------------------|--------------|--------------|----------|
|                                     | December 2020     |              |              | Dec 2019 |                                     | December 2020    |              |              | Dec 2019 |
| Measured, Indicated and Inferred    | Tonnes (Mt)       | Grade (g/t)  | (Moz)        | (Moz)    | Proved and Probable                 | Tonnes (Mt)      | Grade (g/t)  | (Moz)        | (Moz)    |
| Cerro Corona Au                     | 104.8             | 0.56         | 1.89         | 2.21     | Cerro Corona Au                     | 67.0             | 0.64         | 1.37         | 1.55     |
| Salares Norte Au                    | 25.6              | 4.76         | 3.91         | 3.91     | Salares Norte Au                    | 21.1             | 5.13         | 3.48         | 3.48     |
| <b>Total Au</b>                     | <b>130.4</b>      | <b>1.38</b>  | <b>5.80</b>  | 6.13     | <b>Total Au</b>                     | <b>88.1</b>      | <b>1.71</b>  | <b>4.84</b>  | 5.03     |
| <b>Salares Norte Ag<sup>2</sup></b> | <b>25.6</b>       | <b>53.14</b> | <b>43.66</b> | 43.66    | <b>Salares Norte Ag<sup>2</sup></b> | <b>21.1</b>      | <b>57.94</b> | <b>39.26</b> | 39.26    |
|                                     | Tonnes (Mt)       | Grade (%)    | Cu (Mib)     | Cu (Mib) |                                     | Tonnes (Mt)      | Grade (%)    | Cu (Mib)     | Cu (Mib) |
| <b>Cerro Corona Cu<sup>2</sup></b>  | <b>104.3</b>      | <b>0.35</b>  | <b>812</b>   | 886      | <b>Cerro Corona Cu<sup>2</sup></b>  | <b>67.0</b>      | <b>0.38</b>  | <b>565</b>   | 619      |

<sup>1</sup> Managed, unless otherwise stated

<sup>2</sup> Reported tonnes containing gold are consistent for all metals

– All tonnes (t) relate to metric units and rounding-off of figures may result in minor computational discrepancies; where this happens, it is not deemed significant

## Cerro Corona mine



In 2020, the Covid-19 pandemic impacted the execution of the 2019 FS, which underpins the mine's life extension to 2030. The impact resulted in a reduced workforce at the site and materially lower-than-planned total volumes mined, notably waste pre-stripping. In response, a near-term recovery plan was implemented to ensure delivery of the 2030 LoM, focused on balancing ore production and increasing waste stripping over the next two years to make up for the deficit created in 2020. From 2023 onwards, mining will realign with the 2030 FS. From 2025 onwards, when the stockpile balance peaks, the LoM plan will be based on ore processed from stockpiles with in-pit tailings disposal.

Gold Fields will conduct a study to assess the viability of a further one to two-year life extension in 2021, focusing on a potential east wall pit cut-back.

### ASSET FUNDAMENTALS

|   |   |
|---|---|
| <b>General location</b>                                     | The Cerro Corona deposit, centred at longitude 78°37'W and latitude 6°45'S, is at elevations ranging from ~3,600m – 4,000m above mean sea level (amsl). It is located 1.5km west northwest of the Hualgayoc village, ~80km north of the departmental capital of Cajamarca and ~600km north northwest of Lima, Peru's capital.   |
| <b>Brief history and Regional geology</b>                   | The Annexure to this Mineral Resources and Mineral Reserves Supplement provides a summary of Cerro Corona's history and Regional geology.   |
| <b>Climate</b>  | There are no extreme climate conditions that could materially affect mining operations.   |
| <b>Licence status and holdings</b>                          | The total property area owned by Cerro Corona covers 6,175ha, comprising 4,884ha mining concessions, with the surface rights covering 1,291ha. Gold Fields La Cima (GFLC) owns Cerro Corona and holds 99.53% of the economic interest.  |
| <b>Mining method</b>  | Contract mining is deployed in the open pit applying conventional drill, blast, load and haul methods. Accelerated mining based on nine separate pit stages exceeds processing rates allowing tailings generated in the future to be placed back in the pit. Ore is stockpiled during the accelerated mining phase at Cerro Corona and is typically managed at net smelter return (NSR) cut-off values of between US\$14.97/t and US\$26/t.   |
| <b>Operational infrastructure</b>                           | Cerro Corona mine operates one open pit and one copper-gold flotation plant. The mining administration and maintenance facilities are located at the mine.  |
| <b>Mineral processing and TSFs</b>                          | <p>The processing plant consists of a conventional primary crushing, semi-autogenous grind (SAG) and ball milling (SABC), and flotation circuit, to generate a copper-gold concentrate. The final concentrate is thickened and filtered before being stockpiled for road transport (380km) to the Salaverry port, for shipment to copper smelters in Japan and Germany. The thickened rougher flotation tails and the cleaner scavenger flotation tails are transferred individually to the TSF.</p> <p>TSF embankments are constructed in a downstream/centreline manner and are located downstream from the process plant over the Las Gordas and Las Águilas gorges. The embankments (Las Gordas, Las Águilas and La Hierba) are being constructed progressively with borrow materials from limestone quarries. The embankments contain a clay core constructed from pit material (oxide material). The TSF has a remaining LoM storage capacity of ~37.8Mt (up to 3,803 metres relative level (mRL)).</p> |
| <b>Local geology, deposit type and mineralisation style</b> | The Cerro Corona copper-gold deposit consists of an intrusive diorite to quartz-diorite, dated at Mid-Miocene age (14.4 ± 0.1Ma). The intrusive is primarily placed along sub-vertical faults. Limestone alteration varies from siliceous in the south of the deposit to marbling in the west. The ore body is typical of porphyry-style mineralisation comprising stock works of quartz-pyrite-marcasite-chalcopryrite ± bornite ± hematite ± magnetite veining, hosted by intensely altered intrusive rocks of diorite and dacitic composition.   |
| <b>LoM: Proved and Probable Mineral Reserves</b>            | Based on the latest 2030 FS, current Mineral Reserves will be depleted in 2030 (10 years), with the plan based on processing stockpiles only from 2025, together with in-pit tailings disposal.   |
| <b>Sustainable development</b>                              | Cerro Corona maintained ISO 14001:2015 and OHSAS 45001:2018 certifications. In 2017, GFLC maintained its registration in the Official Register of Good Environmental Practices managed by the environmental regulator (Agency for Environmental Assessment and Enforcement (OEFA)).   |

## Cerro Corona mine continued

### KEY DEVELOPMENTS AND MATERIAL ISSUES

- The Covid-19 pandemic and severe rainfall in Q4 2020 impacted reduced total mining volumes and the slowing or deferral of certain projects in 2020. As a result, the following adjustments to the near-term plan are being implemented:
    - Resequencing of the pit schedule, balancing the availability of ore mining fronts with the catch up required on waste movement
    - Increasing the mining fleet capacity and deploying additional resources to the site to accelerate waste movement and mining of pit Phases 8 and 9 over the next two years
    - To enable the increased waste movement, the WSF construction at Arpon deferred from 2020 is scheduled for completion in early 2021, along with the scheduled construction of the Ana WSF
    - Where necessary, certain capital projects will also be accelerated in 2021 and 2022 to align with the 2030 FS LoM plan
  - From 2025 onwards, when the stockpile balance peaks, the LoM plan will be based on ore processed from stockpiles with in-pit tailings disposal
  - In 2019, Gold Fields undertook a scoping study to assess a possible additional LoM extension to 2032, and will be advanced to pre-feasibility study (PFS) level
  - Combined assessment of TSF and WSF capacities to leverage additional Mineral Resources conversion
  - Processing throughput and recovery are optimised through controlled ex-pit and run-of-mine (RoM) pad blending
  - Optimisation through reconfiguration of the existing gravity recovery circuit is planned to be implemented in 2021
  - The sale of the oxide gold stocks is ongoing and will be complete in 2021. This will also provide essential space for waste storage
  - Confirmation of the TSF dam break study, the extent of inundation zones and reclassification of the TSF to support the Global Industry Standard on Tailings Management (GISTM) compliance roadmap were completed
  - Gold Fields has identified incidences of acid mine drainage (AMD) generation, and the risk of potential short-term and long-term AMD issues at Cerro Corona. Gold Fields commissioned additional technical studies during 2015 to 2021 to identify the steps required to prevent or mitigate the potentially material AMD impacts, but none of these studies have allowed Gold Fields to generate a reliable estimate of the total potential closure cost. Gold Fields continues to investigate technical solutions to better inform appropriate short- and long-term mitigation strategies for AMD management and to work towards a reasonable cost estimate of these potential issues. Further studies are planned for 2021
  - Risks to executing the LoM plan include the following:
    - Cerro Corona’s life extension to 2030, first reported in December 2018 supported by a PFS and then re-enforced in 2019 by an FS, remains viable supported by the near-term recovery plan
    - As part of the near-term recovery plan, peak vertical rates of advance in the pit and record mass volumes are mined in 2021.
- However, this potential risk to metal production was addressed through optimisation of the mine sequencing and equipment selection for the accelerated mining programme and the flexibility available to process stockpiles at different rates if required
- Compliance with EIA 9 is required before March 2026 when the first tailings material will be deposited into the pit and is supported by a comprehensive permit application process to the regulator scheduled for 2021 submission (expected to be approved by Q2 2023)
  - Anticipated higher concentrations of arsenic in certain sections of the pit’s southeast wall will be mined in 2021 – 2022, with the copper concentrate’s arsenic content being managed through both mill feed and stockpile blending to minimise the potential negative financial impact on concentrate sales
- The potential for changes in the geometallurgical characteristics of the ore body and increasing hardness as the pit mines deeper represent a possible longer-term risk. This is being addressed through mapping the spatial distribution and assessment of classified lithological units and evaluating relative processing throughput rates (tonnes per hour - tph) at different proportions of argillic, silicified and potassium alteration for incorporation in future planning.

## EXPLORATION AND RESOURCE DEFINITION DRILLING

Cerro Corona's priority during 2020 was to maintain operational production while managing the impact of Covid-19. Consequently, exploration activities were largely deferred until 2021. Routine functions to support operational activities such as grade control (GC) drilling continued during 2020.

## PROJECT AND STUDY PIPELINE

Several capital and LoM projects are scheduled to support the prevailing LoM plan, and include the 2032 additional life extension study, the water treatment plant project and the enhanced mine closure plan. Additional LoM enabling features include continued depressurisation of the

pit's east wall, starting the Arpon WSF in Q3 2020 and completing the increased fleet capacity change from 30t to 45t trucks in 2021.

The opportunity to convert more Mineral Resources to Mineral Reserves at Cerro Corona remains a strategic focus. Innovative solutions to the prevailing constraints on TSF and WSF real estate, such as upside on the hydrogeological containment and stability of any expanded in-pit tailings solution, continue to be assessed and could facilitate more Mineral Resource conversion and life extension. Ongoing technical studies to evaluate the potential Mineral Reserve pit east wall cut-back will require some additional land acquisition.

Gold Fields have scheduled a deep drilling programme for 2021 to test the nature and extent of the porphyry mineralisation proximal to the currently defined Mineral Resource footprint, and to test potential other styles of mineralisation that could support further pit extensions.

## OPERATING STATISTICS

|  | Units   | Historic performance |          |          |
|--|---------|----------------------|----------|----------|
|  |         | Dec 2020             | Dec 2019 | Dec 2018 |
| <b>Open pit mining</b>                             |         |                      |          |          |
| Total mined  | kt      | <b>18,225</b>        | 22,341   | 21,776   |
| – Waste mined                                      | kt      | <b>10,921</b>        | 14,317   | 14,922   |
| – Sulphide tonnes mined                            | kt      | <b>7,303</b>         | 8,024    | 6,854    |
| Strip ratio (waste:ore tonnes)                     | ratio   | <b>1.5</b>           | 1.8      | 2.2      |
| Au mined grade                                     | g/t     | <b>0.85</b>          | 1.05     | 1.06     |
| Cu mined grade                                     | %       | <b>0.42</b>          | 0.51     | 0.56     |
| <b>Processing</b>                                  |         |                      |          |          |
| Sulphide tonnes treated                            | kt      | <b>6,796</b>         | 6,718    | 6,644    |
| Au head grade                                      | g/t     | <b>0.87</b>          | 1.15     | 1.07     |
| Cu head grade                                      | %       | <b>0.44</b>          | 0.55     | 0.57     |
| <b>Produced</b>                                    |         |                      |          |          |
| Concentrate produced                               | kt      | <b>124</b>           | 152      | 159      |
| Au produced  | koz     | <b>119</b>           | 156      | 150      |
| Cu produced  | kt      | <b>25</b>            | 31       | 32       |
| Au equivalent oz sold                              | koz     | <b>207</b>           | 293      | 314      |
| Plant recovery factor (Au)                         | %       | <b>65.0</b>          | 66.0     | 68.1     |
| Plant recovery factor (Cu)                         | %       | <b>88.0</b>          | 89.0     | 88.0     |
| <b>Financials</b>                                  |         |                      |          |          |
| Average Au price received                          | US\$/oz | <b>1,760</b>         | 1,388    | 1,271    |
| Average Cu price received                          | US\$/lb | <b>2.54</b>          | 2.72     | 2.97     |
| Cost of sales before amortisation and depreciation | US\$m   | <b>154</b>           | 162      | 155      |
|  | US\$/oz | <b>745</b>           | 555      | 492      |
| Capital expenditure (capex)                        | US\$m   | <b>49.9</b>          | 56.1     | 33.2     |
|  | US\$/oz | <b>241</b>           | 192      | 106      |
| AIC <sup>1</sup>                                   | US\$/oz | <b>715</b>           | 472      | 282      |

<sup>1</sup> AIC calculated according to World Gold Council (WGC) standard, with copper revenue treated as a by-product

## Cerro Corona mine continued

### MINERAL RESOURCES AND MINERAL RESERVES

#### Mineral Resources classification

| Au                        | Tonnes (kt)    |                |                | Grade (g/t) |             |             | Au (koz)     |              |              |
|---------------------------|----------------|----------------|----------------|-------------|-------------|-------------|--------------|--------------|--------------|
|                           | Dec 2020       | Dec 2019       | Dec 2018       | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020     | Dec 2019     | Dec 2018     |
| <b>Classification</b>     |                |                |                |             |             |             |              |              |              |
| <b>Open pit</b>           |                |                |                |             |             |             |              |              |              |
| Measured                  | 79,449         | 81,777         | 52,623         | 0.57        | 0.61        | 0.73        | 1,449        | 1,609        | 1,229        |
| Indicated                 | 17,578         | 23,575         | 42,856         | 0.48        | 0.49        | 0.49        | 273          | 372          | 674          |
| Inferred                  | 1,777          | 1,865          | 3,119          | 0.42        | 0.43        | 0.42        | 24           | 26           | 42           |
| <b>Total open pit</b>     | <b>98,804</b>  | <b>107,218</b> | <b>98,597</b>  | <b>0.55</b> | <b>0.58</b> | <b>0.61</b> | <b>1,745</b> | <b>2,007</b> | <b>1,945</b> |
| <b>Surface stockpiles</b> |                |                |                |             |             |             |              |              |              |
| Oxides Measured           | 528            | 2,073          | 5,239          | 1.13        | 1.26        | 1.29        | 19           | 84           | 217          |
| Sulphide Measured         | 5,486          | 5,288          | 3,822          | 0.71        | 0.72        | 0.82        | 126          | 122          | 101          |
| <b>Total surface</b>      | <b>6,015</b>   | <b>7,361</b>   | <b>9,061</b>   | <b>0.75</b> | <b>0.87</b> | <b>1.09</b> | <b>145</b>   | <b>206</b>   | <b>318</b>   |
| <b>Grand total</b>        | <b>104,819</b> | <b>114,579</b> | <b>107,658</b> | <b>0.56</b> | <b>0.60</b> | <b>0.65</b> | <b>1,890</b> | <b>2,213</b> | <b>2,263</b> |

| Cu                    | Tonnes (kt)    |                |                | Grade (%)   |             |             | Cu (Mlb)   |            |            |
|-----------------------|----------------|----------------|----------------|-------------|-------------|-------------|------------|------------|------------|
|                       | Dec 2020       | Dec 2019       | Dec 2018       | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020   | Dec 2019   | Dec 2018   |
| <b>Classification</b> |                |                |                |             |             |             |            |            |            |
| <b>Open pit</b>       |                |                |                |             |             |             |            |            |            |
| Measured              | 79,449         | 81,777         | 52,623         | 0.36        | 0.37        | 0.40        | 629        | 676        | 460        |
| Indicated             | 17,578         | 23,575         | 42,856         | 0.34        | 0.31        | 0.36        | 133        | 163        | 338        |
| Inferred              | 1,777          | 1,865          | 3,119          | 0.32        | 0.31        | 0.33        | 13         | 13         | 23         |
| <b>Total open pit</b> | <b>98,804</b>  | <b>107,218</b> | <b>98,597</b>  | <b>0.36</b> | <b>0.36</b> | <b>0.38</b> | <b>775</b> | <b>851</b> | <b>821</b> |
| <b>Surface</b>        |                |                |                |             |             |             |            |            |            |
| Stockpile Measured    | 5,486          | 5,288          | 4,064          | 0.31        | 0.30        | 0.30        | 38         | 35         | 27         |
| <b>Grand total</b>    | <b>104,290</b> | <b>112,506</b> | <b>102,661</b> | <b>0.35</b> | <b>0.36</b> | <b>0.37</b> | <b>812</b> | <b>886</b> | <b>848</b> |

Metal prices used for equiv oz: US\$1,500/oz Au and US\$3.2/lb Cu. The metallurgical recovery rate (Au = 68% and Cu = 86%) and selling cost were not applied to the conversion. Calculation: CuMlbs\*Cu Price (812\*3.2)/Au price (1,500) = 1.7 Au equivalent Moz

|   | Units   | December     |       |       |
|---|---------|--------------|-------|-------|
|   |         | 2020         | 2019  | 2018  |
| <b>Mineral Resources parameters</b>             |         |              |       |       |
| Mineral Resources Au price                      | US\$/oz | <b>1,500</b> | 1,400 | 1,400 |
| Mineral Resources Cu price                      | US\$/lb | <b>3.2</b>   | 3.2   | 3.2   |
| NSR for mill feed <sup>1</sup>                  | US\$/t  | <b>14.97</b> | 14.45 | 14.25 |
| Au cut-off for oxide ore                        | g/t     | <b>0.4</b>   | 0.4   | 0.4   |
| <b>Mineral Reserves parameters</b>              |         |              |       |       |
| Mineral Reserves Au price                       | US\$/oz | <b>1,300</b> | 1,200 | 1,200 |
| Mineral Reserves Cu price <sup>2</sup>          | US\$/lb | <b>2.8</b>   | 2.8   | 2.8   |
| NSR for mill feed <sup>2</sup>                  | US\$/t  | <b>26</b>    | 28    | 18    |
| Strip ratio (waste:ore)                         | ratio   | <b>0.80</b>  | 0.75  | 0.94  |
| Dilution open pit                               | %       | <b>0</b>     | 0     | 0     |
| Mine Call Factor (MCF)                          | %       | <b>100</b>   | 100   | 100   |
| Mining recovery factor (open pit)               | %       | <b>98</b>    | 98    | 98    |
| NSR   | US\$/t  | <b>14.97</b> | 14.45 | 14.25 |
| Plant recovery (Au) – hypogene <sup>1,3,4</sup> | %       | <b>68</b>    | 68    | 69.5  |
| Plant recovery (Cu) – Hypogene <sup>1,3,4</sup> | %       | <b>86</b>    | 88    | 86.5  |
| Processing capacity                             | Mtpa    | <b>6.7</b>   | 6.7   | 6.9   |

<sup>1</sup> At December 2020, ~99% of remaining in-pit ore consisted of hypogene material

<sup>2</sup> NSR is the return from sales of concentrates, expressed in US\$/t, ie  $NSR = (Au\ price - Au\ selling\ cost) \times Au\ grade \times Au\ recovery + (Cu\ price - Cu\ selling\ cost) \times Cu\ grade \times Cu\ recovery$ . Since 2014, a variable NSR was applied to the LoM plan to optimise the net present value (NPV) and free cash-flow (FCF)

<sup>3</sup> For revenue estimation, a Cu price of US\$2.8/lb

<sup>4</sup> Average recovery provided; forecast recoveries are calculated using derived and regularly updated recovery models



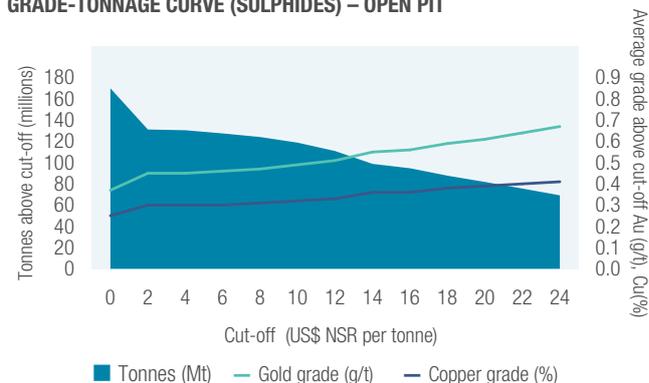
Cerro Corona open pit

## Cerro Corona mine continued

### GRADE TONNAGE CURVE

The gold and copper grade tonnage curves for the Surface Mineral Resources are presented opposite. Stockpiles are excluded from the grade tonnage curves.

### GRADE-TONNAGE CURVE (SULPHIDES) – OPEN PIT



### Mineral Reserves classification

| Au                       | Tonnes (kt)   |               |               | Grade (g/t) |             |             | Au (koz)     |              |              |
|--------------------------|---------------|---------------|---------------|-------------|-------------|-------------|--------------|--------------|--------------|
|                          | Dec 2020      | Dec 2019      | Dec 2018      | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020     | Dec 2019     | Dec 2018     |
| <b>Classification</b>    |               |               |               |             |             |             |              |              |              |
| <b>Open pit</b>          |               |               |               |             |             |             |              |              |              |
| Proved                   | 53,173        | 57,888        | 45,864        | 0.64        | 0.67        | 0.77        | 1,098        | 1,253        | 1,141        |
| Probable                 | 8,346         | 10,347        | 29,961        | 0.54        | 0.54        | 0.51        | 145          | 178          | 490          |
| <b>Total open pit</b>    | <b>61,519</b> | <b>68,235</b> | <b>75,825</b> | <b>0.63</b> | <b>0.65</b> | <b>0.67</b> | <b>1,243</b> | <b>1,431</b> | <b>1,631</b> |
| <b>Surface stockpile</b> |               |               |               |             |             |             |              |              |              |
| Sulphide Proved          | 5,486         | 5,288         | 4,064         | 0.71        | 0.72        | 0.81        | 126          | 122          | 106          |
| <b>Grand total</b>       | <b>67,005</b> | <b>73,523</b> | <b>79,889</b> | <b>0.64</b> | <b>0.66</b> | <b>0.68</b> | <b>1,368</b> | <b>1,553</b> | <b>1,737</b> |

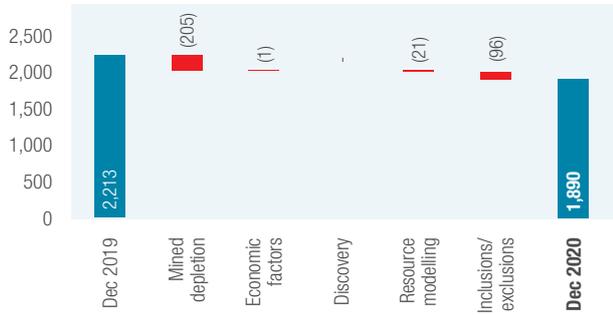
| Cu                       | Tonnes (kt)   |               |               | Grade (%)   |             |             | Cu (Mlb)   |            |            |
|--------------------------|---------------|---------------|---------------|-------------|-------------|-------------|------------|------------|------------|
|                          | Dec 2020      | Dec 2019      | Dec 2018      | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020   | Dec 2019   | Dec 2018   |
| <b>Classification</b>    |               |               |               |             |             |             |            |            |            |
| <b>Open pit</b>          |               |               |               |             |             |             |            |            |            |
| Proved                   | 53,173        | 57,888        | 45,864        | 0.39        | 0.40        | 0.42        | 460        | 507        | 420        |
| Probable                 | 8,346         | 10,347        | 29,961        | 0.37        | 0.34        | 0.37        | 67         | 77         | 247        |
| <b>Total open pit</b>    | <b>61,519</b> | <b>68,235</b> | <b>75,825</b> | <b>0.39</b> | <b>0.39</b> | <b>0.40</b> | <b>528</b> | <b>584</b> | <b>667</b> |
| <b>Surface stockpile</b> |               |               |               |             |             |             |            |            |            |
| Sulphide Proved          | 5,486         | 5,288         | 4,064         | 0.30        | 0.31        | 0.30        | 38         | 35         | 27         |
| <b>Grand total</b>       | <b>67,005</b> | <b>73,523</b> | <b>79,889</b> | <b>0.38</b> | <b>0.38</b> | <b>0.39</b> | <b>565</b> | <b>619</b> | <b>695</b> |

Metal prices used for eq. oz: US\$1,300/oz Au and US\$2.8/lb Cu. The selling cost, including refining and royalties, plus metallurgical recovery rate (Au = 68% and Cu = 86%), were not applied to the conversion. Calculation: CuMlbs\*Cu price (565\*2.8)/Au price (1,300) = 1.2 Au eq. Moz

### Mineral Resources and Mineral Reserves reconciliation year-on-year

| Factors that affected Mineral Resources reconciliation year-on-year  | Factors that affected Mineral Reserves reconciliation year-on-year |
|--|--|
| Mining depletion (-205koz gold and -68Mlb copper)                    | Mining depletion (-202koz gold and -67Mlb copper)                  |
| Geological and resource model updates (-21koz gold and -6Mlb copper) | Updated pit design (+12koz gold and +12Mlb copper)                 |
| Oxide stockpile sale of 1.5Mt (-653koz)                              |  |

**MINERAL RESOURCE RECONCILIATION**  
Gold (koz)



**MINERAL RESERVE RECONCILIATION**  
Gold (koz)



**MINERAL RESOURCE RECONCILIATION**  
Copper (Mlb)



**MINERAL RESERVE RECONCILIATION**  
Copper (Mlb)



**Mineral Reserves sensitivity (gold – koz; copper – Mlb)**

The Mineral Reserves are constrained predominantly by the TSF and WSF. Therefore, they are reasonably insensitive to changes in the metal price. Sensitivities are not based on detailed rerun depletion schedules and should be considered on a relative and indicative basis only.

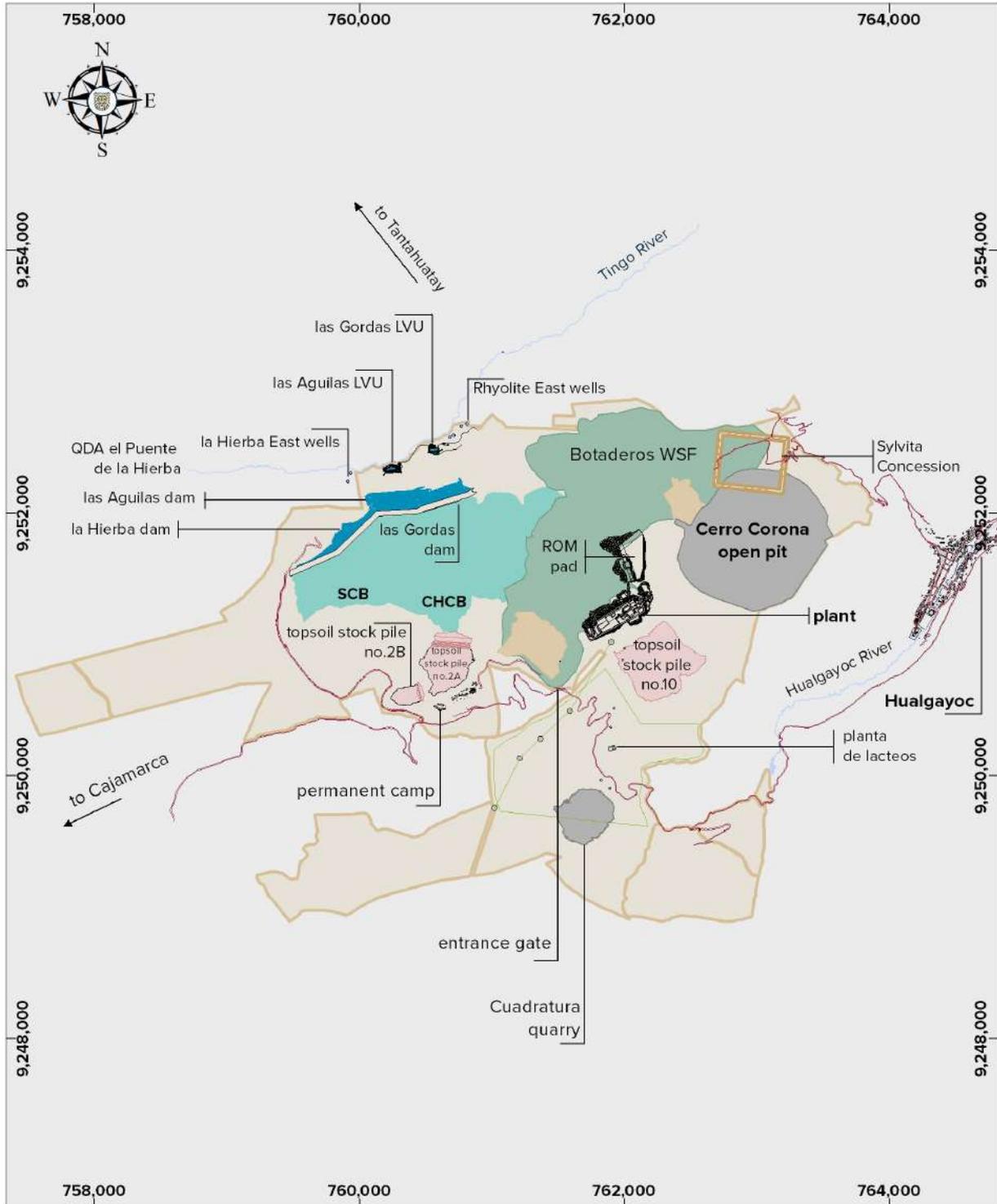
**MINERAL RESERVE SENSITIVITY**

Gold (koz); Copper (Mlb)



Cerro Corona mineral processing facility and tailings dam

# Cerro Corona mine continued



### Reference

- roads
- powerline
- infrastructure
- buildings
- property boundary
- top soil dump

- well
- rivers
- low volume underflow (LVU)
- open pit/quarry
- waste storage facility (WSF)
- tailings storage facility (TSF)
- stockpile

- 
- 
- 
- 
- 

### Gold Fields Limited Cerro Corona Mine

MINE INFRASTRUCTURE AS AT DECEMBER 2020

0 0.5 1 1.5 2 2.5

Kilometers

Co-ordinate System: WGS 1984 UTM Zone 17S  
Projection: Transverse Mercator

## Salares Norte project



Salares Norte is a high-grade, gold-silver open pit project in Chile commencing with mine development and processing facility construction in preparation for first gold in 2023.

During April 2020, Gold Fields' Board formally approved development of the Salares Norte project on the back of the positive definitive feasibility study (DFS) and the approval of the EIA by the Chilean authorities. The open-pit development and the 2Mtpa processing facility construction commenced and is on schedule and within budget. All critical permits required for the development of the mine were secured.

During 2020, the district exploration yielded encouraging results at the Horizonte project mainly over the Punta de Opalo and Cruz Sur targets. In addition, more work was done surrounding the Agua Amarga North extension.

Gold Fields completed the DFS in 2018 based on developing Salares Norte as an open-pit mine with crushing, milling, leaching and metal extraction using both Merrill-Crowe and Carbon in Pulp (CIP) circuits at an average 2Mtpa plant throughput. Key features from the updated Salares Norte DFS are:

- Mineral Reserves: 3.5Moz gold and 39Moz silver, equating to gold-equivalent Mineral Reserves of 4.0Moz
- 10 years LoM excluding Inferred material, and 11.5 years LoM including Inferred material
- First gold production is expected in Q1 2023
- Annual ore throughput of 2Mt
- Average annual production of 450koz gold-equivalent for the first seven years, and average annual production of 355koz gold-equivalent for the first 10 years
- All-in sustaining costs (AISC) over the LoM of US\$552/gold-equivalent oz

### ASSET FUNDAMENTALS

|   |   |
|---|---|
| <b>General location</b>                   | The Salares Norte project is located in the Atacama region of Northern Chile. The nearest town is Diego de Almagro, ~190km west of the project. The project is at latitude 26°0'42"S and longitude 68°53'35"W, with elevations between 4,200m amsl – 4,900m amsl.   |
| <b>Brief history and Regional geology</b> | The Annexure to this Supplement provides a summary of Salares Norte's history and Regional geology.   |
| <b>Climate</b>                            | The mine is situated at high altitude, around 4,500m amsl. While inclement weather may occur at these elevations, management plans were established to mitigate any negative impact on mining operations.   |
| <b>Licence status and holdings</b>        | Minera Gold Fields Salares Norte SpA. (MGFSN), in which Gold Fields indirectly holds a 100% interest, owns the project. The total property area is 86,030ha and MGFSN holds 1,800ha of exploitation concessions (mining rights), with definitive title granted. MGFSN holds 82,030ha of additional mining rights in the Salares Norte district as well as an active option agreement with Pan Pacific Copper Exploration Chile covering 2,200ha northwest of Salares Norte. Land access rights are in place through corresponded easements granted by the government. Water rights needed for the project were granted by the water authorities (Dirección General de Aguas (DGA)) and are environmentally approved.  |
| <b>Mining method</b>                      | The Brecha Principal and Agua Amarga deposits will be mined by a contractor using open-pit mining methods. Mining will occur in six phases over nine years, including two years of pre-stripping, starting in Brecha Principal and finishing in Agua Amarga. Ultimately, the two pits will merge into a single pit due to the backslope. Waste will be placed in either the south or north WSF. All ore will be hauled to either the RoM pad or one of the grade-bin stockpiles, south of the pits.   |
| <b>Operational infrastructure</b>         | Infrastructure will consist of mine and plant facilities, camp, offices, on-site power generation and a potable water plant. Water will be supplied from a well field, 12km from the project.   |
| <b>Mineral processing and TSFs</b>        | <p>The process plant, designed to process 2Mtpa, will be located southeast of the main pit at ~4,500m amsl. Ore will be crushed, milled and thickened, with thickener underflow pumped to cyanide leaching. Slurry from the leaching stage will feed a counter-current washing and solid liquid separation process through a two-stage counter-current decantation (CCD) circuit. Metals in the solution will be recovered by zinc precipitation in the Merrill-Crowe process. Tailings slurry obtained from the underflow of the second CCD stage will be scavenged by a CIP circuit.</p> <p>The dry stack TSF, located above the south mine WSF, has a total design capacity of 24Mt. It is expected that tailings will come from the filter plant with geotechnical moisture content less than 20%. Filtered tailings will be transported by trucks to the TSF, spread and allowed to dry to specific moisture content before being compacted.</p> |

## Salares Norte project continued

### ASSET FUNDAMENTALS continued

#### Local geology, deposit type and mineralisation style

The Salares Norte project is located in the northern part of the Maricunga Belt; an area with a predominance of Cenozoic volcanic rocks, comprising eroded strato-volcanos, volcanic domes and pyroclastic rocks. Mineralisation is contained in a high-sulphidation epithermal system, hosted mainly by a breccia complex along the contact of two volcanic domes of andesitic and dacitic composition.

Mineral Resources and Mineral Reserves have been delineated by drilling in two separate deposits, Brecha Principal and Agua Amarga, which are located ~500m apart. Most of the mineralisation known to date is oxidised. The sulphide mineralisation contains mainly pyrite, is generally lower grade and lower volume, and has lower processing recovery than the oxide material.

#### LoM: Proved and Probable Mineral Reserves

Based on the DFS, the mine will operate for nine years with processing of the Mineral Reserves over 10 years. District exploration to identify other deposits in the area is ongoing.

#### Sustainable development

An environmental impact study was approved by Chilean authorities in 2019. The EIA details all potential environmental and social impacts for construction, operation and closure of the mine, together with the corresponding mitigation actions and voluntary commitments to address them.

Power will be sourced from an on-site 26MW hybrid microgrid. The hybrid system consisting of 16MW diesel generating capacity and a 10MWp solar photovoltaic (PV) plant. The PV plant will be commissioned towards the end of the projected process plant ramp-up period when electrical demand will reach steady state.

### KEY DEVELOPMENTS AND MATERIAL ISSUES

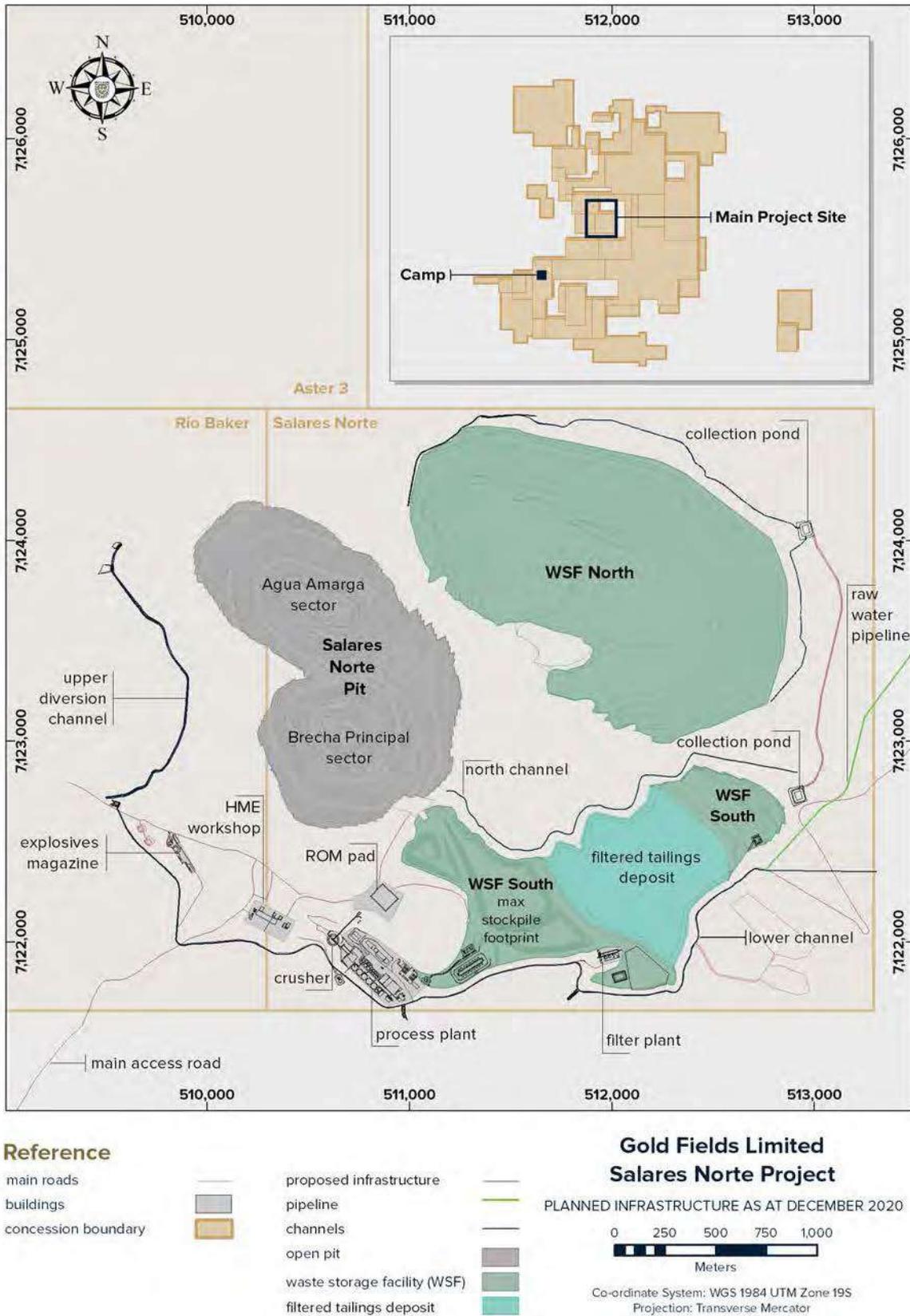
- In February 2020, Gold Fields' Board approved the FS and FNTP for construction
- The initial capex estimate for the project was US\$860m (in 2020 terms), of which US\$112m was sunk during 2020 and the pre-strip has commenced
- Detailed engineering progressed to 97% at the end of 2020, procurement to 87% and adjudication of construction contracts to 95%
- Purchase orders for all major equipment were placed and off-site fabrication started on several critical packages. All major contracts, including mining services, bulk earthworks, water diversion channel construction, electromechanical erection of the processing plant and power supply, were adjudicated and mobilised to site
- All sectorial permits required to start the project construction and mining activity were secured during 2020
- The detailed project execution plan developed in 2019 and updated in 2020 provides a high level of confidence in the engineering, execution readiness and cost estimation phases of the project
- Camp capacity increased to 1,231 beds, corresponding to 85% of the final construction capacity required taking account of the new restricted capacity due to the Covid-19 pandemic. A dormitory building with 218 beds was added and is under construction to complement the beds lost
- Bulk earthworks for the plant, mining contractor mobilisation and pioneering for the mine commenced during Q4 2020
- Despite 97% of the Mineral Resources base already being classified in the Indicated category, improved confidence in the estimate was achieved in 2019 through GC-spaced test drilling at Agua Amarga and Brecha Principal. This programme was designed to test local geology and grade domains defining higher-grade zones. The results validated the overall resource model
- During 2019, independent external consultants successfully audited the project database, geological models, resource models and the LoM plan
- The Chinchilla relocation programme commenced in 2020 and is under modification. However, it has released two areas (out of nine) needed for mine development at this stage (see the "Permitting and Development Schedule" section below for more detail). Under prevailing circumstances the Chinchilla relocation programme is not seen as presenting a risk to stopping the project
- Limited amounts of mercury are a product of the metallurgical process and will be managed in the regulatory framework administered in country. However, Gold Fields is assessing more rigorous solutions for product retirement
- The water balance model indicates minor fluctuations to the Salares water table over the life of the project, with negligible anticipated impact to fauna and flora. This will be closely monitored
- Risks to the execution of the LoM plan include the following:
  - Sectorial permitting for the LoM is currently on schedule with no reason to believe it will not be granted
  - Silver:gold ratio is a low metallurgical risk with high retention times required for increased silver extraction
  - Covid-19 and the potential for additional costs and delays to be incurred by the contractors (and passed on to the project)

### Mine design concept

Following two years of construction and pre-stripping, processing of the Brecha Principal deposit will commence in 2023, followed by the Agua Amarga deposit. Waste will be stored in two WSFs. Ore will be processed at a rate of 2Mtpa. The process flowsheet includes single-stage crushing, SAG and ball milling, leaching in agitated tanks, and hybrid metal extraction employing both Merrill-Crowe and CIP. Tailings from the CIP will be subjected to cyanide (CNwad) detoxification prior to filtration. The filter cake will be trucked to the dry stack tailings facility.

The following project layout is for reference only:

**Project site infrastructure layout**



## Salares Norte project continued

The key physical results from the DFS and LoM plan for the new mine are summarised below:

| Item                            | Unit         | Key metric   |
|---------------------------------|--------------|--------------|
| Indicated Resources             | %            | <b>97</b>    |
| Waste mined <sup>1</sup>        | Mt           | <b>310</b>   |
| Pre-strip                       | Mt           | <b>50.5</b>  |
| Ore mined                       | Mt           | <b>21.1</b>  |
| Plant throughput                | Mtpa         | <b>2.0</b>   |
| Strip ratio LoM <sup>1</sup>    | W:O          | <b>14.7</b>  |
| Au grade                        | g/t          | <b>5.13</b>  |
| Ag grade                        | g/t          | <b>57.94</b> |
| Plant recovery (Au)             | %            | <b>92.7</b>  |
| Plant recovery (Ag)             | %            | <b>67.5</b>  |
| LoM production (metal sold)     | Moz Au Equiv | <b>3.6</b>   |
| AISC over LoM (gold-equivalent) | US\$/oz      | <b>552</b>   |
| LoM                             | years        | <b>10</b>    |

Gold price: US\$1,200/oz, silver price: US\$17.50/oz for Mineral Reserves

<sup>1</sup> Pre-strip included in waste mined and LoM strip ratio

### Permitting and development schedule

The EIA was approved in December 2019 and all major sectorial permits required to initiate mining were approved during 2020. These included the exploitation, WSF, TSF, processing plant and mine closure plan permits. One significant impact identified as part of the EIA relates to the alteration and loss of habitat of the Short-tailed Chinchillas (Chinchilla), which is a protected species in Chile. To mitigate such impact, a plan was developed and approved by authorities in the EIA. The plan involves establishing a compensation and conservation area outside the mining area, declaring no-go zones where we cannot operate, and relocating a small fraction of the Chinchilla population that lives in future mining zones to a new location 5km away.

The Chinchilla capture and relocation process, which began in August 2020 and is a key aspect of the environmental approval for Salares Norte, requires capture, transportation to the relocation area, mandatory 'adaptation' period in a fenced area in the new location, release and on-going monitoring and evaluation for a year. Two of the four Chinchillas relocated in 2020 died during the 30-day adaptation process and relocation activities were temporarily suspended. The remaining two individuals were successfully released in the new location. As part of the investigation around the loss of two of the four Chinchilla, an autopsy was undertaken. Expert analysis of the autopsy has recommended, primarily, modifications related to the 'adaptation' period and release process for any future relocated Chinchilla. Monitoring and evaluation continue as the relocated Chinchilla settle into their new habitat and interact with newly identified Chinchilla in the area.

Salares Norte plans to resume Chinchilla relocation once the new measures have been approved by the regulator. The 2021 - 2022 construction schedule has not been affected by the disrupted relocation activities.

The key project development milestones for the new mine are shown below:

| Milestone   | Date           |
|---|----------------|
| Detailed engineering for plant and infrastructure commenced | April 2018     |
| Positive DFS completed                                      | December 2018  |
| Maiden Reserves declaration                                 | December 2018  |
| EIA approval  | December 2019  |
| Construction approval obtained from Gold Fields' Board      | February 2020  |
| Commencement of mine pioneering and plant construction      | September 2020 |
| Detailed engineering progress at 97%                        | December 2020  |
| Construction and pre-strip completed                        | January 2023   |
| Planned first gold production                               | Q1 2023        |

## EXPLORATION AND RESOURCES DEFINITION DRILLING

2020 exploration expenditures are presented in the Americas regional section.

In 2020, the district exploration programme (17,504m diamond drilling - DD) focused on the Horizonte project (formerly known as Pircas) over Punta de Opalo and Cruz Sur targets, and provided encouraging results. Additional drilling surrounding the Salares Norte open pit, Agua Amarga North extension, Brecha West and Aguilla targets was completed during the year.

Exploration drilling over Aster 3, along the northwest extension of the Brecha Principal and Agua Amarga deposits, was completed.

The Fernando Sur prospect, based on an option agreement over 2,200ha with Pan Pacific Copper Exploration Chile, was prepared during Q4 2020 for targeting and exploratory drilling in 2021.

Additional targets in the Gold Fields district tenement package (Pedernales and Piedra) will also be evaluated for future exploration.



Salares Norte – Horizonte project – Trinchera target

## Salares Norte project continued

### MINERAL RESOURCES AND MINERAL RESERVES

#### Mineral Resources classification

| Au                    | Tonnes (kt)   |          |          | Grade (g/t) |          |          | Au (koz)     |          |          |
|-----------------------|---------------|----------|----------|-------------|----------|----------|--------------|----------|----------|
|                       | Dec 2020      | Dec 2019 | Dec 2018 | Dec 2020    | Dec 2019 | Dec 2018 | Dec 2020     | Dec 2019 | Dec 2018 |
| <b>Classification</b> |               |          |          |             |          |          |              |          |          |
| <b>Open pit</b>       |               |          |          |             |          |          |              |          |          |
| Measured              | —             | —        | —        | —           | —        | —        | —            | —        | —        |
| Indicated             | 23,714        | 23,714   | 23,700   | 4.99        | 4.99     | 4.99     | 3,804        | 3,804    | 3,800    |
| Inferred              | 1,842         | 1,842    | 1,860    | 1.84        | 1.84     | 1.84     | 109          | 109      | 110      |
| <b>Total open pit</b> | <b>25,556</b> | 25,556   | 25,560   | <b>4.76</b> | 4.76     | 4.76     | <b>3,913</b> | 3,913    | 3,910    |

| Ag                    | Tonnes (kt)   |          |          | Grade (g/t)  |          |          | Ag (koz)      |          |          |
|-----------------------|---------------|----------|----------|--------------|----------|----------|---------------|----------|----------|
|                       | Dec 2020      | Dec 2019 | Dec 2018 | Dec 2020     | Dec 2019 | Dec 2018 | Dec 2020      | Dec 2019 | Dec 2018 |
| <b>Classification</b> |               |          |          |              |          |          |               |          |          |
| <b>Open pit</b>       |               |          |          |              |          |          |               |          |          |
| Measured              | —             | —        | —        | —            | —        | —        | —             | —        | —        |
| Indicated             | 23,714        | 23,714   | 23,700   | 56.29        | 56.29    | 56.31    | 42,915        | 42,915   | 42,910   |
| Inferred              | 1,842         | 1,842    | 1,860    | 12.61        | 12.61    | 12.62    | 747           | 747      | 754      |
| <b>Total open pit</b> | <b>25,556</b> | 25,556   | 25,560   | <b>53.14</b> | 53.14    | 53.13    | <b>43,662</b> | 43,662   | 43,664   |

| Deposit                 | Class            | Tonnes (kt)   | Au (g/t)    | Ag (g/t)     | Au (koz)     | Ag (koz)      |
|-------------------------|------------------|---------------|-------------|--------------|--------------|---------------|
| <b>Brecha Principal</b> | Indicated        | 15,883        | 5.27        | 68.64        | 2,690        | 35,051        |
|                         | Inferred         | 1,081         | 1.86        | 17.00        | 65           | 591           |
|                         | <b>Sub-total</b> | <b>16,964</b> | <b>5.05</b> | <b>65.35</b> | <b>2,755</b> | <b>35,642</b> |
| <b>Agua Amarga</b>      | Indicated        | 7,831         | 4.43        | 31.23        | 1,114        | 7,864         |
|                         | Inferred         | 761           | 1.80        | 6.38         | 44           | 156           |
|                         | <b>Sub-total</b> | <b>8,592</b>  | <b>4.19</b> | <b>29.03</b> | <b>1,158</b> | <b>8,020</b>  |
| <b>Grand total</b>      |                  | <b>25,556</b> | <b>4.76</b> | <b>53.14</b> | <b>3,913</b> | <b>43,662</b> |

- Mineral Resources are reported according to the SAMREC Code
- Confidence classification assumes annual production-scale and open-pit mining
- These Mineral Resources are classified as Indicated and Inferred. The Competent Person (CP) has reasonable confidence in the Resources, but future drilling may materially change the Resources evaluation
- Commodity prices used for reporting Resources are US\$1,400/oz gold and US\$20/oz silver
- Mineral Resources are constrained in a whittle optimised pit shell, which considered mining, processing and administrative costs, process recovery and sustaining capital
- Mineral Resources are reported in situ for material in a pit shell having positive value after process recovery and costs for processing, refining, royalties and administration were applied. A variable cut-off is applied since the process recoveries and cost depend on head grade. This resulted in an average revenue cut-off grade (COG) of US\$43/t processed based on 1% royalty, average process recoveries of 92.7% for gold and 67.5% for silver; refining costs of US\$2.78/oz for gold and US\$1.21/oz for silver; average ore and tailings handling cost of US\$5.10/t processed; average processing cost of US\$28.61/t processed; sustaining capital costs of US\$1.60/t processed; administrative costs of US\$19.5m per year; and average mining costs of US\$2.94/t mined
- Mineral Resources are reported without mining dilution and loss. Mining dilution and loss were accounted for in pit shell generation
- Mineral Resources are reported inclusive of Mineral Reserves
- Figures are rounded to reflect confidence. Some figures may not sum or average exactly due to rounding. The CP deems these small discrepancies immaterial

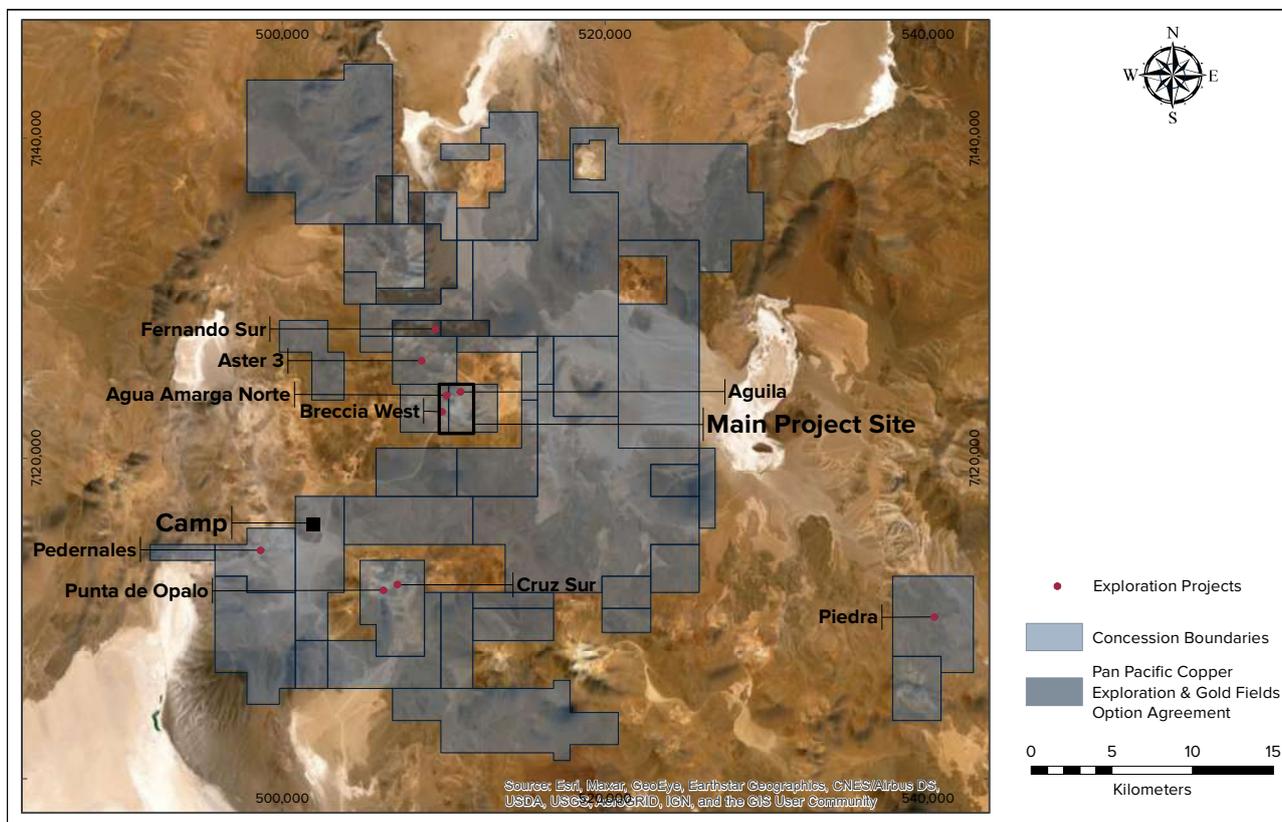
### Modifying factors

|                                     | Units   | December     |       |       |
|-------------------------------------|---------|--------------|-------|-------|
|                                     |         | 2020         | 2019  | 2018  |
| <b>Mineral Resources parameters</b> |         |              |       |       |
| Mineral Resources Au price          | US\$/oz | <b>1,400</b> | 1,400 | 1,400 |
| Mineral Resources Ag price          | US\$/oz | <b>20.0</b>  | 20.0  | 20.0  |
| NSR <sup>1</sup> for mill feed      | US\$/t  | <b>43.00</b> | 43.00 | 43.00 |
| <b>Mineral Reserves parameters</b>  |         |              |       |       |
| Mineral Reserves Au price           | US\$/oz | <b>1,200</b> | 1,200 | 1,200 |
| Mineral Reserves Ag price           | US\$/oz | <b>17.5</b>  | 17.5  | 17.5  |
| NSR for mill feed                   | US\$/t  | <b>43.16</b> | 43.16 | 43.16 |
| Strip ratio (waste:ore)             | ratio   | <b>14.7</b>  | 14.7  | 14.7  |
| Dilution open pit                   | %       | <b>3.12</b>  | 3.12  | 3.12  |
| MCF                                 | %       | <b>100</b>   | 100   | 100   |
| Mining recovery factor (open pit)   | %       | <b>100</b>   | 100   | 100   |
| Plant recovery (Au) <sup>2</sup>    | %       | <b>92.7</b>  | 92.7  | 92.7  |
| Plant recovery (Ag) <sup>2</sup>    | %       | <b>67.5</b>  | 67.5  | 67.5  |
| Processing capacity                 | Mtpa    | <b>2.0</b>   | 2.0   | 2.0   |

<sup>1</sup> NSR is defined as the return from sales of concentrates, expressed in US\$/t, ie  $NSR = (Au\ price - Au\ selling\ cost) \times Au\ grade \times Au\ recovery + (Ag\ price - Ag\ selling\ cost) \times Ag\ grade \times Ag\ recovery$ . A variable NSR is applied to the LoM plan to optimise the NPV and FCF

<sup>2</sup> Average recovery provided; forecast recoveries are calculated using derived and applied recovery models

### Salares Norte: Map showing Gold Fields Exploration projects in the Salares Norte district

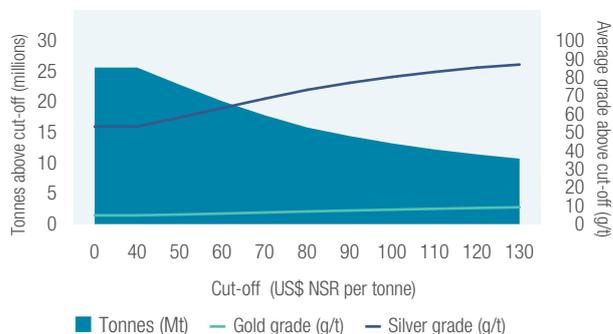


## Salares Norte project continued

### Grade tonnage curves

The gold and silver grade tonnage curves for the surface Mineral Resources are presented below. Surface stockpiles are excluded from the grade tonnage curves.

GRADE-TONNAGE CURVE – OPEN PIT



### Mineral Reserves classification

| Au                    | Tonnes (kt)        |               |               | Grade (g/t)        |              |              | Au (koz)        |               |               |
|-----------------------|--------------------|---------------|---------------|--------------------|--------------|--------------|-----------------|---------------|---------------|
|                       | Dec 2020           | Dec 2019      | Dec 2018      | Dec 2020           | Dec 2019     | Dec 2018     | Dec 2020        | Dec 2019      | Dec 2018      |
| <b>Classification</b> |                    |               |               |                    |              |              |                 |               |               |
| <b>Open pit</b>       |                    |               |               |                    |              |              |                 |               |               |
| Proved                | —                  | —             | —             | —                  | —            | —            | —               | —             | —             |
| Probable              | 21,079             | 21,079        | 21,079        | 5.13               | 5.13         | 5.13         | 3,476           | 3,476         | 3,476         |
| <b>Total open pit</b> | <b>21,079</b>      | <b>21,079</b> | <b>21,079</b> | <b>5.13</b>        | <b>5.13</b>  | <b>5.13</b>  | <b>3,476</b>    | <b>3,476</b>  | <b>3,476</b>  |
| <b>Ag</b>             | <b>Tonnes (kt)</b> |               |               | <b>Grade (g/t)</b> |              |              | <b>Ag (koz)</b> |               |               |
|                       | Dec 2020           | Dec 2019      | Dec 2018      | Dec 2020           | Dec 2019     | Dec 2018     | Dec 2020        | Dec 2019      | Dec 2018      |
| <b>Classification</b> |                    |               |               |                    |              |              |                 |               |               |
| <b>Open pit</b>       |                    |               |               |                    |              |              |                 |               |               |
| Proved                | —                  | —             | —             | —                  | —            | —            | —               | —             | —             |
| Probable              | 21,079             | 21,079        | 21,079        | 57.94              | 57.94        | 57.94        | 39,263          | 39,263        | 39,263        |
| <b>Total open pit</b> | <b>21,079</b>      | <b>21,079</b> | <b>21,079</b> | <b>57.94</b>       | <b>57.94</b> | <b>57.94</b> | <b>39,263</b>   | <b>39,263</b> | <b>39,263</b> |

### Mineral Reserves by deposit

| Deposit          | Class           | Tonnes (kt)   | Au (g/t)    | Ag (g/t)     | Au (koz)     | Ag (koz)      |
|------------------|-----------------|---------------|-------------|--------------|--------------|---------------|
| Brecha Principal | Probable        | 15,373        | 5.23        | 69.20        | 2,587        | 34,205        |
| Agua Amarga      | Probable        | 5,706         | 4.84        | 27.57        | 889          | 5,058         |
| <b>Total</b>     | <b>Probable</b> | <b>21,079</b> | <b>5.13</b> | <b>57.94</b> | <b>3,476</b> | <b>39,263</b> |

- Mineral Reserves are reported according to the SAMREC Code
- Confidence classification assumes annual production-scale and open pit mining
- Mineral Reserves are classified as Probable and are based on Indicated Mineral Resources. The CP has reasonable confidence in the Reserves, but future drilling may materially change the Reserve evaluation
- Commodity prices used for reporting Reserves are US\$1,200/oz gold and US\$17.50/oz silver
- Mineral Reserves are based on the 2018 DFS production schedule which was constrained by a designed open pit. Modifying factors include mining, processing, and administrative costs; process recovery and sustaining capital costs are at an FS level
- Mineral Reserves are reported using RoM tonnes and grades as delivered to the mill and are therefore fully diluted
- A variable revenue cut-off was applied in the estimation of Mineral Reserves because the process recoveries and cost depend on the head grade. This resulted in an average revenue COG of US\$43.16/t processed based on 1% royalty; average process recoveries of 92.7% for gold and 67.5% for silver; refining costs of US\$2.53/oz for gold and US\$1.21/oz for silver; average process costs of US\$35.47/t processed; and administrative costs of US\$19.5m per year. Average mining costs were US\$2.39/t mined
- Mineral Reserves include marginal ore evaluated at an average revenue cut-off of US\$34.16/t processed, considering a reduction on costs during the rehandling period at the end of life of the processing facility
- Figures are rounded to reflect confidence. Some figures may not sum or average exactly due to rounding. The CP deems these small discrepancies immaterial
- Mineral Reserves are included in the Mineral Resources estimate
- No Mineral Resource or Mineral Reserve reconciliation charts are shown as there were no year-on-year changes

### Mineral Resources and Mineral Reserves reconciliation year-on-year

| Factors that affected Mineral Resources reconciliation year-on-year | Factors that affected Mineral Reserves reconciliation year-on-year |
|---|--|
| No significant changes to the December 2019 declaration             | No changes to the December 2019 declaration                        |

### Mineral Reserves sensitivity

To illustrate the impact of fluctuations in gold price and exchange rates on the current declaration, Salares Norte generated sensitivities regarding Mineral Reserves. The following graph indicates the Managed Mineral Reserves sensitivity at -15%, -10%, -5%, base +5%, +10% and +15% base – US\$1,200/oz gold and US\$17.50/oz silver Mineral Reserve price.

These sensitivities (other than for the base case) are not supported by detailed plans and depletion schedules. They should only be considered on an indicative basis, specifically as such sensitivities assume 100% selectivity, without any operating cost increases.

Mineral Reserve sensitivity  
Au (Moz); Ag (Moz)



# AUSTRALIA REGION

## SALIENT POINTS

### MINERAL RESOURCES

**19.4Moz\***  
GREW BY 5%  
NET OF  
DEPLETION

### MINERAL RESERVES

**7.5Moz\***  
GREW BY 8%  
NET OF  
DEPLETION

*\* Agnew, St Ives and Granny Smith, 100%  
attributable to Gold Fields, Gruyere JV 50%  
attributable to Gold Fields, FSE 40% attributable  
to Gold Fields*

## AUSTRALIA REGION

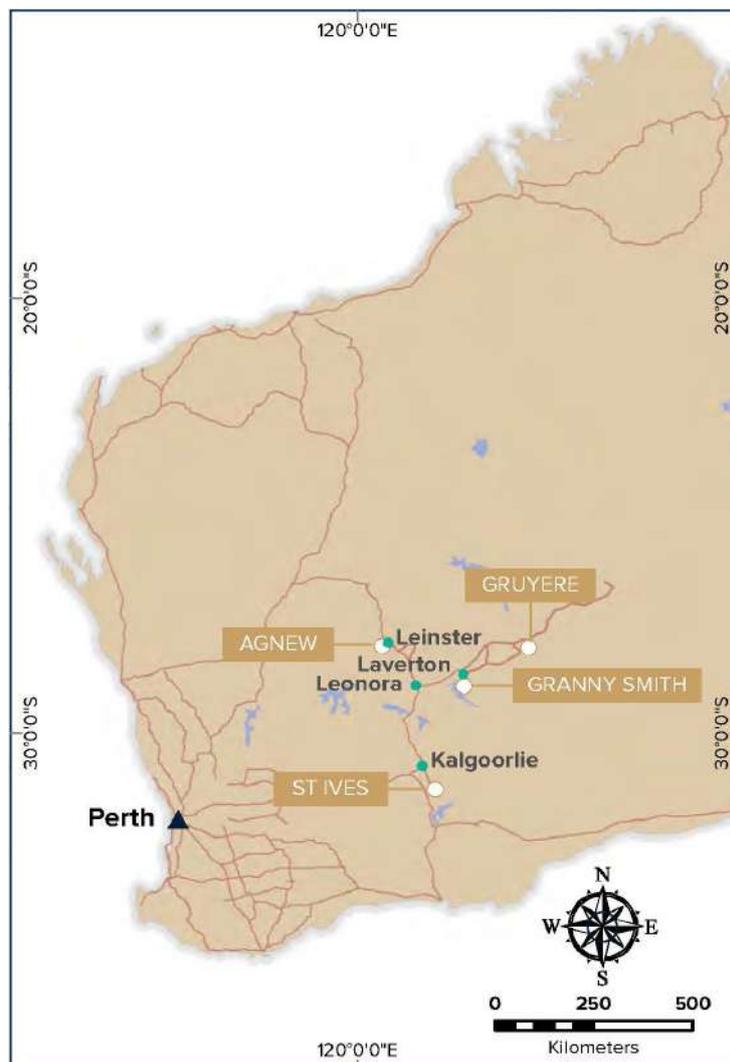
### St Ives, Agnew, Granny Smith and Gruyere joint venture (JV) gold mines located in Western Australia

The Australia region operates a portfolio of predominantly low-cost, relatively long-life mines and has a strong pipeline of projects configured to drive reserve replacement and life extension.

The Australian mines continued to see the real benefits of consistent annual investment in extensional and near-mine exploration (US\$49.8m in 2020), with Agnew and St Ives both increasing Mineral Resources and Mineral Reserves net of depletion. The significant year-on-year growth in Mineral Reserves at Agnew (19%) and St Ives (17%) means that these mines are well positioned to deliver on near to medium-term growth options. Agnew reported its largest Mineral Reserve since 2013, and St Ives its largest since 2011. At Granny Smith, Mineral Reserves increased 4% year-on-year as Mineral Resource conversion drilling continued to return positive results from the Zone 135 vertical lodes at the Wallaby deposit. The region's strong exploration capabilities and technical competitive strengths supported ongoing discovery and project development which continue to reinforce the predicted trends for ongoing life-of-mine extensions at these Western Australia orogenic-style operations.

The Gruyere JV mine successfully completed its first full calendar year of gold production, with further exploration drilling planned to test potential beneath the Gruyere open pit in 2021.

The Australia region exceeded 1Moz gold production for the first time in 2020.



## Regional overview

### Exploration drilling and expenditure

On-lease exploration metres drilled and expenditure for the year ended 31 December 2020 are summarised below (exclusive of grade control (GC) drilling). The 13% higher exploration costs per metre drilled reflect the increasing ratio of diamond drilling (DD) as exploration migrates from near surface to deeper targets, as well as increasing near-mine extensional drilling to support underground Mineral Reserve replacement projects at St Ives, Agnew and Granny Smith.

| Exploration drilling                      | December 2020  |             |             | December 2019  |              |              |
|---|----------------|-------------|-------------|----------------|--------------|--------------|
|   | Metres drilled | A\$m        | US\$m       | Metres drilled | A\$m         | US\$m        |
| <b>Operations</b>                         |                |             |             |                |              |              |
| Agnew                                     | 59,967         | 19.70       | 13.60       | 74,914         | 25.58        | 17.79        |
| Granny Smith                              | 71,748         | 15.50       | 10.70       | 142,891        | 20.22        | 14.07        |
| St Ives                                   | 130,625        | 35.40       | 24.40       | 138,333        | 36.04        | 25.06        |
| Gruyere (100% of metres and 50% of costs) | 14,221         | 1.70        | 1.10        | 11,309         | 2.01         | 1.40         |
| <b>Total<sup>1</sup></b>                  | <b>276,561</b> | <b>72.2</b> | <b>49.8</b> | <b>367,447</b> | <b>83.86</b> | <b>58.32</b> |

<sup>1</sup> Average 2020 exchange rate: A\$1 = US\$0.6894

Drilling unit costs are affected by the length, type (DD, reverse circulation (RC), aircore or sonic), ground conditions, rig and site availability, as well as whether drilling is from surface or underground

The year-on-year reduction in total metres drilled in the Australia region (~25%) is largely due to the increased portion from DD as exploration targets deeper underground deposits, the main drilling method is DD, which has a higher cost per metre rate. Aligned with this, we completed major aircore programmes at Granny Smith in 2019, resulting in significantly less aircore drilling in 2020

### MINERAL RESOURCES AND MINERAL RESERVES

#### Australia region: Summary Mineral Resource and Mineral Reserve estimates for operational mines<sup>1</sup>

|                                  | Mineral Resources |             |              |          |                     | Mineral Reserves |             |             |          |
|----------------------------------|-------------------|-------------|--------------|----------|---------------------|------------------|-------------|-------------|----------|
|                                  | December 2020     |             |              | Dec 2019 |                     | December 2020    |             |             | Dec 2019 |
| Measured, Indicated and Inferred | Tonnes (Mt)       | Grade (g/t) | Au (Moz)     | Au (Moz) | Proved and Probable | Tonnes (Mt)      | Grade (g/t) | Au (Moz)    | Au (Moz) |
| Agnew                            | 18.6              | 5.31        | 3.18         | 2.52     | Agnew               | 5.3              | 5.39        | 0.92        | 0.77     |
| Granny Smith                     | 45.0              | 5.49        | 7.94         | 8.31     | Granny Smith        | 12.6             | 5.34        | 2.17        | 2.08     |
| St Ives                          | 41.7              | 3.70        | 4.96         | 4.40     | St Ives             | 25.5             | 3.25        | 2.67        | 2.28     |
| Gruyere                          | 77.9              | 1.34        | 3.36         | 3.31     | Gruyere             | 43.4             | 1.24        | 1.74        | 1.80     |
| <b>Total</b>                     | <b>183.1</b>      | <b>3.30</b> | <b>19.43</b> | 18.54    | <b>Total</b>        | <b>86.8</b>      | <b>2.68</b> | <b>7.49</b> | 6.93     |

<sup>1</sup> Managed unless otherwise stated (Gruyere: only the Gold Fields attributable figures are reported)

– Mineral Resources are inclusive of Mineral Reserves

– All tonnes (t) relate to metric units and rounding of figures may result in minor computational discrepancies. Where this happens, it is not deemed significant

## Agnew gold mine



To support mine life extension, Gold Fields has expedited a new mine residential camp, the installation of renewable energy solutions, transitioning Waroonga and New Holland into a consolidated “One Mine complex” and continued exploration to underpin the operational pipeline. The Greater Agnew Project (GAP) aims to provide an integrated view of the mine’s full site potential incorporating assessments of the Redeemer complex, Barren Lands, Waroonga North Lower, Kath Lower and Sheba South areas, and associated supporting infrastructure, including potential mill throughput expansions.

To support GAP, Agnew continued to focus on extending known ore sources proximal to the current mining fronts at Waroonga and New Holland, as well as drilling at the Redeemer complex and at Barren Lands. Focused resource definition drilling in 2020 confirmed ore body extensions at Kath Lower, Waroonga North, Sheba South and Barren Lands. The discovery of the extension to the Barren Lands open pit delivered a maiden underground Reserve. Successful drilling at the underground Redeemer complex also enabled Redeemer North to report a maiden Mineral Resource with upside potential.

### ASSET FUNDAMENTALS

|  |   |
|--|---|
| <b>General location</b>  | Agnew is situated at latitude 27°55'S and longitude 120°42'E in the Norseman-Wiluna Greenstone Belt. It is located 23km west of Leinster in Western Australia, 375km north of Kalgoorlie and ~870km northeast of Perth. Well-established power, access roads and supporting infrastructure are in place.  |
| <b>Brief history and Regional geology</b>                        | The Annexure to this Mineral Resource and Mineral Reserve Supplement (the Supplement) provides a summary of Agnew’s history and Regional geology.   |
| <b>Climate</b>   | The climate is semi-arid and temperatures vary from an average minimum of 4° C in June to an average maximum of 36° C in January. No extreme climate conditions are experienced that materially affect mining operations.   |
| <b>Licence status and holdings</b>                               | The Agnew Gold Mining Company Proprietary Limited (AGMC), ACN 098-385-883, was incorporated in Australia in 2001 as the legal entity holding and conducting mining activity on the Agnew mineral leases. Gold Fields holds 100% of the issued shares of AGMC through its 100% holding in the issued shares of Orogen Holding (BVI) Limited. Agnew controls exploration and mineral rights over 74,872ha (total of granted, inclusive of miscellaneous and non-managed tenements), and has security of tenure for all current exploration and mining leases (MLs) that contribute to future Mineral Reserves.  |
| <b>Mining method</b>   | The primary mining method at Waroonga is long-hole sub-level stoping with paste fill. The New Holland mining method depends on the geometry of the ore structure, with the primary method being long-hole open-stoping.   |
| <b>Operational infrastructure</b>                                | Agnew operates two underground mines, namely Waroonga and New Holland. At Waroonga, ore is sourced from the Waroonga North, Kath, FBH, Main and Kim lodes, accessed via declines. New Holland mining occurs in four primary areas: Sheba South, Sheba, Cinderella and Himitsu. These areas are accessed via declines. There are also centralised administrative offices, engineering workshops at both Waroonga and New Holland, and one active Carbon in Pulp (CIP) processing plant (1.3Mt/tpa capacity).<br><br>A hybrid renewable power plant was commissioned in 2019/2020 including solar, wind turbine, gas generator, battery power storage and diesel back-up power solutions. |
| <b>Mineral processing and tailings storage facilities (TSFs)</b> | The Agnew processing plant consists of a tertiary crushing circuit, followed by a two-stage ball milling circuit with gravity and a conventional CIP gold recovery circuit (1.3Mt/tpa capacity).<br><br>Agnew’s TSFs 1 and 2, and an adjoined above-ground paddock storage facility, were decommissioned. TSF 3 is an in-pit facility located at the Redeemer pit, operational since it was commissioned in 2004. TSF 3 has been irregularly topped up since commissioning TSF 4. TSF 4 is an in-pit facility located at the Songvang pit and has a remaining LoM storage capacity of ~6.5Mt. All the Lawlers TSFs are closed and rehabilitated.  |

## Agnew gold mine *continued*

| <b>ASSET FUNDAMENTALS</b> <i>continued</i>                  |  |
|---|--|
| <b>Local geology, deposit type and mineralisation style</b> | <p>The Australia regional overview in the Annexure to this Supplement describes the regional geology of the Yilgarn Craton.</p> <p>Agnew is situated in the northern portion of the Norseman-Wiluna Greenstone Belt of the Yilgarn Craton, Western Australia. Locally, the belt comprises a sequence of mafic to ultramafic volcanics and associated interflow sediments, which were folded to form the Lawlers anticline.</p> <p>The mafic and ultramafic volcanics of the Lawlers anticline are unconformably overlain by a sequence of clastic sediments comprising the Scotty Creek formation. The sedimentary rocks were metamorphosed to lower greenschist facies and comprise conglomerates, and very fine to very coarse-grained pebbly sandstones and siltstones.</p> <p>The Agnew deposits are broadly hosted by the intersections between various structures and the relative stratigraphy. Gold mineralisation largely occurs in quartz veins in the sedimentary units of the Scotty Creek formation.</p> <p>Orogenic greenstone gold deposits (hydrothermal) are hosted in several different styles of lodes. Although all Agnew deposits broadly occur at the intersections between structures and stratigraphy, there are subtle differences in alteration and mineralisation that are controlled in part by the local host rock chemistry. Mineralisation zones are discontinuous with short range predictability.</p> |
| <b>LoM: Proved and Probable Mineral Reserves</b>            | <p>Extensional and brownfields exploration continues, which could extend the LoM given the modelled endowment potential and under explored sections of the tenements. It is estimated that the current Mineral Reserves will be depleted in 2025 (four and a half years).</p>  |
| <b>Sustainable development</b>                              | <p>Agnew retained its ISO 45001 and ISO 14001 certifications. At acquisition, the New Holland operations were amalgamated under these certifications. The mine was recertified to comply with the International Cyanide Management Code (ICMC) in February 2020. During the year, Agnew also maintained ISO 27001 certification.</p> <p>The mine implemented a Reconciliation Action Plan (RAP) working group to facilitate the implementation of the Gold Fields RAP. The RAP was designed to develop respectful relationships and create meaningful opportunities with Aboriginal and Torres Strait Islander peoples.</p> <p>Agnew undertook a comprehensive revision of its mine closure plan. This was submitted to the regulator in 2020.</p>   |

### KEY DEVELOPMENTS AND MATERIAL ISSUES

- Reserve replacement and strong net growth during 2020, with notable exploration success at:
  - Kath Lower and Sheba South
  - Barren Lands and Redeemer complex
- LoM infrastructure investments to secure a sustainable future:
  - Completion of the Link Drive between the Waroonga and New Holland mines
  - Completion of the solar farm, wind farm and gas electricity facility
  - Upgrades to underground infrastructure and ventilation in existing mines
- LoM extension remains a key focus area for Agnew in 2021, including:
  - Extensional and resource definition drilling at Waroonga North, Kath Lower, FBH, Main, Kim South and Sheba South
  - Resource extension work at Barren Lands below the open pit and underground and at Redeemer North
  - Further early-stage exploration continues across the broader tenement package on prioritised prospects
  - Advancement of narrow vein stoping method trials to reduce dilution while maintaining gold recovery, with initial work focused on Sheba showing promise
  - Pre-feasibility study (PFS) completed for Barren Lands underground to support the 2020 Reserve declaration
  - The GAP project, staged over the next three to four years, will provide an integrated view of the mine's full site potential and cost base aimed at extending LoM and sustaining the operation at current metal production levels beyond 2024
- If the GAP is not implemented at Agnew over the scheduled project timeline, cost control and the achievement of the AIC/oz metric could be challenging
- Risks to the execution of the LoM plan include the following:
  - Timely development of drill drives at Waroonga North Lower, Kath Lower and Sheba South to allow adequate drill platforms for GC and extensional drilling
  - Project start-up costs for new mining fronts
  - Geotechnical ground conditions at depth at Kim, FBH, Kath and Sheba are being managed using geotechnical modelling and closure monitoring programmes

## OPERATING STATISTICS

|  | Units    | Historic performance |          |          |
|--|----------|----------------------|----------|----------|
|  |          | Dec 2020             | Dec 2019 | Dec 2018 |
| <b>Underground mining</b>                          |          |                      |          |          |
| Total mined  | kt       | <b>2,044</b>         | 1,961    | 1,955    |
| – Waste mined (operating expenditure (opex))       | kt       | <b>258</b>           | 236      | 230      |
| – Waste mined (capital expenditure (capex))        | kt       | <b>492</b>           | 442      | 509      |
| – Ore mined  | kt       | <b>1,294</b>         | 1,284    | 1,216    |
| Mined grade  | g/t      | <b>5.8</b>           | 5.7      | 6.5      |
| <b>Processing</b>                                  |          |                      |          |          |
| Tonnes treated                                     | kt       | <b>1,357</b>         | 1,231    | 1,178    |
| Head grade   | g/t      | <b>5.7</b>           | 5.8      | 6.7      |
| Yield  | g/t      | <b>5.3</b>           | 5.5      | 6.3      |
| Plant recovery                                     | %        | <b>94.6</b>          | 94.2     | 94.2     |
| Total Au production                                | koz      | <b>233</b>           | 219      | 239      |
|  | kg       | <b>7,256</b>         | 6,824    | 7,437    |
| <b>Financials</b>                                  |          |                      |          |          |
| Average Au price received                          | US\$/oz  | <b>1,762</b>         | 1,387    | 1,263    |
|  | A\$/oz   | <b>2,557</b>         | 1,994    | 1,690    |
| Exchange rate (annual average)                     | US\$/A\$ | <b>0.69</b>          | 0.70     | 0.75     |
| Cost of sales before amortisation and depreciation | A\$m     | <b>236</b>           | 233      | 216      |
|  | A\$/oz   | <b>1,012</b>         | 1,062    | 904      |
| Capex  | A\$m     | <b>75</b>            | 109      | 97       |
|  | A\$/oz   | <b>323</b>           | 499      | 408      |
| All-in costs (AIC)                                 | A\$/oz   | <b>1,528</b>         | 1,656    | 1,374    |
|  | US\$/oz  | <b>1,053</b>         | 1,152    | 1,026    |

## EXPLORATION AND RESOURCES DEFINITION DRILLING

2019/2020 exploration expenditures are presented in the Australia regional section.

Exploration in 2020 focused on extensions at both the Waroonga and New Holland mineralised systems.

Waroonga programmes included further infill drilling of Kath Lower which defined a significant open down plunge lode. Extensional and infill drilling was also carried out on the Waroonga North lodes. Drilling in these areas ensured mining depletion was replaced. Down dip extensional drilling of the Kim lode continues to return positive results. Step-out and infill drilling programmes will be completed in 2021 in the Waroonga North, Kath Lower, Main South, FBH South and Kim South areas.

New Holland extensional and exploration drilling was conducted mainly at Hidden Secret, Sheba South and Sheba North, with limited drilling in the New Holland and Greater Genesis areas. The Sheba South programme resulted in a significant high-grade extension of the Sheba lode toward the south. Further focused drilling on the

Sheba South and Sheba North targets and the Hidden Secret target is planned for 2021.

A change from extensional drilling at Barren Lands to a resource conversion programme below the small Barren Lands open pit returned positive results with a new underground Reserve. Focused drilling at the Redeemer complex on the Redeemer North lode confirmed and extended the mineralisation, resulting in Redeemer North being added as a maiden Resource in 2020. Further technical studies and resource definition drilling aim to convert this area into a Reserve in 2021.

Surface exploration in 2020 was initially planned to drill test multiple targets across the wider property tenure using RC and DD before a change in strategy refocused efforts on Resource conversion to support near-term Reserve replacement and growth. The drill programmes designed for 2021 are a combination of focused Resource conversion at Barren Lands, Redeemer North and Redeemer Zone 2 North, as well as campaigns designed to test down plunge extensions of these targets. Additional projects include discovery programmes on targets

generated from data collected during previous exploration programmes from the past three to five years. These programmes range from full field wide-spaced programmes to definition-style programmes over known areas of significance such as the Maria complex and Mulla Mulla.

## PROJECT AND STUDY PIPELINE

A broad range of projects are scheduled, ranging from strategic option analysis, desktop and scoping studies to PFS and FS studies, all designed to underpin the LoM plan and life extension. The 2021 projects include the strategic assessment and initial work for GAP, PFSs for Redeemer Zone 2, Barren Lands underground, Redeemer North underground and Glasgow Lass open pit. Several mining and infrastructure projects will be evaluated, including a PFS for a potential bulk mining and processing plant upgrade, as well as an FS for the crusher upgrade. The timing of the various projects is calibrated to support Agnew's strategic and LoM plans, and consequently considers project lead times, required funding and resources, as well as the Company's capital investment process.

## Agnew gold mine continued

### MINERAL RESOURCES AND MINERAL RESERVES

#### Mineral Resources classification

| Classification                        | Tonnes (kt)   |               |               | Grade (g/t) |             |             | Au (koz)     |              |              |
|---------------------------------------|---------------|---------------|---------------|-------------|-------------|-------------|--------------|--------------|--------------|
|                                       | Dec 2020      | Dec 2019      | Dec 2018      | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020     | Dec 2019     | Dec 2018     |
| <b>Open pit and underground</b>       |               |               |               |             |             |             |              |              |              |
| Measured                              | 98            | 82            | 104           | 5.11        | 5.40        | 5.43        | 16           | 14           | 18           |
| Indicated                             | 11,733        | 8,209         | 6,601         | 5.72        | 6.01        | 5.49        | 2,157        | 1,585        | 1,165        |
| Inferred                              | 6,666         | 5,455         | 5,512         | 4.66        | 5.16        | 4.81        | 998          | 905          | 853          |
| <b>Total open pit and underground</b> | <b>18,497</b> | <b>13,747</b> | <b>12,218</b> | <b>5.33</b> | <b>5.67</b> | <b>5.18</b> | <b>3,171</b> | <b>2,504</b> | <b>2,036</b> |
| <b>Surface</b>                        |               |               |               |             |             |             |              |              |              |
| Measured stockpiles                   | 105           | 252           | 128           | 2.07        | 2.13        | 3.15        | 7            | 17           | 13           |
| <b>Total</b>                          | <b>18,602</b> | <b>13,999</b> | <b>12,346</b> | <b>5.31</b> | <b>5.60</b> | <b>5.16</b> | <b>3,178</b> | <b>2,521</b> | <b>2,049</b> |

#### Mineral Resources classification per source area

| Area                          | Measured    |             |           | Indicated     |             |              | Inferred     |             |            | Total Mineral Resources |             |              |
|-------------------------------|-------------|-------------|-----------|---------------|-------------|--------------|--------------|-------------|------------|-------------------------|-------------|--------------|
|                               | Tonnes (kt) | Grade (g/t) | Au (koz)  | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)  | Grade (g/t) | Au (koz)   | Tonnes (kt)             | Grade (g/t) | Au (koz)     |
| <b>Open pit</b>               |             |             |           |               |             |              |              |             |            |                         |             |              |
| Miranda                       | —           | —           | —         | 51            | 4.62        | 8            | 291          | 4.15        | 39         | 343                     | 4.22        | 46           |
| Crusader                      | —           | —           | —         | 1,138         | 2.21        | 81           | 62           | 2.59        | 5          | 1,200                   | 2.23        | 86           |
| Various – other               | —           | —           | —         | 1,432         | 3.33        | 154          | 422          | 3.74        | 51         | 1,854                   | 3.43        | 204          |
| <b>Total open pit</b>         | <b>—</b>    | <b>—</b>    | <b>—</b>  | <b>2,621</b>  | <b>2.87</b> | <b>242</b>   | <b>775</b>   | <b>3.80</b> | <b>95</b>  | <b>3,397</b>            | <b>3.09</b> | <b>337</b>   |
| <b>Underground</b>            |             |             |           |               |             |              |              |             |            |                         |             |              |
| Waroonga                      |             |             |           |               |             |              |              |             |            |                         |             |              |
| Kim                           | 93          | 5.03        | 15        | 285           | 7.06        | 65           | 68           | 8.97        | 19         | 446                     | 6.90        | 99           |
| Main                          | —           | —           | —         | 658           | 6.86        | 145          | 222          | 7.63        | 55         | 881                     | 7.06        | 200          |
| FBH                           | —           | —           | —         | 1,216         | 5.42        | 212          | 555          | 5.11        | 91         | 1,771                   | 5.32        | 303          |
| North                         | —           | —           | —         | 425           | 8.98        | 123          | 42           | 8.44        | 11         | 467                     | 8.93        | 134          |
| Kath                          | —           | —           | —         | 1,268         | 9.07        | 370          | 136          | 6.55        | 29         | 1,404                   | 8.82        | 398          |
| Rajah                         | —           | —           | —         | 114           | 5.66        | 21           | 3            | 6.62        | 1          | 117                     | 5.68        | 21           |
| Redeemer/ Crusader            | —           | —           | —         | 2,837         | 6.19        | 565          | 1,636        | 5.26        | 277        | 4,473                   | 5.85        | 842          |
| Genesis and New Holland       |             |             |           |               |             |              |              |             |            |                         |             |              |
| Lower Genesis                 | 5           | 6.65        | 1         | 103           | 3.95        | 13           | 740          | 3.64        | 87         | 848                     | 3.70        | 101          |
| Sheba                         | —           | —           | —         | 1,170         | 6.92        | 260          | 959          | 4.29        | 132        | 2,129                   | 5.73        | 392          |
| Upper New Holland and Genesis | —           | —           | —         | 696           | 4.49        | 100          | 908          | 4.12        | 120        | 1,603                   | 4.28        | 221          |
| Hidden Secret                 | —           | —           | —         | 250           | 3.69        | 30           | 226          | 4.03        | 29         | 477                     | 3.85        | 59           |
| Other                         | —           | —           | —         | 51            | 3.12        | 5            | 384          | 4.11        | 51         | 435                     | 3.99        | 56           |
| Miranda (Maria)               | —           | —           | —         | 40            | 5.26        | 7            | 11           | 5.50        | 2          | 50                      | 5.31        | 9            |
| <b>Total underground</b>      | <b>98</b>   | <b>5.11</b> | <b>16</b> | <b>9,112</b>  | <b>6.54</b> | <b>1,915</b> | <b>5,891</b> | <b>4.77</b> | <b>903</b> | <b>15,101</b>           | <b>5.84</b> | <b>2,834</b> |
| <b>Surface</b>                |             |             |           |               |             |              |              |             |            |                         |             |              |
| Mill stocks                   | 105         | 2.07        | 7         | —             | —           | —            | —            | —           | —          | 105                     | 2.07        | 7            |
| <b>Grand total</b>            | <b>203</b>  | <b>3.54</b> | <b>23</b> | <b>11,733</b> | <b>5.72</b> | <b>2,157</b> | <b>6,666</b> | <b>4.66</b> | <b>998</b> | <b>18,602</b>           | <b>5.31</b> | <b>3,178</b> |

## Modifying factors

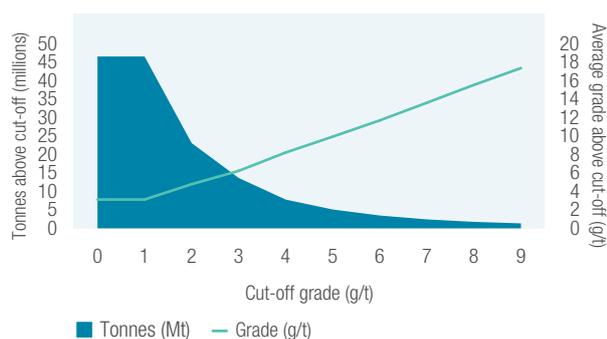
|                                      | Units    | December           |             |             |
|--------------------------------------|----------|--------------------|-------------|-------------|
|                                      |          | 2020               | 2019        | 2018        |
| <b>Mineral Resources parameters</b>  |          |                    |             |             |
| Mineral Resources Au price           | US\$/oz  | <b>1,500</b>       | 1,400       | 1,400       |
|                                      | US\$/A\$ | <b>0.75</b>        | 0.76        | 0.76        |
|                                      | A\$/oz   | <b>2,000</b>       | 1,850       | 1,850       |
| Cut-off for underground              | g/t      | <b>2.3 – 3.9</b>   | 2.5 – 3.8   | 2.3 – 3.7   |
| Cut-off for open pit                 | g/t      | <b>0.77 – 0.95</b> | 0.83 – 0.95 | 0.80 – 0.99 |
| <b>Mineral Reserves parameters</b>   |          |                    |             |             |
| Mineral Reserves Au price            | US\$/oz  | <b>1,300</b>       | 1,200       | 1,200       |
|                                      | US\$/A\$ | <b>0.74</b>        | 0.75        | 0.75        |
|                                      | A\$/oz   | <b>1,750</b>       | 1,600       | 1,600       |
| Cut-off for fresh ore                | g/t      | <b>2.6 – 4.4</b>   | 2.85 – 4.4  | 2.6 – 4.2   |
| Cut-off for oxide                    | g/t      | <b>0.88 – 1.07</b> | 0.96 – 1.13 |             |
| Mining recovery factor (underground) | %        | <b>70 – 93</b>     | 80 – 95     | 90          |
| Mining recovery factor (open pit)    | %        | <b>87 – 96</b>     | 83          | 83          |
| Mine Call Factor (MCF)               | %        | <b>100</b>         | 100         | 100         |
| Dilution (underground)               | %        | <b>14 – 29</b>     | 24          | 20          |
| Dilution (open pit)                  | %        | <b>2 – 39</b>      | 24          | 20          |
| Plant recovery <sup>1</sup>          | %        | <b>93.3</b>        | 93.3        | 92.1        |
| Processing capacity                  | Mtpa     | <b>1.3</b>         | 1.3         | 1.3         |

<sup>1</sup> Average recovery stated; forecast recoveries are calculated using derived and applied recovery models that also depend on ore source

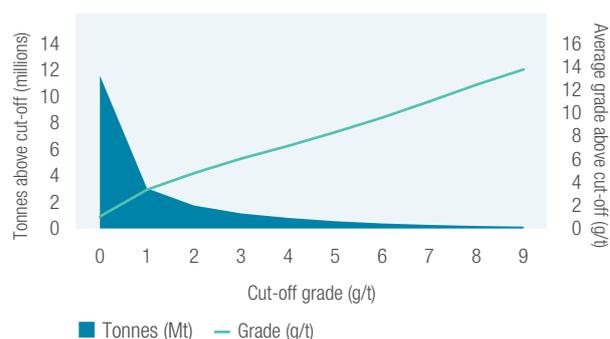
## Grade tonnage curves

The grade tonnage curves for the surface and underground Mineral Resources are presented below. Stockpiles are excluded from the grade tonnage curves.

GRADE-TONNAGE CURVE – UNDERGROUND



GRADE-TONNAGE CURVE – OPEN PIT



## Mineral Reserves classification

| Classification                        | Tonnes (kt)  |          |          | Grade (g/t) |          |          | Au (koz)   |          |          |
|---------------------------------------|--------------|----------|----------|-------------|----------|----------|------------|----------|----------|
|                                       | Dec 2020     | Dec 2019 | Dec 2018 | Dec 2020    | Dec 2019 | Dec 2018 | Dec 2020   | Dec 2019 | Dec 2018 |
| <b>Open pit and underground</b>       |              |          |          |             |          |          |            |          |          |
| Proved                                | <b>6</b>     | 53       | 58       | <b>5.43</b> | 3.45     | 4.84     | <b>1</b>   | 6        | 9        |
| Probable                              | <b>5,181</b> | 4,336    | 3,501    | <b>5.46</b> | 5.37     | 4.78     | <b>909</b> | 748      | 538      |
| <b>Total open pit and underground</b> | <b>5,187</b> | 4,389    | 3,560    | <b>5.45</b> | 5.35     | 4.78     | <b>910</b> | 754      | 547      |
| Surface stockpiles                    |              |          |          |             |          |          |            |          |          |
| Proved                                | <b>105</b>   | 252      | 128      | <b>2.07</b> | 2.13     | 3.15     | <b>7</b>   | 17       | 13       |
| <b>Grand total</b>                    | <b>5,292</b> | 4,641    | 3,688    | <b>5.39</b> | 5.17     | 4.72     | <b>917</b> | 772      | 560      |

## Agnew gold mine continued

### Mineral Reserves classification per mining area

| Mineral Reserves areas     | Proved      |             |          | Probable     |             |            | Total Mineral Reserves |             |            |
|----------------------------|-------------|-------------|----------|--------------|-------------|------------|------------------------|-------------|------------|
|                            | Tonnes (kt) | Grade (g/t) | Au (koz) | Tonnes (kt)  | Grade (g/t) | Au (koz)   | Tonnes (kt)            | Grade (g/t) | Au (koz)   |
| <b>Underground</b>         |             |             |          |              |             |            |                        |             |            |
| Waroonga                   |             |             |          |              |             |            |                        |             |            |
| Kim and Edmunds            | —           | —           | —        | 103          | 9.83        | 32         | 103                    | 9.83        | 32         |
| FBH                        | —           | —           | —        | 443          | 5.00        | 71         | 443                    | 5.00        | 71         |
| Main, Main South, Rajah    | —           | —           | —        | 171          | 5.47        | 30         | 171                    | 5.47        | 30         |
| North                      | —           | —           | —        | 342          | 7.52        | 83         | 342                    | 7.52        | 83         |
| Kath                       | —           | —           | —        | 998          | 8.69        | 279        | 998                    | 8.69        | 279        |
| <b>Waroonga – total</b>    | <b>—</b>    | <b>—</b>    | <b>—</b> | <b>2,057</b> | <b>7.49</b> | <b>495</b> | <b>2,057</b>           | <b>7.49</b> | <b>495</b> |
| <b>New Holland – total</b> | <b>6</b>    | <b>5.43</b> | <b>1</b> | <b>771</b>   | <b>4.96</b> | <b>123</b> | <b>777</b>             | <b>4.96</b> | <b>124</b> |
| <b>Redeemer – total</b>    | <b>—</b>    | <b>—</b>    | <b>—</b> | <b>1,095</b> | <b>5.70</b> | <b>201</b> | <b>1,095</b>           | <b>5.70</b> | <b>201</b> |
| <b>Total underground</b>   | <b>6</b>    | <b>5.43</b> | <b>1</b> | <b>3,924</b> | <b>6.49</b> | <b>819</b> | <b>3,930</b>           | <b>6.49</b> | <b>820</b> |
| <b>Surface</b>             |             |             |          |              |             |            |                        |             |            |
| <b>Total open pits</b>     | <b>—</b>    | <b>—</b>    | <b>—</b> | <b>1,257</b> | <b>2.22</b> | <b>90</b>  | <b>1,257</b>           | <b>2.22</b> | <b>90</b>  |
| Agnew surface stockpiles   | 105         | 2.07        | 7        | —            | —           | —          | 105                    | 2.07        | 7          |
| <b>Grand total</b>         | <b>111</b>  | <b>2.25</b> | <b>8</b> | <b>5,181</b> | <b>5.46</b> | <b>909</b> | <b>5,292</b>           | <b>5.39</b> | <b>917</b> |

The current LoM plan reflects mining at the Waroonga, New Holland and Redeemer complexes, along with the previously declared open pits supported by mining at Barren Lands

### Mineral Resources and Mineral Reserves reconciliation year-on-year

| Factors that affected Mineral Resources reconciliation year-on-year   |
|---|
| Mining depletion (-248koz)  |
| Higher gold price A\$1,850/oz to A\$2,000/oz (+179koz)  |
| Infill drilling resulted in additions at Kath Lower, Sheba and Waroonga North   |
| Increases due to extensional discovery at Kath, Sheba, Barren Lands underground, Redeemer North underground, Hidden Secret and Waroonga North (+729koz) |

| Factors that affected Mineral Reserves reconciliation year-on-year   |
|--|
| Mining depletion (-248koz)   |
| Higher gold price A\$1,600/oz to A\$1,750/oz (+63koz)  |
| Inferred to Indicated conversion and extensions to Waroonga North, Kath Lower Sheba South and Barren Lands underground (+174koz) |
| Infill drilling and Mineral Resource model updates increased ounces at Waroonga North, Kath Lower and Sheba South (+161koz)      |

#### MINERAL RESOURCE RECONCILIATION

Gold (koz)

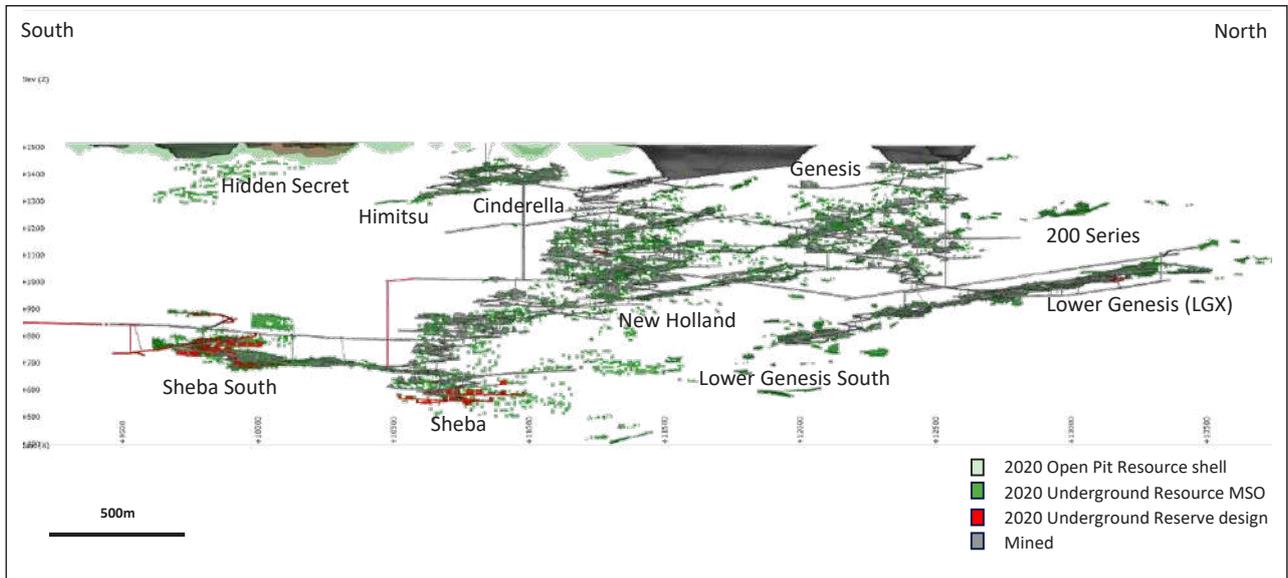


#### MINERAL RESERVE RECONCILIATION

Gold (koz)



**Agnew: Schematic NS long-section through the New Holland/Genesis ore bodies and mine workings**



**Mineral Reserves sensitivity**

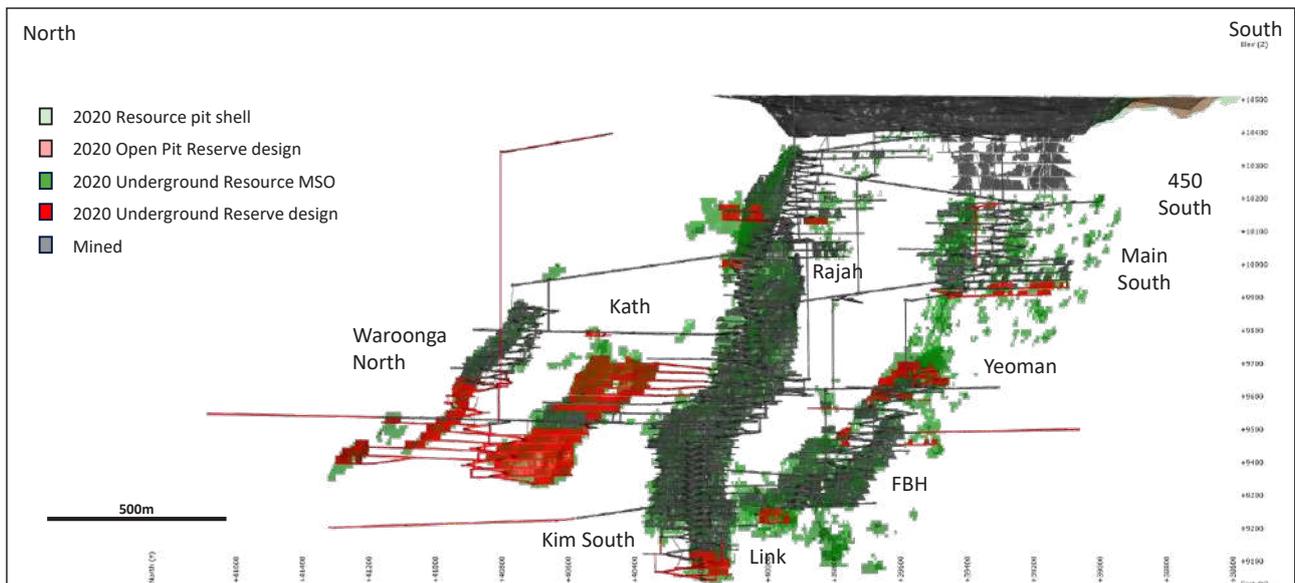
To illustrate the impact of fluctuations in gold price and exchange rates on the current declaration, Agnew generated sensitivities for Mineral Reserves. The following graph indicates the Managed Mineral Reserves sensitivity at -15% -10%, -5%, base, +5%, +10% and +15% to the base (A\$1,750/oz) reserve gold price.

These sensitivities (other than for the base case) are not supported by detailed plans and depletion schedules. They should only be considered on an indicative basis, specifically as such sensitivities assume 100% selectivity, without any operating cost increases.

**MINERAL RESERVE SENSITIVITY**  
GOLD (koz)

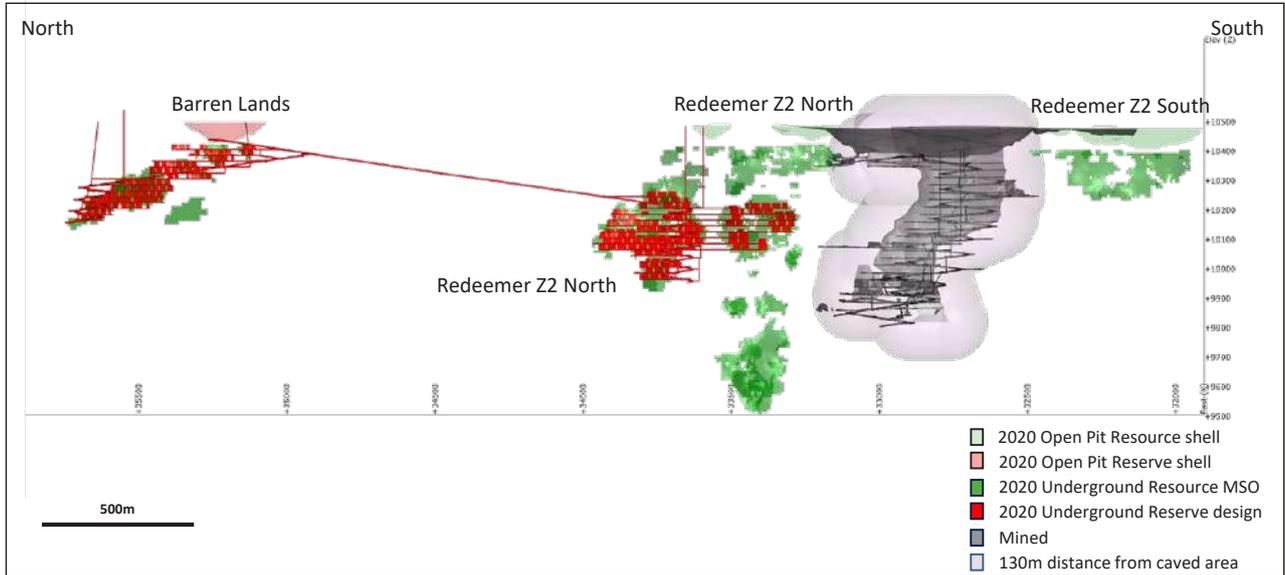


**Agnew: Schematic NS long-section through the Waroonga ore bodies**



# Agnew gold mine continued

Agnew: Schematic NS long-section through the Redeemer Zone 2 and Barren Lands ore bodies

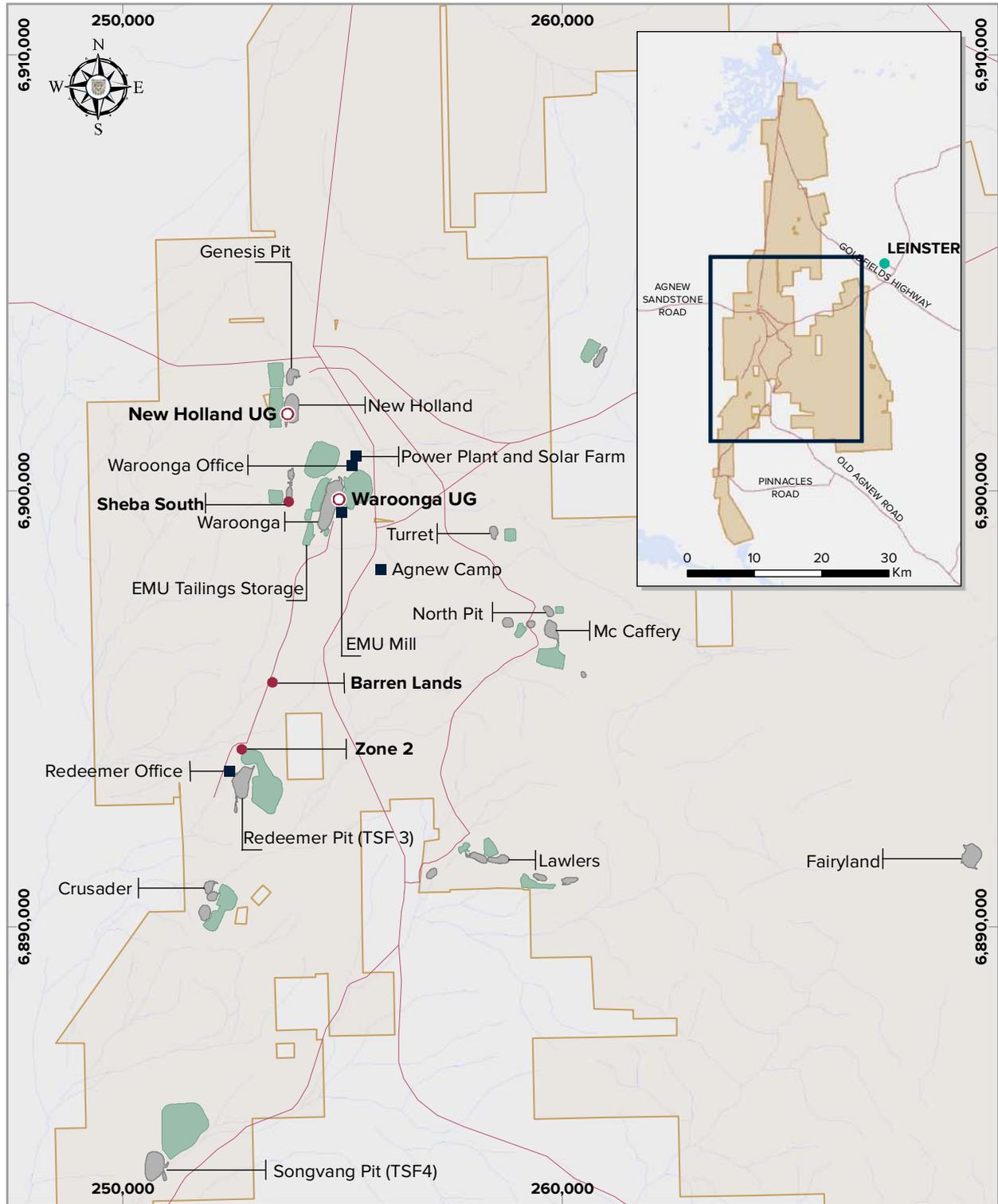


Note: Mineralisation within 130m of the caved area is sterilised and not reported as Resource

The Redeemer complex comprises the Redeemer Zone 2 North and Redeemer Zone 2 South ore bodies adjacent to previously operated Redeemer mine workings



Agnew: Resource definition drilling at Redeemer project



**Reference**

- |                       |   |                    |   |
|-----------------------|---|--------------------|---|
| Buildings             | ■ | Exploration Target | ● |
| Main Roads            | — | UG Mine            | ○ |
| Ephemeral Watercourse | — | Open Pit           | ■ |
| Lease Outline         | ■ | Waste Dump         | ■ |

**Gold Fields Limited  
Agnew Gold Mine**

MINE INFRASTRUCTURE AS AT DECEMBER 2020



Co-ordinate System: Map Grid of Australia Zone 51  
(Geocentric Datum of Australia 1994)

## Granny Smith gold mine



Current mining focuses on extracting Zone 110/120 and runs in parallel with investment in the future mining phases at Wallaby to secure reserve replacement. This includes advancing development to determine the full extent of the Zone 110/120 lodes and continued development of Zone 135 to enable drilling to support the ongoing FS, which also includes the high-grade vertical lodes. In addition, the Zone 150 'constraints and scoping study' will be progressed to assess the potential for mining at increased depth at Wallaby.

Granny Smith achieved a 4.3% increase in Reserves, as resource conversion drilling continued to return positive results predominantly from the Zone 135 vertical lodes at the Wallaby deposit. In 2020, the drill focus was on upgrading existing resources to reserves, combined with implementing updated pillar extraction and sterilisation protocols. In 2021, emphasis will be on improving resource to reserve conversion, while exploration drilling will recommence in Zone 150, which is not currently reported as a Resource. Regional exploration programmes are now focused on testing bedrock anomaly targets on both land and lake-based projects.

### ASSET FUNDAMENTALS

|   |  |
|---|--|
| <b>General location</b>                   | Granny Smith is situated in the Yilgarn Craton at an elevation of 400m amsl, and located at latitude 28°51'09"S and longitude 122°18'35"E, ~400km northeast of the town of Kalgoorlie in the eastern Goldfields of Western Australia in the Laverton district.   |
| <b>Brief history and Regional geology</b> | The Annexure to this Supplement provides a summary of Granny Smith's history and Regional geology.   |
| <b>Climate</b>                            | The climate is semi-arid and temperatures vary from an average minimum of 4° C in June to an average maximum of 36° C in January. The average annual rainfall is 220mm. No extreme climate conditions are experienced that materially affect mining operations.  |
| <b>Licence status and holdings</b>        | Granny Smith is owned by GSM Mining Company Proprietary Limited, a wholly owned subsidiary of Gold Fields. This entity was established on 1 October 2013, following Gold Fields' acquisition of the asset from Barrick Corporation. Granny Smith controls exploration and mineral rights over 96,698ha, including miscellaneous and non-managed tenements (96 tenements) and has security of tenure for all current exploration and MLs that contribute to future Mineral Reserves.  |
| <b>Mining method</b>                      | Wallaby underground is accessed via a decline, mining methods employed include room and pillar, bulk stopes and long-hole open stoping. The Zone 135 bulk stopes reflect the deepest mining in the LoM plan at Wallaby at ~1,450m below surface. Ground support, pillars and paste fill are designed to manage seismic activity. Operations utilise owner mining. Road haulage carts ore to the processing plant from the decline portal.  |
| <b>Operational infrastructure</b>         | Granny Smith has one underground mine contributing to the Mineral Reserves and Mineral Resources. The Mineral Reserves do not include any open pits, and one open pit contributes to the Mineral Resources. The mine has one ore stockpile in the LoM plan, centralised administrative offices and engineering workshops.  |
| <b>Mineral processing and TSFs</b>        | <p>Ore is processed at the CIP processing plant under campaign milling conditions and is located 15km northeast of the Wallaby underground mine. Granny Smith operates a single TSF that comprises three compartments, known as cells 1, 2 and 3. A fourth cell will be constructed in 2021 next to cell 3 to provide additional tailings capacity for the rest of the LoM.</p> <p>Cell 1 has a high B ANCOLD consequence rating, and was raised to its final permitted crest elevation of 448 metres relative level (mRL) in late 2016. It has a remaining LoM storage capacity of ~0.96Mt. This cell is inactive.</p> <p>Cell 2 was raised to its final permitted crest elevation of 448.5mRL in 2012. This cell has a high B ANCOLD consequence rating, is filled to capacity and is being harvested for paste fill.</p> <p>Cell 3 has a high B ANCOLD consequence rating, was raised to an elevation of 432.2mRL in November 2018 (final permitted elevation of 437mRL) and has a remaining LoM storage capacity of ~2.86Mt.</p> |

## ASSET FUNDAMENTALS continued

### Local geology, deposit type and mineralisation style

The regional geology of the Yilgarn Craton is described in the Australia regional overview section of the Annexure to this Supplement.

The Granny Smith region is dominated by the Mt Margaret Dome in the northwest and the Kirgella Dome in the southeast. These domes are flanked to the east and west by north westnorth striking shear zones, with the central zone between the two domes dominated by north to north northeast striking sigmoidal shear zones. These distinctly different strikes to the shear zones developed early in the tectonic evolution and resulted in a favourable architecture for late-stage orogenic gold mineralisation at Wallaby and Granny Smith.

Orogenic greenstone gold deposits are hosted in different styles of lodes. The lodes comprise vein stock works localised by a northerly trending shear at the margin of a granodiorite. The Wallaby lodes are flat lying alteration zones hosted in magnetite amphibole altered conglomerate. Mineralised zones show moderate to long-range geological continuity and short-range grade continuity.

### LoM: Proved and Probable Reserves

Extensional and brownfield exploration continues, which will sustain an extended LoM beyond current Proved and Probable Reserves. It is estimated that the current Mineral Reserves are sufficient for a 10-year LoM.

### Sustainable development

Granny Smith retained its ISO 14001, 45001 and 27001 certifications. International Cyanide Management Code (ICMC) recertification was achieved in 2019. The mine complies with all environmental legislation.

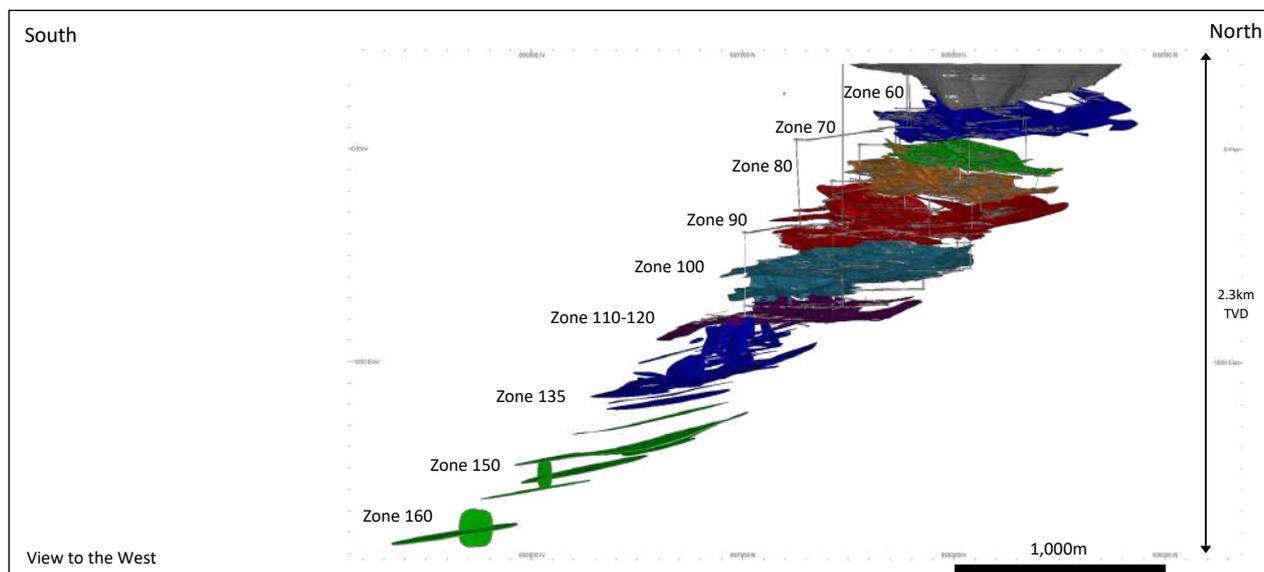
As with all Gold Fields' operations in Australia, Granny Smith constituted a Reconciliation Action Plan (RAP) working group to align with the Gold Fields RAP.

## KEY DEVELOPMENTS AND MATERIAL ISSUES

- The changes to the production sequencing required to deal with the seismicity in the lower parts of the mine were successfully implemented in 2020, together with the start of bulk stope mining in Zone 120 in conjunction with integrated paste fill
- Upgraded refrigeration and ventilation infrastructure was completed in 2020 with Vent Rises 6 and 8
- Several projects are pursuing opportunities to improve efficiencies and address cost pressures due to the increased depth of mining and associated increases in haulage distance, travel time, ventilation and ground control requirements. These include:
  - Continued development of the Joey decline as part of a second haulage decline system
  - Business improvement and modernisation projects centred around haulage and production efficiencies
  - Options to dispose of waste underground through backfilling old stopes
  - Implement the digital infrastructure and integrated operations platform
- Ongoing exploration drilling expanded the Reserve footprint of the Zone 135 flat and vertical lodes and framed significant mineralised zones down to Zone 160 at Wallaby
- A Zone 135 FS commenced to integrate the expanded Reserve profiled in 2020 into the LoM plan
- The resource development strategy continues to focus on identifying the potential of the Wallaby system down to the Zone 150 level, including geotechnical and seismic modelling and metallurgical response testing
- The Resource Optimisation Project (ROP) continues. The plan aims to define previously overlooked extensions and economic remnants in the upper zones of Wallaby to extract supplementary ore
- A new hybrid power system, comprising more than 20,000 solar panels (7MW capacity) and supported by a 2MW/1MWh battery system, was commissioned in 2020 supporting the existing gas plant, and reduced the mine's fuel consumption by 10% to 13%
- Strategic DD of high-quality bedrock targets from previously gathered foundational data relating to regolith, anomalism, geology and multi-element dispersion from aircore drilling commenced at the Granny Smith deposit area
- Risks to the execution of the LoM plan include the following:
  - Mining flexibility reducing with depth in conjunction with the introduction of paste fill in the mine's deeper areas and an increase in the size of geotechnical regional stability pillars to mitigate seismic activity
  - The Geotechnical Review Board (GRB) continues to review and provide recommendations on geotechnical design and extraction sequencing for reducing the impact of seismicity
  - Deeper-level mining is associated with increasing costs but is expected to be offset by increasing head grade and the impact of a broad range of business improvement projects, including mining at depth studies and cost-efficiency initiatives to maintain the AIC/oz margin
  - Mining efficiency is expected to increase with modernisation, automation and the dual decline access

## Granny Smith gold mine continued

Granny Smith: Schematic of the Wallaby underground ore zone model looking west



### OPERATING STATISTICS

|  | Units    | Historic performance |          |          |
|--|----------|----------------------|----------|----------|
|  |          | Dec 2020             | Dec 2019 | Dec 2018 |
| <b>Underground mining</b>                          |          |                      |          |          |
| Total mined  | kt       | <b>2,336</b>         | 2,342    | 2,322    |
| – Waste mined (opex)                               | kt       | <b>115</b>           | 152      | 72       |
| – Waste mined (capex)                              | kt       | <b>522</b>           | 479      | 495      |
| – Ore mined  | kt       | <b>1,700</b>         | 1,712    | 1,755    |
| Mined grade  | g/t      | <b>5.32</b>          | 5.29     | 5.25     |
| <b>Processing</b>                                  |          |                      |          |          |
| Tonnes treated                                     | kt       | <b>1,719</b>         | 1,753    | 1,778    |
| Head grade   | g/t      | <b>5.27</b>          | 5.20     | 5.26     |
| Yield  | g/t      | <b>4.88</b>          | 4.88     | 4.90     |
| Plant recovery                                     | %        | <b>93.0</b>          | 93.6     | 93.2     |
| Total Au production                                | koz      | <b>270</b>           | 275      | 280      |
|  | kg       | <b>8,387</b>         | 8,548    | 8,721    |
| <b>Financials</b>                                  |          |                      |          |          |
| Average Au price received                          | US\$/oz  | <b>1,758</b>         | 1,396    | 1,266    |
|  | A\$/oz   | <b>2,551</b>         | 2,007    | 1,694    |
| Exchange rate (annual average)                     | US\$/A\$ | <b>0.69</b>          | 0.70     | 0.75     |
| Cost of sales before amortisation and depreciation | A\$m     | <b>242.5</b>         | 226.1    | 225.1    |
|  | A\$/oz   | <b>899</b>           | 823      | 803      |
| Capex  | A\$m     | <b>96.4</b>          | 103.8    | 105.4    |
|  | A\$/oz   | <b>357</b>           | 378      | 376      |
| AIC  | A\$/oz   | <b>1,465</b>         | 1,325    | 1,239    |
|  | US\$/oz  | <b>1,010</b>         | 922      | 925      |

## EXPLORATION AND RESOURCES DEFINITION DRILLING

2019/2020 exploration expenditures are presented in the Australia regional section.

In 2020, exploration focused on:

- Resource conversion drilling and defining extensions to the Wallaby deposit. Expanding the Resource footprint of the Zone 135 flat and vertical lodes, including confirming the full footprint of Zone 135 to support completion of the FS during 2021
- Discovering a new ore source outside Wallaby by assessing the potential across the broader tenement package. Follow-up infill aircore drilling was completed on aircore anomalies at the Dream prospect. DD followed up the preliminary bedrock target at Fog, Tassie Devil and around the Granny Smith complex. On Lake Carey, diamond drill programmes targeting bedrock intersections below

aircore anomalies were completed at Brahma, Ganymede, Dawn and Morning Star. Drilling at Brahma and Ganymede failed to identify significant bedrock mineralisation

In 2021, exploration will be directed at:

- Drilling for potential resource growth in Zone 150 at Wallaby
- Continued resource and reserve growth at Wallaby through extensions to lodes both laterally and at depth, focusing on Zone 135
- Surface drill programme around Wallaby to strategically test for potential lode extensions
- Drilling at the Granny Smith complex to define new extensions for resource growth
- Continued bedrock testing of high-quality surface exploration targets generated by anomalism and refining geological interpretations from first pass aircore programmes

## PROJECT AND STUDY PIPELINE

A broad range of projects is scheduled, from strategic option analysis, desktop and scoping studies to PFSs and FSs, aimed at enhancing the LoM plan.

The 2021 projects include:

- Completing the Zone 135 FS in parallel with initial development
- Completing a scoping study for the Granny Smith complex
- Commencing a PFS for the Granny Smith complex
- Commencing a scoping study on Zone 150 at Wallaby

## MINERAL RESOURCES AND MINERAL RESERVES

### Mineral Resources classification

| Classification           | Tonnes (kt)   |          |          | Grade (g/t) |          |          | Au (koz)     |          |          |
|--------------------------|---------------|----------|----------|-------------|----------|----------|--------------|----------|----------|
|                          | Dec 2020      | Dec 2019 | Dec 2018 | Dec 2020    | Dec 2019 | Dec 2018 | Dec 2020     | Dec 2019 | Dec 2018 |
| <b>Open pit</b>          |               |          |          |             |          |          |              |          |          |
| Measured                 | —             | —        | —        | —           | —        | —        | —            | —        | —        |
| Indicated                | —             | —        | 434      | —           | —        | 1.95     | —            | —        | 27       |
| Inferred                 | <b>297</b>    | 297      | 589      | <b>1.91</b> | 1.91     | 1.95     | <b>18</b>    | 18       | 37       |
| <b>Total open pit</b>    | <b>297</b>    | 297      | 1,023    | <b>1.91</b> | 1.91     | 1.95     | <b>18</b>    | 18       | 64       |
| <b>Underground</b>       |               |          |          |             |          |          |              |          |          |
| Measured                 | <b>4,814</b>  | 4,544    | 4,008    | <b>6.07</b> | 5.36     | 5.79     | <b>940</b>   | 783      | 745      |
| Indicated                | <b>28,758</b> | 31,499   | 27,792   | <b>5.92</b> | 5.67     | 5.79     | <b>5,471</b> | 5,742    | 5,173    |
| Inferred                 | <b>11,051</b> | 13,034   | 13,374   | <b>4.23</b> | 4.20     | 4.30     | <b>1,502</b> | 1,761    | 1,847    |
| <b>Total underground</b> | <b>44,622</b> | 49,077   | 45,174   | <b>5.52</b> | 5.25     | 5.35     | <b>7,913</b> | 8,286    | 7,766    |
| <b>Total stockpiles</b>  | <b>31</b>     | 43       | 43       | <b>4.76</b> | 4.47     | 5.21     | <b>5</b>     | 6        | 7        |
| <b>Grand total</b>       | <b>44,951</b> | 49,417   | 46,240   | <b>5.49</b> | 5.23     | 5.27     | <b>7,936</b> | 8,310    | 7,837    |

## Granny Smith gold mine continued

### Mineral Resources classification per mining area

| Area                     | Measured     |             |            | Indicated     |             |              | Inferred      |             |              | Total Mineral Resources |             |              |
|--------------------------|--------------|-------------|------------|---------------|-------------|--------------|---------------|-------------|--------------|-------------------------|-------------|--------------|
|                          | Tonnes (kt)  | Grade (g/t) | Au (koz)   | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)             | Grade (g/t) | Au (koz)     |
| <b>Open pit</b>          |              |             |            |               |             |              |               |             |              |                         |             |              |
| Hillside                 | —            | —           | —          | —             | —           | —            | 297           | 1.91        | 18           | 297                     | 1.91        | 18           |
| <b>Total open pit</b>    | <b>—</b>     | <b>—</b>    | <b>—</b>   | <b>—</b>      | <b>—</b>    | <b>—</b>     | <b>297</b>    | <b>1.91</b> | <b>18</b>    | <b>297</b>              | <b>1.91</b> | <b>18</b>    |
| <b>Underground</b>       |              |             |            |               |             |              |               |             |              |                         |             |              |
| Granny Smith             | —            | —           | —          | 3,581         | 3.77        | 434          | 2,067         | 3.44        | 299          | 5,648                   | 3.65        | 663          |
| Wallaby                  |              |             |            |               |             |              |               |             |              |                         |             |              |
| Zone 80                  | 523          | 5.51        | 93         | 811           | 5.33        | 139          | 190           | 4.03        | 25           | 1,525                   | 5.23        | 256          |
| Zone 90                  | 507          | 6.23        | 101        | 712           | 4.84        | 111          | 714           | 3.89        | 89           | 1,932                   | 4.85        | 301          |
| Zone 100                 | 1,253        | 5.57        | 224        | 3,956         | 5.88        | 747          | 1,004         | 3.97        | 128          | 6,213                   | 5.50        | 1,100        |
| Zones 110 – 120          | 2,082        | 6.84        | 458        | 8,090         | 6.58        | 1,712        | 780           | 4.48        | 112          | 10,952                  | 6.48        | 2,282        |
| Zone 135                 | —            | —           | —          | 9,813         | 6.53        | 2,060        | 4,480         | 4.92        | 709          | 14,293                  | 6.03        | 2,769        |
| Other                    | 449          | 4.40        | 64         | 1,794         | 4.65        | 268          | 1,817         | 3.59        | 210          | 4,060                   | 4.15        | 542          |
| <b>Total underground</b> | <b>4,814</b> | <b>6.07</b> | <b>940</b> | <b>28,758</b> | <b>5.92</b> | <b>5,471</b> | <b>11,051</b> | <b>4.23</b> | <b>1,502</b> | <b>44,622</b>           | <b>5.52</b> | <b>7,913</b> |
| <b>Surface</b>           |              |             |            |               |             |              |               |             |              |                         |             |              |
| Surface stockpiles       | 31           | 4.76        | 5          | —             | —           | —            | —             | —           | —            | 31                      | 4.76        | 5            |
| <b>Grand total</b>       | <b>4,845</b> | <b>6.06</b> | <b>944</b> | <b>28,758</b> | <b>5.92</b> | <b>5,471</b> | <b>11,348</b> | <b>4.17</b> | <b>1,520</b> | <b>44,951</b>           | <b>5.49</b> | <b>7,936</b> |

### Modifying factors

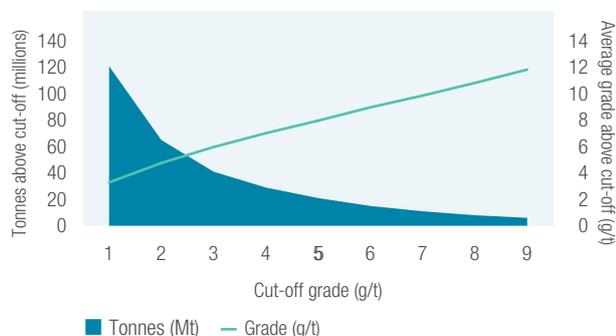
|                                      | Units    | December         |           |             |
|--------------------------------------|----------|------------------|-----------|-------------|
|                                      |          | 2020             | 2019      | 2018        |
| <b>Mineral Resources parameters</b>  |          |                  |           |             |
| Mineral Resources Au price           | US\$/oz  | <b>1,500</b>     | 1,400     | 1,400       |
|                                      | US\$/A\$ | <b>0.75</b>      | 0.76      | 0.76        |
|                                      | A\$/oz   | <b>2,000</b>     | 1,850     | 1,850       |
| Cut-off for open pit                 | g/t      | <b>0.63</b>      | 0.63      | 0.60 – 0.63 |
| Cut-off for underground              | g/t      | <b>2.1 – 2.8</b> | 2.1 – 2.9 | 2.0 – 2.8   |
| <b>Mineral Reserves parameters</b>   |          |                  |           |             |
| Mineral Reserves Au price            | US\$/oz  | <b>1,300</b>     | 1,200     | 1,200       |
|                                      | US\$/A\$ | <b>0.74</b>      | 0.75      | 0.75        |
|                                      | A\$/oz   | <b>1,750</b>     | 1,600     | 1,600       |
| Cut-off for underground              | g/t      | <b>2.5 – 3.2</b> | 2.5 – 3.3 | 2.4 – 3.2   |
| Mining recovery factor (underground) | %        | <b>90 – 92</b>   | 90 – 92   | 91          |
| MCF                                  | %        | <b>100</b>       | 100       | 100         |
| Dilution underground                 | %        | <b>12 – 20</b>   | 12 – 16   | 15          |
| Plant recovery <sup>1</sup>          | %        | <b>92.3</b>      | 92.8      | 92.2        |
| Processing capacity                  | Mtpa     | <b>3.5</b>       | 3.5       | 3.5         |

<sup>1</sup> Average recovery stated; forecast recoveries are calculated using derived and regularly updated recovery models that also depend on ore source

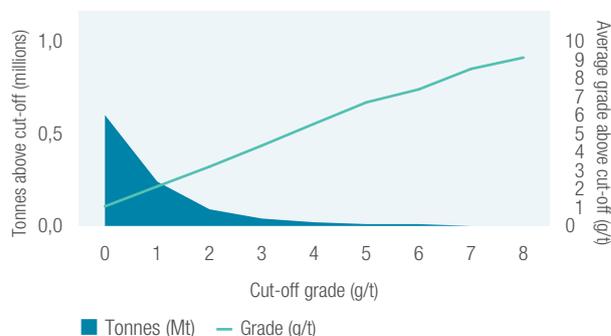
### Grade tonnage curves

The grade tonnage curves for the surface and underground Mineral Resources are presented below. Stockpiles are excluded from the grade tonnage curves.

GRADE-TONNAGE CURVE – UNDERGROUND



GRADE-TONNAGE CURVE – OPEN PIT



### Mineral Reserves

#### Mineral Reserves classification

| Classification           | Tonnes (kt)   |               |               | Grade (g/t) |             |             | Au (koz)     |              |              |
|--------------------------|---------------|---------------|---------------|-------------|-------------|-------------|--------------|--------------|--------------|
|                          | Dec 2020      | Dec 2019      | Dec 2018      | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020     | Dec 2019     | Dec 2018     |
| <b>Underground</b>       |               |               |               |             |             |             |              |              |              |
| Proved                   | 2,216         | 839           | 1,106         | 5.03        | 4.81        | 4.92        | 358          | 130          | 175          |
| Probable                 | 10,366        | 11,608        | 11,465        | 5.41        | 5.21        | 5.60        | 1,804        | 1,943        | 2,064        |
| <b>Total underground</b> | <b>12,582</b> | <b>12,447</b> | <b>12,571</b> | <b>5.35</b> | <b>5.18</b> | <b>5.54</b> | <b>2,163</b> | <b>2,072</b> | <b>2,239</b> |
| <b>Surface</b>           |               |               |               |             |             |             |              |              |              |
| Proved                   | 31            | 43            | 43            | 4.76        | 4.47        | 5.21        | 5            | 6            | 7            |
| <b>Grand total</b>       | <b>12,613</b> | <b>12,490</b> | <b>12,614</b> | <b>5.34</b> | <b>5.18</b> | <b>5.54</b> | <b>2,167</b> | <b>2,078</b> | <b>2,246</b> |

#### Mineral Reserves classification per mining area

| Area                             | Proved       |             |            | Probable      |             |              | Total Mineral Reserves |             |              |
|----------------------------------|--------------|-------------|------------|---------------|-------------|--------------|------------------------|-------------|--------------|
|                                  | Tonnes (kt)  | Grade (g/t) | Au (koz)   | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)            | Grade (g/t) | Au (koz)     |
| <b>Underground</b>               |              |             |            |               |             |              |                        |             |              |
| Other (Zones 250, 60, 70 and 80) | 78           | 3.60        | 9          | 709           | 4.81        | 110          | 787                    | 4.69        | 119          |
| Zone 90                          | 151          | 4.50        | 22         | —             | —           | —            | 151                    | 4.50        | 22           |
| Zone 100                         | 459          | 4.44        | 65         | 1,446         | 5.38        | 250          | 1,904                  | 5.15        | 315          |
| Zones 110 – 120                  | 1,528        | 5.33        | 262        | 3,460         | 5.41        | 601          | 4,988                  | 5.38        | 863          |
| Zone 135                         | —            | —           | —          | 4,752         | 5.52        | 843          | 4,752                  | 5.52        | 843          |
| <b>Total underground</b>         | <b>2,216</b> | <b>5.03</b> | <b>358</b> | <b>10,366</b> | <b>5.41</b> | <b>1,804</b> | <b>12,582</b>          | <b>5.35</b> | <b>2,163</b> |
| <b>Surface</b>                   |              |             |            |               |             |              |                        |             |              |
| Surface stockpiles               | 31           | 4.76        | 5          | —             | —           | —            | 31                     | 4.76        | 5            |
| <b>Grand total</b>               | <b>2,247</b> | <b>5.02</b> | <b>363</b> | <b>10,366</b> | <b>5.41</b> | <b>1,804</b> | <b>12,613</b>          | <b>5.34</b> | <b>2,167</b> |

# Granny Smith gold mine continued

## Mineral Resources and Mineral Reserves reconciliation year-on-year

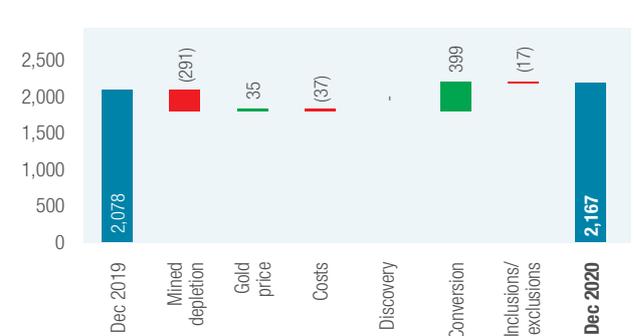
| Factors that affected Mineral Resources reconciliation year-on-year   |
|---|
| Mining depletion from Wallaby Zones 60, 70, 80, 90, 100 and 110/120 (-291koz)   |
| Higher gold price A\$1,850/oz to A\$2,000/oz  |
| Resource growth of 372koz primarily from resource extension discoveries in Zone 135 horizontal and vertical lodes outside of previous years' model footprints                       |
| Resource improvement of 311koz through infill conversion of potential material to resource and incremental lode grade or thickness improvements in previous years' model footprints |
| Decrease of 757koz through sterilisation, application of updated pillar extraction protocols and stockpile changes  |

| Factors that affected Mineral Reserve reconciliation year-on-year                                  |
|--|
| Mining depletion from Wallaby Zones 60, 70, 80, 90, 100 and 110/120 (-291koz)                      |
| Higher gold price A\$1,600/oz to A\$1,750/oz   |
| Reserve growth from Zone 100 and Zone 135 following conversion of Inferred Resources (+399koz)     |
| Decrease of 39koz in Zone 120 due to updated geotechnical guidance and pillar extraction protocols |

### MINERAL RESOURCE RECONCILIATION



### MINERAL RESERVE RECONCILIATION



### Mineral Reserves sensitivity

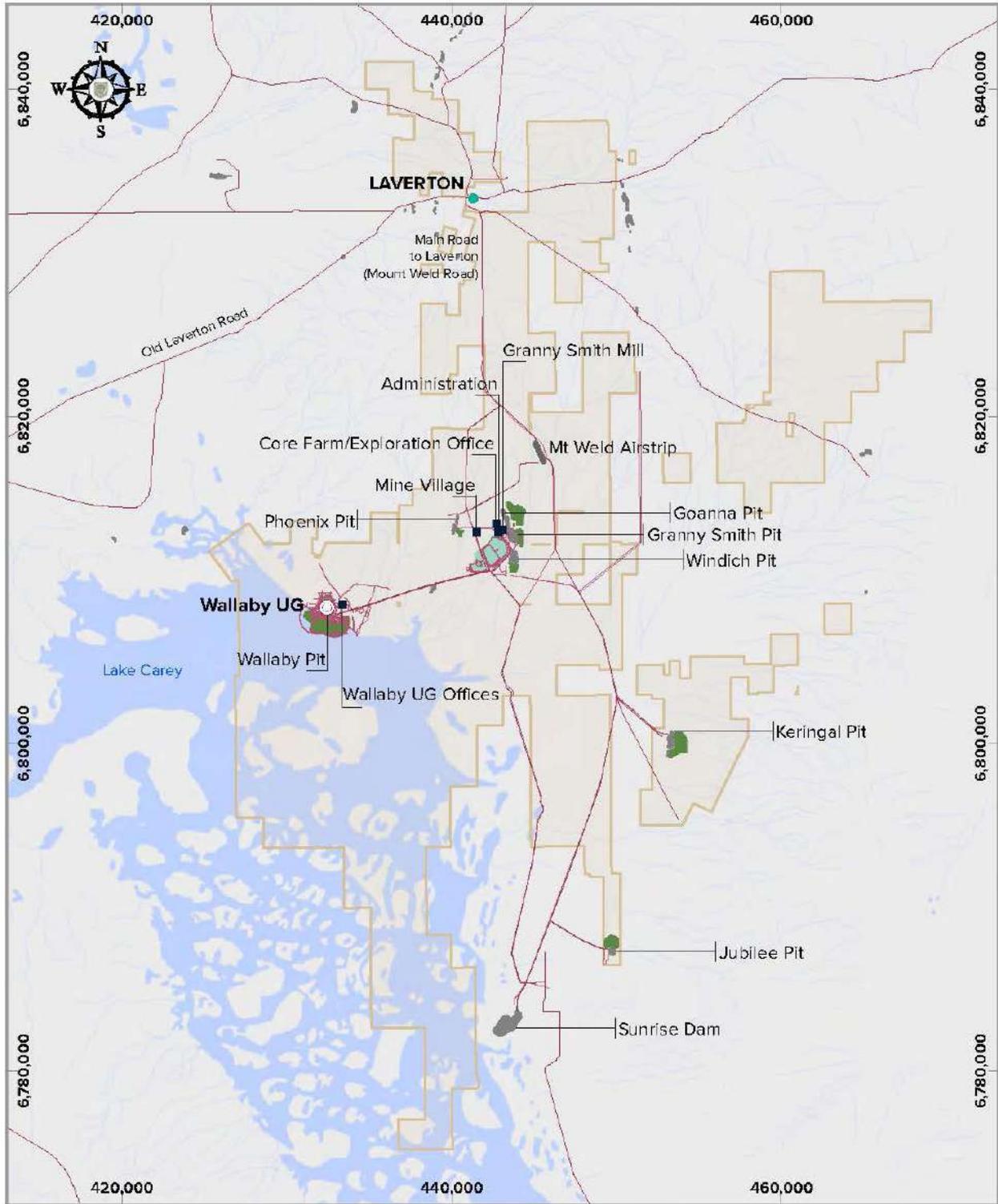
To illustrate the impact of fluctuations in gold price and exchange rates on the current declaration, Granny Smith generated sensitivities for Mineral Reserves. The following graph indicates the Managed Mineral Reserves sensitivity at -15%, -10%, -5%, base, +5%, +10% and +15% to the base A\$1,750/oz reserve gold price.

These sensitivities (other than for the base case) are not supported by detailed plans and depletion schedules. They should only be considered on an indicative basis, specifically as such sensitivities assume 100% selectivity, without any operating cost increases.

### MINERAL RESERVE SENSITIVITY



Granny Smith: Wallaby pit and mine offices with Lake Carey in the background

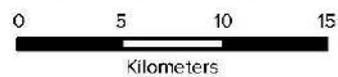


**Reference**

- |                       |   |               |   |
|-----------------------|---|---------------|---|
| Buildings             | ■ | Open Pit      | ■ |
| UG Mines              | ○ | Stockpiles    | ■ |
| Main Roads            | — | Tailings Dams | ■ |
| Ephemeral Watercourse | — | Waste Dump    | ■ |
| Lease Outline         | — |               |   |

**Gold Fields Limited  
Granny Smith Gold Mine**

MINE INFRASTRUCTURE AS AT DECEMBER 2020



Co-ordinate System: Map Grid of Australia Zone 51  
(Geocentric Datum of Australia 1994)

## Gruyere gold mine – 50% attributable to Gold Fields



Gold Fields' 50% ownership is held by Gruyere Mining Company Proprietary Limited, a wholly owned Australian subsidiary of Gold Fields, and will be reported as attributable, unless otherwise stated. In 2020, the Gruyere mine transitioned to mining fresh rock, which became a major portion of the processing plant feed, and completed its first full year of commercial production with 258koz of gold produced. The Resource and Reserve base remains robust at 6.7Moz and 3.5Moz managed respectively, supporting a nine-year LoM, low-cost gold operation. The focus for 2021 remains on process plant throughput, utilisation and efficiency in response to the harder and more abrasive fresh ore types, combined with increasing mining capacity to deliver against the operational and LoM plans.

### ASSET FUNDAMENTALS

|   |  |
|---|--|
| <b>General location</b>                   | The Gruyere deposit, centred at latitude 27°59'S and longitude 123°50'E, in the Yamarna Terrane of the Eastern Yilgarn, Western Australia. Gruyere is located 200km east of Laverton and 1,000km northeast of Perth.   |
| <b>Brief history and Regional geology</b> | The Annexure to this Supplement provides a summary of Gruyere's history and Regional Geology.  |
| <b>Climate</b>                            | The climate is semi-arid and temperatures vary from an average minimum of 4° C in June to an average maximum of 36° C in January. The average annual rainfall is 220mm. No extreme climate conditions are experienced that materially affect mining operations.  |
| <b>Licence status and holdings</b>        | The project, with granted tenements for mining, exploration and miscellaneous of 138,893ha, is located on ML M38/1267 granted on 5 May 2016 for 21 years. The ML is in the Yamarna pastoral lease.   |
| <b>Mining method</b>                      | <p>The Gruyere mine utilises mining contractors to mine the open pit using conventional drill, blast, load and haul activities. Gruyere pit reached fresh rock in 2020 allowing validation and optimisation of the geotechnical parameters. The pit is designed to be mined in stages over the LoM. Material was mined from both Stage 1 and Stage 2 during 2020.</p> <p>During 2020, mining moved from the predominantly oxide material mined in 2019 to fresher harder and more abrasive material.</p> <p>Crusher feed to the processing plant is provided by a combination of direct tip material from the mine and rock sourced from the run-of-mine (RoM) and long-term stockpiles.</p> |
| <b>Operational infrastructure</b>         | The Gruyere JV Mineral Reserve comprises five open pits plus ore stockpiles. The Mineral Resource includes seven open pits and one underground deposit. The operation has a processing plant with TSF and is supported by a power station with gas pipeline and power distribution lines; borefields and water supply infrastructure; centralised administrative offices; engineering workshops; accommodation village; airstrip and road networks.  |
| <b>Mineral processing and TSFs</b>        | <p>All ore mined is processed in the Gruyere plant which consists of primary crushing, SAG/ball milling, gravity and carbon-in-leach (CIL) circuits. The processing plant was designed to 7.5Mtpa but subsequent work shows this can be increased to 8.2Mtpa and then increased to 10Mtpa by 2024.</p> <p>The TSF perimeter embankment is constructed in a downstream manner (in stages) to enclose a surface area of ~203ha at Stage 1 (starter) and 231ha at Stage 6 (final). The TSF has a High C ANCOLD consequence rating and a remaining LoM storage capacity of ~81.1Mt.</p>  |

**ASSET FUNDAMENTALS** continued

|  |  |
|--|--|
| <p><b>Local geology, deposit type and mineralisation style</b></p> | <p>The regional geology of the Yilgarn Craton is described in the Australia regional overview section of the Annexure to this Supplement.</p> <p>Gruyere is an Archaean orogenic gold deposit. Mineralisation is hosted in the Gruyere monzonite porphyry. Gold is associated with varying intensity albite-sericite-chlorite-biotite-calcite alteration of the host rock.</p> <p>The Gruyere deposit is located on a flexure point in the regional-scale Dorothy Hills Greenstone Belt and Shear Zone. Orogenic gold mineralisation is hosted in the steep easterly dipping Gruyere porphyry, a medium-grained quartz monzonite porphyry that has intruded the country rocks. The host Gruyere porphyry averages 90m in horizontal width through the deposit with a maximum width of 190m in the centre of the deposit and tapering to around 5m – 10m width at the northern and southern extremities. The entire Gruyere porphyry is variably altered and gold grade is related to variations in style and intensity of alteration, structure, veining and sulphide species.</p> <p>Yam14 is located 8km south of the Gruyere deposit and on a flexure of the Dorothy Hills Shear Zone. Mineralisation at Yam14 is shear-related and hosted in an intermediate sedimentary package at the contact with a rhyolitic tuff. Elevated gold grades are associated with shearing, increased quartz veining and albite-chlorite-pyrite-arsenopyrite alteration.</p> <p>Gold mineralisation in the Golden Highway trend (Attila, Alaric, Montagne, Argos and Orleans projects) comprises steeply dipping shear hosted gold in volcanoclastic sequences, with gold associated with zones of albite ± sericite ± chlorite ± pyrite mineralisation.</p> |
| <p><b>LoM: Proved and Probable Reserve</b></p>                     | <p>The total project includes a 3.5Moz Mineral Reserve (1.7Moz attributable to Gold Fields), supporting average annual gold production of ~300koz (50% attributable to Gold Fields) over a nine-year LoM.</p>  |
| <p><b>Sustainable development</b></p>                              | <p>Gruyere achieved ICMC certification in 2020. Gruyere also achieved ISO 45001 certification for its health and safety management system and ISO 14001 for its environmental management systems during 2020.</p> <p>The mine implemented a Reconciliation Action Plan (RAP) working group to align to the requirements of the initial Reflect RAP phase developed by Gold Fields. The RAP focuses on developing respectful relationships and creating meaningful opportunities with Aboriginal and Torres Strait Islander peoples.</p> <p>Gruyere complies with all environmental legislation. A detailed revision of the Gruyere mine closure plan was completed in 2020 and submitted to the regulatory authorities.</p>  |

**KEY DEVELOPMENTS AND MATERIAL ISSUES**

- First full year of commercial production achieved 8.1Mt processed and 258koz gold produced
- GC drilling in 2020 continued to ensure greater than 12 months of Measured material available for mine planning
- The Resource and Reserve models performed well with a full-year MCF of 97%
- Following favourable metallurgical testing and the completion of the PFS, additional Golden Highway satellite reserves were declared for the Argos and Montagne open pits. This increased the Golden Highway reserve to 307koz, representing 9% of the total Gruyere JV Reserve
- The planned average production of ~300koz per annum is underpinned by ongoing business improvement initiatives including a “mine to mill” blasting optimisation study showing promising early results
- The original design capacity of the Gruyere circuit on 100% fresh ores was 7.5Mtpa. An exercise to debottleneck saw changes implemented that increased throughput capacity to circa 8.2Mtpa. A decision was made to work towards a future optimised stretched throughput target of 10Mtpa by ~2024
- Golden Highway exploration and related studies will continue to assess ore supply flexibility for future years from smaller open pits on the JV tenements
- Risks to the execution of the LoM plan include:
  - Achievement of target mill throughput due to the harder and more abrasive fresh ore types dominating the mill feed blend as oxide mining ceases mid-2021
  - Mining recovery, ore dilution and reconciliation metrics will be closely monitored in 2021 and GC drilling protocols and mining practices further enhanced as warranted
  - Modifying factors will be monitored and calibrated to enhance future Resource and Reserve declarations as more empirical operating data is generated
  - Finalisation to study work in 2021 to confirm geotechnical parameters and pit expansion options greater than 400m below surface

## Gruyere gold mine continued

### OPERATING STATISTICS

|  | Units    | Historic performance |          |          |
|--|----------|----------------------|----------|----------|
|  |          | Dec 2020             | Dec 2019 | Dec 2018 |
| <b>Mining 100%</b>   |          |                      |          |          |
| Total mined  | kt       | <b>26,447</b>        | 19,850   |          |
| – Waste mined (opex)   | kt       | <b>15,135</b>        | 187      |          |
| – Waste mined (capex)  | kt       | <b>3,224</b>         | 12,902   |          |
| – Ore mined  | kt       | <b>8,088</b>         | 6,761    |          |
| Mined grade  | g/t      | <b>1.09</b>          | 0.87     |          |
| Strip ratio (waste/tonne ore)                                | ratio    | <b>2.3</b>           | 1.9      |          |
| <b>Processing 100%</b>                                       |          |                      |          |          |
| Tonnes treated   | kt       | <b>8,108</b>         | 3,278    |          |
| Head grade   | g/t      | <b>1.06</b>          | 1.05     |          |
| Yield  | g/t      | <b>0.99</b>          | 0.94     |          |
| Plant recovery   | %        | <b>92.6</b>          | 93.3     |          |
| Total Au production  | koz      | <b>258</b>           | 99       |          |
|  | kg       | <b>8,030</b>         | 3,082    |          |
| <b>Financials Gold Fields Limited (GFI) share</b>            |          |                      |          |          |
| Average Au price received                                    | US\$/oz  | <b>1,762</b>         | 1,517    |          |
|  | A\$/oz   | <b>2,557</b>         | 2,181    |          |
| Exchange rate (annual average)                               | US\$/A\$ | <b>0.69</b>          | 0.70     |          |
| Cost of sales before amortisation and depreciation 50% share | A\$m     | <b>106</b>           | 20       |          |
| GFI 50% share  | A\$/oz   | <b>821</b>           | 398      |          |
| Capex 50% share  | A\$m     | <b>41</b>            | 104      |          |
| GFI 50% share  | A\$/oz   | <b>315</b>           | 2,093    |          |
| AIC  | A\$/oz   | <b>1,266</b>         | 4,170    |          |
| AIC  | US\$/oz  | <b>931</b>           | 2,900    |          |

### EXPLORATION AND RESOURCE DEFINITION DRILLING

2019/2020 exploration expenditures are presented in the Australia regional overview section.

A GC drilling programme was completed in the Gruyere Stage 2 and Stage 3 pits during Q3 2020. Twenty-nine holes were completed for a total of 2,394m. The programme was designed to achieve 25m x 25m spacing for areas of the Stage 2 and Stage 3 pit. The programme utilised opportune drill floor availability in Stage 2 to target areas of the hangingwall that were data-poor. Drilling in the Stage 3 pit utilised a drill floor after pre-strip of sand had commenced, infilling three sections where a sand dune prevented previous GC drilling.

### PROJECT AND STUDY PIPELINE

Projects include further studies and data collection to assess future pit expansion options. Various debottlenecking studies will also be conducted in 2021 to enhance overall operating efficiencies such as the mine optimisation FS and wall optimisation PFS. Commenced in 2020 and continuing in 2021, the mine's technical team started mill throughput and mill utilisation optimisation studies, both of which are targeting to achieve an overall increased processing rate of (nominally) 10Mtpa by ~2024. To date, the properties of the milled fresh ores align with the original project's FS measured and design expectations, for both rock hardness and abrasiveness. The Gruyere plant was originally designed and built to process 7.5Mtpa fresh ores.

### MINERAL RESOURCES AND MINERAL RESERVES

The Mineral Resources and Mineral Reserves for the Gruyere deposit were updated by Gold Fields on 31 December 2020. Geology and resource estimation models were updated to reflect the latest available data sets where appropriate. The Resource and Reserve for the ancillary Golden Highway deposits (Alaric, Montagne, Argos and Attila) were updated by Gold Road with technical review by Gold Fields Australia (GFA). The Mineral Resources for Central Bore, Yam14, Montagne and Orleans were updated by Gold Road with technical review by GFA.

### Mineral Resource classification

The Gold Fields 50% share, as held by Gruyere Mining Company Proprietary Limited, is reported below.

| Classification                        | Tonnes (kt)   |          |          | Grade (g/t) |          |          | Gold (koz)   |          |          |
|---------------------------------------|---------------|----------|----------|-------------|----------|----------|--------------|----------|----------|
|                                       | Dec 2020      | Dec 2019 | Dec 2018 | Dec 2020    | Dec 2019 | Dec 2018 | Dec 2020     | Dec 2019 | Dec 2018 |
| <b>Open pit and Underground</b>       |               |          |          |             |          |          |              |          |          |
| Measured                              | 6,291         | 5,727    | 8,365    | 1.13        | 1.23     | 1.18     | 229          | 226      | 318      |
| Indicated                             | 62,365        | 64,714   | 49,930   | 1.35        | 1.34     | 1.32     | 2,715        | 2,794    | 2,123    |
| Inferred                              | 7,588         | 4,697    | 19,391   | 1.52        | 1.66     | 1.39     | 371          | 251      | 864      |
| <b>Total open pit and underground</b> | <b>76,243</b> | 75,138   | 77,685   | <b>1.35</b> | 1.35     | 1.32     | <b>3,315</b> | 3,271    | 3,305    |
| <b>Stockpiles</b>                     |               |          |          |             |          |          |              |          |          |
| Measured stockpiles                   | 1,661         | 1,690    |          | 0.76        | 0.70     |          | 41           | 38       |          |
| <b>Grand total</b>                    | <b>77,904</b> | 76,828   | 77,685   | <b>1.34</b> | 1.34     | 1.32     | <b>3,356</b> | 3,309    | 3,305    |

### Mineral Resource classification per mining area

The mine as managed by Gold Fields at 100% is reported below.

| Area                         | Measured      |             |            | Indicated      |             |              | Inferred      |              |            | Total Mineral Resource |              |              |
|------------------------------|---------------|-------------|------------|----------------|-------------|--------------|---------------|--------------|------------|------------------------|--------------|--------------|
|                              | Tonnes (kt)   | Grade (g/t) | Gold (koz) | Tonnes (kt)    | Grade (g/t) | Gold (koz)   | Tonnes (kt)   | Grade (g/t)  | Gold (koz) | Tonnes (kt)            | Grade (g/t)  | Gold (koz)   |
| <b>Open pits</b>             |               |             |            |                |             |              |               |              |            |                        |              |              |
| Gruyere                      | 12,582        | 1.13        | 459        | 111,069        | 1.35        | 4,807        | 8,563         | 1.37         | 379        | 132,214                | 1.33         | 5,644        |
| Yam14                        | —             | —           | —          | 225            | 1.39        | 10           | 906           | 1.24         | 36         | 1,130                  | 1.27         | 46           |
| Alaric                       | —             | —           | —          | 1,795          | 1.70        | 98           | 906           | 1.21         | 35         | 2,700                  | 1.53         | 133          |
| Montagne                     | —             | —           | —          | 4,167          | 1.24        | 166          | 503           | 1.29         | 21         | 4,670                  | 1.24         | 187          |
| Argos                        | —             | —           | —          | 1,561          | 1.24        | 62           | 2,327         | 1.12         | 84         | 3,888                  | 1.17         | 146          |
| Orleans                      | —             | —           | —          | —              | —           | —            | 1,121         | 1.56         | 56         | 1,121                  | 1.56         | 56           |
| Attila                       | —             | —           | —          | 5,912          | 1.51        | 286          | 609           | 1.56         | 30         | 6,522                  | 1.51         | 317          |
| <b>Total open pits</b>       | <b>12,582</b> | <b>1.13</b> | <b>459</b> | <b>124,729</b> | <b>1.35</b> | <b>5,429</b> | <b>14,934</b> | <b>1.34</b>  | <b>641</b> | <b>152,245</b>         | <b>1.33</b>  | <b>6,529</b> |
| <b>Gold Fields 50% share</b> | <b>6,291</b>  | <b>1.13</b> | <b>229</b> | <b>62,365</b>  | <b>1.35</b> | <b>2,715</b> | <b>7,467</b>  | <b>1.34</b>  | <b>321</b> | <b>76,122</b>          | <b>1.33</b>  | <b>3,265</b> |
| <b>Underground</b>           |               |             |            |                |             |              |               |              |            |                        |              |              |
| Central Bore                 | —             | —           | —          | —              | —           | —            | 242           | 13.05        | 101        | 242                    | 13.05        | 101          |
| <b>Underground share</b>     | <b>—</b>      | <b>—</b>    | <b>—</b>   | <b>—</b>       | <b>—</b>    | <b>—</b>     | <b>121</b>    | <b>13.05</b> | <b>51</b>  | <b>121</b>             | <b>13.05</b> | <b>51</b>    |
| Stockpiles                   | 3,322         | 0.76        | 81         | —              | —           | —            | —             | —            | —          | 3,322                  | 0.76         | 81           |
| <b>Grand total</b>           | <b>15,904</b> | <b>1.06</b> | <b>540</b> | <b>124,729</b> | <b>1.35</b> | <b>5,429</b> | <b>15,175</b> | <b>1.52</b>  | <b>743</b> | <b>155,808</b>         | <b>1.34</b>  | <b>6,712</b> |
| <b>Gold Fields 50% share</b> | <b>7,952</b>  | <b>1.06</b> | <b>270</b> | <b>62,365</b>  | <b>1.35</b> | <b>2,715</b> | <b>7,588</b>  | <b>1.52</b>  | <b>371</b> | <b>77,904</b>          | <b>1.34</b>  | <b>3,356</b> |

#### Notes:

- All Mineral Resources are completed in accordance with the SAMREC Code (2016)
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding
- Mineral Resources are inclusive of Mineral Reserves
- Figures are reported on a 50% attributable basis unless otherwise specified
- The open pit Mineral Resources are reported at various COG's. 0.30g/t – 0.53g/t Au and are constrained in A\$2,000/oz optimised pit shells derived from mining, processing and geotechnical parameters that could be realistically applied to these deposits during future economic extraction. No allowance for an open pit ramp was included in the geotechnical parameters used to generate the constraining whittle shells
- The underground Mineral Resource, Central Bore, is reported in economically optimised shapes, applying a gold price of A\$2,000/oz, against a COG of 3.5g/t and minimum mining width of 1.5m

## Gruyere gold mine continued

### Modifying factors

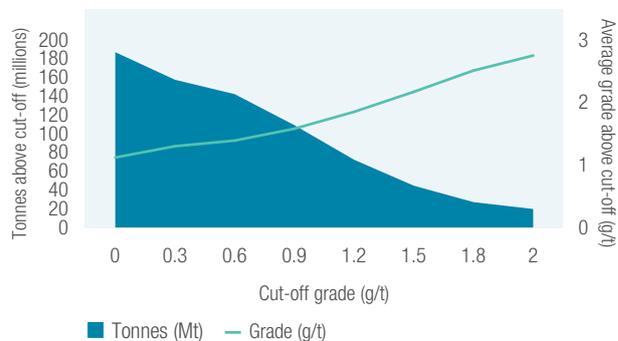
|                                    | Units   | December          |             |           |
|------------------------------------|---------|-------------------|-------------|-----------|
|                                    |         | 2020              | 2019        | 2018      |
| <b>Mineral Resource parameters</b> |         |                   |             |           |
| Mineral Resource Au price          | US\$/oz | <b>1,500</b>      | 1,400       | 1,400     |
|                                    | A\$/oz  | <b>2,000</b>      | 1,850       | 1,850     |
| Cut-off for open pit               | g/t     | <b>0.35 – 0.5</b> | 0.37 – 0.53 | 0.3 – 0.5 |
| <b>Mineral Reserve parameters</b>  |         |                   |             |           |
| Mineral Reserve Au price           | US\$/oz | <b>1,300</b>      | 1,200       | 1,200     |
|                                    | A\$/oz  | <b>1,750</b>      | 1,600       | 1,600     |
| Cut-off for mill feed open pit     | g/t     | <b>0.4 – 0.6</b>  | 0.3 – 0.7   | 0.3 – 0.7 |
| Strip ratio (waste:ore)            | ratio   | <b>3.04</b>       | 2.80        | 2.80      |
| MCF                                | %       | <b>100</b>        | 100         | 100       |
| Dilution open pit                  | %       | <b>7 – 20</b>     | 7 – 20      | 4.9       |
| Mining Recovery                    | %       | <b>94 – 98</b>    | 94 – 98     |           |
| Plant recovery <sup>1</sup>        | %       | <b>88 – 91</b>    | 86 – 91     | 91        |
| Processing capacity                | Mtpa    | <b>10</b>         | 8.2         | 7.5 – 8.8 |

<sup>1</sup> An annualised recovery range is stated; forecast recoveries are calculated using recovery models derived from historical metallurgical test work that depend on ore type (oxide, transitional and fresh)

### Grade tonnage curve – open pit

The grade tonnage curve for the surface Mineral Resource is presented opposite. Stockpiles are excluded from the grade tonnage curves.

GRADE-TONNAGE CURVE – OPEN PIT (100%)



### Mineral Reserve classification

The Gold Fields 50% share, as held by Gruyere Mining Company Proprietary Limited, is reported below.

| Classification        | Tonnes (kt)   |          |          | Grade (g/t) |          |          | Gold (koz)   |          |          |
|-----------------------|---------------|----------|----------|-------------|----------|----------|--------------|----------|----------|
|                       | Dec 2020      | Dec 2019 | Dec 2018 | Dec 2020    | Dec 2019 | Dec 2018 | Dec 2020     | Dec 2019 | Dec 2018 |
| <b>Open pit</b>       |               |          |          |             |          |          |              |          |          |
| Proved                | <b>6,391</b>  | 5,672    | 8,581    | <b>1.09</b> | 1.17     | 1.13     | <b>224</b>   | 213      | 311      |
| Probable              | <b>35,374</b> | 37,853   | 38,541   | <b>1.30</b> | 1.27     | 1.28     | <b>1,473</b> | 1,544    | 1,584    |
| <b>Total open pit</b> | <b>41,764</b> | 43,525   | 47,122   | <b>1.26</b> | 1.26     | 1.25     | <b>1,697</b> | 1,757    | 1,894    |
| <b>Stockpiles</b>     |               |          |          |             |          |          |              |          |          |
| Measured stockpiles   | <b>1,661</b>  | 1,690    |          | <b>0.76</b> | 0.70     |          | <b>41</b>    | 38       |          |
| <b>Grand total</b>    | <b>43,425</b> | 45,215   | 47,122   | <b>1.24</b> | 1.24     | 1.25     | <b>1,738</b> | 1,795    | 1,894    |

### Mineral Reserves classification per mining area

The mine as managed by Gold Fields at 100% is reported below.

| Area                         | Proved        |             |            | Probable      |             |              | Total Mineral Reserve |             |              |
|------------------------------|---------------|-------------|------------|---------------|-------------|--------------|-----------------------|-------------|--------------|
|                              | Tonnes (kt)   | Grade (g/t) | Gold (koz) | Tonnes (kt)   | Grade (g/t) | Gold (koz)   | Tonnes (kt)           | Grade (g/t) | Gold (koz)   |
| <b>Open pits</b>             |               |             |            |               |             |              |                       |             |              |
| Gruyere                      | 12,781        | 1.09        | 448        | 63,674        | 1.29        | 2,640        | 76,455                | 1.26        | 3,087        |
| Alaric                       | —             | —           | —          | 839           | 1.42        | 38           | 839                   | 1.42        | 38           |
| Argos                        | —             | —           | —          | 492           | 1.20        | 19           | 492                   | 1.20        | 19           |
| Attila                       | —             | —           | —          | 3,735         | 1.42        | 170          | 3,735                 | 1.42        | 170          |
| Montagne                     | —             | —           | —          | 2,008         | 1.23        | 79           | 2,008                 | 1.23        | 79           |
| <b>Total open pits</b>       | <b>12,781</b> | <b>1.09</b> | <b>448</b> | <b>70,748</b> | <b>1.30</b> | <b>2,947</b> | <b>83,529</b>         | <b>1.26</b> | <b>3,394</b> |
| Stockpiles                   | 3,322         | 0.76        | 81         | —             | —           | —            | 3,322                 | 0.76        | 81           |
| <b>Grand total</b>           | <b>16,103</b> | <b>1.02</b> | <b>529</b> | <b>70,748</b> | <b>1.30</b> | <b>2,947</b> | <b>86,851</b>         | <b>1.24</b> | <b>3,475</b> |
| <b>Gold Fields 50% share</b> | <b>8,052</b>  | <b>1.02</b> | <b>264</b> | <b>35,374</b> | <b>1.30</b> | <b>1,473</b> | <b>43,425</b>         | <b>1.24</b> | <b>1,738</b> |

**Notes:**

- The Mineral Reserve is completed in accordance with the SAMREC Code
- Gold Road holds an uncapped 1.5% net smelter return royalty on Gold Fields Limited's share of production from the Gruyere JV project once total gold production exceeds 2Moz
- The Mineral Reserve for the Gruyere deposit is evaluated using a gold price of A\$1,750/oz and is reported above a 0.3g/t COG. Attila is reported above the following variable COGs – 0.70g/t Au (fresh), 0.60g/t Au (transition) and 0.55g/t Au (oxide); Alaric is reported above the following variable COGs – 0.67g/t Au (fresh), 0.62g/t Au (transition) and 0.57g/t Au (oxide)
- Ore block tonnage dilution averages and gold loss estimates: Gruyere – 4.9% and 0.4%; Attila – 14% and 3%; Alaric – 20% and 6%
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding

### Mineral Resource and Mineral Reserve reconciliation year-on-year

| Factors that affected Mineral Resource reconciliation year-on-year                         |
|--|
| Gruyere – mining depletion JV 100% (-311koz)   |
| Higher gold price A\$1,850/oz to A\$2,000/oz partially offset by increased costs (+362koz) |
| Gruyere – infill drilling and resource model update (-39koz)                               |
| Gruyere optimisation whittle shell improvements (+81koz)                                   |

| Factors that affected Mineral Reserve reconciliation year-on-year  |
|--|
| Gruyere – mining depletion JV 100% (-283koz)   |
| Higher gold price A\$1,600/oz to A\$1,750/oz, Gruyere reserve design retained, minor Golden Highway changes (+11koz) |
| Gruyere – infill drilling and resource model update (+81koz)   |
| Maiden Reserves along the Golden Highway – Argos and Montagne (+116koz)  |

**MINERAL RESOURCE RECONCILIATION (100%)**  
Gold (koz)



**MINERAL RESERVE RECONCILIATION (100%)**  
Gold (koz)



### Mineral Reserve sensitivity

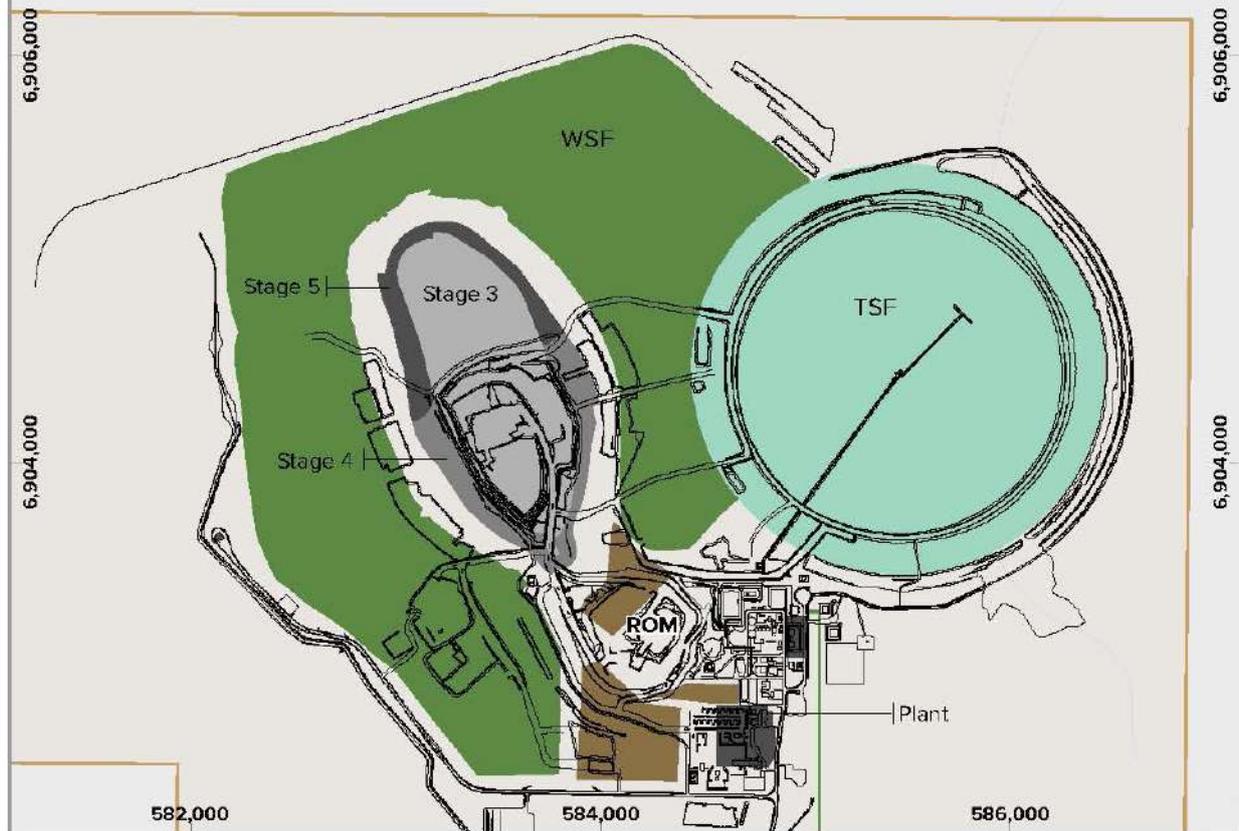
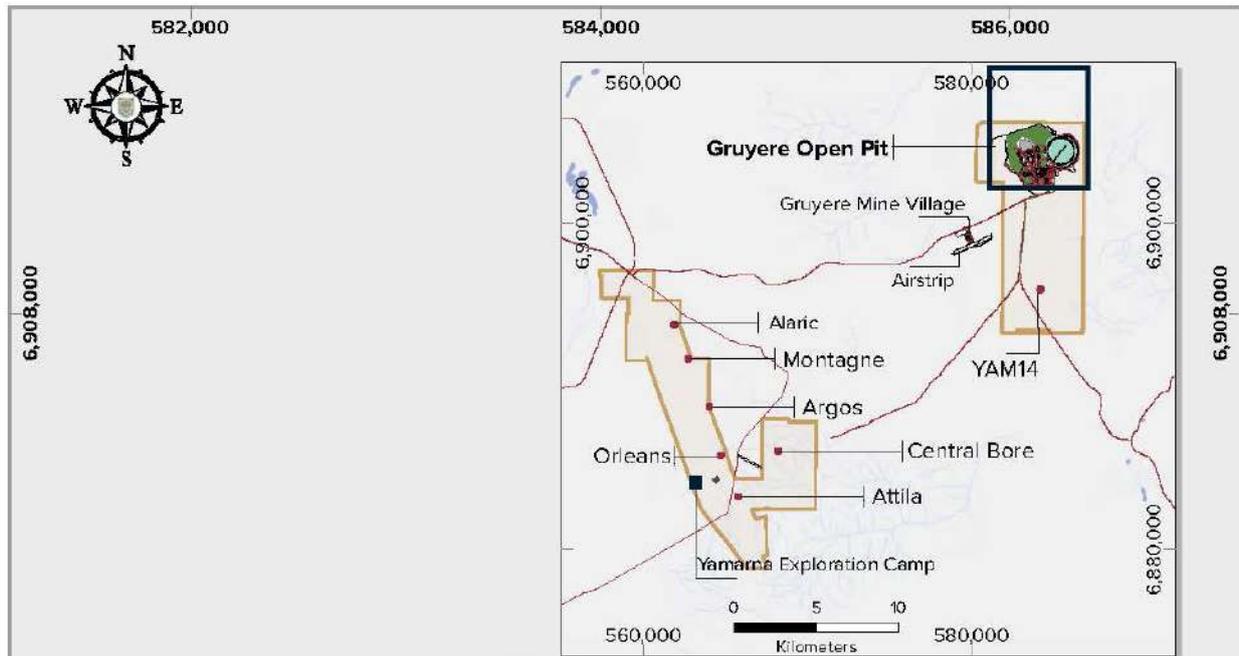
To illustrate the impact of fluctuations in gold price and exchange rates on the current declaration, Gruyere generated sensitivities for Mineral Reserves. The following graph indicates the Managed Mineral Reserve sensitivity at -15%, -10%, -5%, base, +5%, +10% and +15% to the base A\$1,750/oz reserve gold price.

These sensitivities (other than for the base case) are not supported by detailed plans and depletion schedules. They should only be considered on an indicative basis, specifically as such sensitivities assume 100% selectivity, without any operating cost increases.

**MINERAL RESERVE SENSITIVITY (100%)**  
GOLD (koz)



# Gruyere gold mine continued



### Reference

- Buildings
- Main Roads
- Ephemeral Watercourse
- Lease Outline

- Deposit
- Open Pit
- Stockpiles
- Tailings Dam (TSF)
- Waste Dump (WSF)

### Gruyere Mining Company Pty Ltd Gruyere Project Joint Venture Area

MINE INFRASTRUCTURE AS AT DECEMBER 2020



Co-ordinate System: Map Grid of Australia Zone 51  
(Geocentric Datum of Australia 1994)

## St Ives gold mine



St Ives continued with a strong 2020, increasing its Resource and Reserve base net of depletion by 13% and 17% respectively as it transitions to a predominantly underground operation. This is the largest Reserve and Resource position for St Ives since 2011. Maintaining exploration momentum and traction on related technical studies has been key to replacing and growing reserves centred on the increasingly important Invincible underground camp, where ore body extensions at Invincible Deeps and Invincible South continue to provide further upside. The main underground LoM sources are Invincible, Invincible South and Hamlet North, and all three areas continue to deliver on their original FS plans while expanding their reserve footprint. The Invincible South and Hamlet North mines will be in full production in 2021, delivering the benefits from prior investment. This, combined with the continued operation of Invincible underground, will form the backbone of the operation over the next few years.

Reserve growth was supported by high-grade additions at Hamlet North underground and by significant open pit extensions at the Neptune and Invincible open pits. Brownfield exploration across the expansive tenement package continues to deliver encouraging early-stage results.

### ASSET FUNDAMENTALS

|   |  |
|---|--|
| <b>General location</b>                   | The St Ives mining operations extend from 5km – 25km south southwest of Kambalda in Western Australia, ~630km east of Perth at latitude 31°12'S and longitude 121°40'E. The nearest major settlement is Kalgoorlie situated 80km to the north, with well-established power grids, access roads and supporting infrastructure.  |
| <b>Brief history and Regional geology</b> | The Annexure to this Supplement provides a summary of St Ives' history and Regional Geology.   |
| <b>Climate</b>                            | St Ives is in an area of arid bush land. While occasional storm activity may cause minor delays to open pit mining operations, the climatic conditions do not materially impact the site's normal operations.  |
| <b>Licence status and holdings</b>        | St Ives controls prospecting, exploration, mining and miscellaneous tenements over 184,717ha (inclusive of 45 non-managed leases totalling 6,263ha, and 13 JV tenements totalling 37,213ha, where St Ives is currently earning an interest).   |
| <b>Mining method</b>                      | <p>St Ives currently operates two underground mines and one open pit. The undergrounds are accessed via a decline. Mining contractors deploy long-hole stoping and paste/rock fill. Current underground mines are relatively shallow and configured to mitigate geotechnical seismic risk through mine design, scheduling and defined ground support regimes.</p> <p>Open pits are mined using conventional drill and blast with truck and shovel. Surface mining operations are conducted using an owner-operator mining fleet.</p> <p>Ore from both open pit and underground operations is transported with road trains from individual mining operations to the central St Ives processing RoM pad.</p>   |
| <b>Operational infrastructure</b>         | St Ives has four underground mine areas and 12 open pits contributing to the Mineral Reserve. There are nine underground mines and 20 open pits contributing to the Mineral Resource. Current ore stockpiles represent less than 5.5% of the total Reserve. There is a centralised administrative office and engineering workshops.  |
| <b>Mineral processing and TSFs</b>        | <p>St Ives operates a 4.7Mtpa processing plant that consists of primary crushing, SAG/ball milling, gravity and CIP circuits.</p> <p>TSF 1 has a low ANCOLD consequence rating, was decommissioned and is being used for tailings reclamation for underground paste backfill material, using excavators, loaders and trucks.</p> <p>TSF 2 has a low ANCOLD consequence rating, was filled to the final design height and decommissioned.</p> <p>TSF 3 has a low ANCOLD consequence rating and was decommissioned in 2016.</p> <p>TSF 4 is a paddock-type facility with a current maximum embankment height of ~14.5m. The facility is inactive and has a high C ANCOLD consequence rating.</p> <p>The North Orchin in-pit TSF has a low ANCOLD consequence rating, reached its storage capacity and was decommissioned in 2015.</p> <p>The Leviathan in-pit TSF was commissioned early 2017 and is currently active with a low ANCOLD consequence rating. The current remaining LoM storage capacity is ~31Mt.</p> |

## St Ives gold mine continued

### ASSET FUNDAMENTALS continued

#### Local geology and deposit type, and mineralisation style

The regional geology of the Yilgarn Craton is described in the Australia regional overview section of the Annexure to this Supplement.

St Ives is in the Kambalda domain; a sub-set of the Norseman-Wiluna Belt. The Kambalda domain is bound by the north northwest trending Boulder-Lefroy fault (BLF) and Zuleika shear. The region underwent four compressional events predated by early extension, and was metamorphosed to upper greenschist or lower amphibolite facies.

The main structural feature of the St Ives area is the gently south-plunging Kambalda anticline, which extends 35km from the south end of the Kambalda dome to the Junction mine. The majority of known gold deposits are proximal to the trace of the anticlinal axis. A major second order structure known as the Playa shear splays off the BLF shear zone and can be traced through the St Ives field for more than 10km.

There are several styles of gold mineralisation at St Ives. Individual deposits may contain more than one of the following styles:

- Lode mineralisation: Archaean lode mineralisation typically consisting of 0.5m – 20m-wide mesothermal vein complexes that may also have hydraulic breccias and/or mylonites. Mineralisation is typically discontinuous with short-range predictability
- Supergene mineralisation: Broad zones of flat-lying gold mineralisation in weathered Archaean and overlying tertiary sediments
- Palaeoplacer mineralisation: Placer deposits hosted by palaeochannels in the unconsolidated tertiary sediments that overlie the Archaean basement

#### LoM: Proved and Probable Reserves

Extensional and brownfields exploration continues and could increase the LoM given the prevailing Inferred Resources and exploration pipeline. It is estimated that the current known Mineral Reserves will be depleted in 2028 (eight years).

#### Sustainable development

The mine maintained ISO 45001 certification for its occupational health and safety management system and ISO 14001 certification for its environmental management system. St Ives is also certified as fully compliant with the ICMC. In 2019, St Ives achieved ISO 27001 certification (information security management standards) and this certification was retained in 2020. The mine complies with all environmental legislation.

St Ives implemented a Reconciliation Action Plan (RAP) working group that delivers on actions designed to support the Gold Fields RAP.

In accordance with the three-year cycle, St Ives completed a detailed review of its mine closure plan and this was submitted to the regulator.

### KEY DEVELOPMENTS AND MATERIAL ISSUES

- Emphasis in 2021 will be on the continued expansion of the Invincible underground operations with full production now established. The site is embarking on the Future Invincible Strategy Project assessing the potential to expand Invincible from the current 1.5Mtpa to 2Mtpa over the next three years
- At Hamlet North, the 2021 focus will be on extending the LoM down dip of the current reserve following up encouraging exploration drilling completed in 2020
- Surface production continued in the Neptune complex, mining from pit Stages 5 and 6. Exploration drilling completed during 2020 significantly expanded the Neptune Stage 7 open pit, merging it with the main Neptune open pit. Pre-stripping of this cut-back commenced in Q4 2020
- Development of a site-wide paste fill strategy for the Invincible complex saw paste fill implemented in the Invincible underground stoping operations. This helped with the geotechnical challenges experienced from the mudstone rock mass behaviour
- Highly prospective targets continued to be explored along strike of Invincible South in the greater Invincible area, with additional resources likely to be added in 2021
- The LoM mining mix is transitioning from open pit to underground operations in the short term, and discovering new, sizeable open pit opportunities was prioritised to rebalance the overall mix
- Mill upgrades continue to be implemented to enhance metal recovery from multiple ore sources and lake sediments with improvements in recovery experienced during 2020
- A “One Mining Proposal” was submitted to the Department of Mines, Industry Regulation and Safety in Q3 2019 with approval granted in January 2021. This approval significantly reduces the amount of regulatory commitments to state government
- Risks to the execution of the LoM plan include:
  - The systematic introduction of paste fill to stoping operations will assist with regional stability at depth coupled to geotechnical modelling and the use of seismic monitoring networks
  - Campaign milling is introduced to align to the current LoM profile post-2025 but is anticipated to not be required with ongoing discovery and Reserve replacement
  - New generation mining opportunities have a lead time of circa three years and beyond from initial discovery to production, so maintaining traction on exploration, discovery and resource conversion remains key to St Ives’ Reserve replacement and LoM extension strategy

## OPERATING STATISTICS

|  | Units    | Historic performance |          |          |
|--|----------|----------------------|----------|----------|
|  |          | Dec 2020             | Dec 2019 | Dec 2018 |
| <b>Total mined</b>                                 | kt       | <b>13,420</b>        | 15,167   | 22,044   |
| – Waste mined (opex)                               | kt       | <b>6,119</b>         | 5,795    | 5,839    |
| – Waste mined (capex)                              | kt       | <b>3,232</b>         | 4,292    | 11,898   |
| – Ore mined  | kt       | <b>4,069</b>         | 5,080    | 4,307    |
| Mined grade  | g/t      | <b>3.2</b>           | 2.4      | 3.0      |
| <b>Open pit mining</b>                             |          |                      |          |          |
| Open pit mined                                     | kt       | <b>10,910</b>        | 12,913   | 20,757   |
| – Waste mined                                      | kt       | <b>8,579</b>         | 9,161    | 17,362   |
| – Ore mined  | kt       | <b>2,331</b>         | 3,752    | 3,396    |
| Mined grade  | g/t      | <b>1.7</b>           | 1.8      | 2.7      |
| Strip ratio (waste/tonne ore)                      | ratio    | <b>3.7</b>           | 2.4      | 5.1      |
| <b>Underground mining</b>                          |          |                      |          |          |
| Underground mined                                  | kt       | <b>2,510</b>         | 2,254    | 1,287    |
| – Waste mined                                      | kt       | <b>772</b>           | 926      | 375      |
| – Ore mined  | kt       | <b>1,737</b>         | 1,328    | 911      |
| Mined grade  | g/t      | <b>5.3</b>           | 4.1      | 4.1      |
| <b>Processing</b>                                  |          |                      |          |          |
| Tonnes treated                                     | kt       | <b>4,817</b>         | 4,466    | 4,250    |
| Head grade   | g/t      | <b>2.73</b>          | 2.76     | 2.88     |
| Yield  | g/t      | <b>2.49</b>          | 2.58     | 2.69     |
| Plant recovery                                     | %        | <b>92.7</b>          | 92.3     | 92.5     |
| Total Au production                                | koz      | <b>385</b>           | 371      | 367      |
|  | kg       | <b>11,971</b>        | 11,527   | 11,412   |
| <b>Financials</b>                                  |          |                      |          |          |
| Average Au price received                          | US\$/oz  | <b>1,756</b>         | 1,390    | 1,266    |
|  | A\$/oz   | <b>2,547</b>         | 1,998    | 1,695    |
| Exchange rate (annual average)                     | US\$/A\$ | <b>0.69</b>          | 0.70     | 0.75     |
| Cost of sales before amortisation and depreciation | A\$m     | <b>340</b>           | 329      | 249      |
|  | A\$/oz   | <b>882</b>           | 887      | 678      |
| Capex  | A\$m     | <b>107</b>           | 141      | 170      |
|  | A\$/oz   | <b>277</b>           | 382      | 464      |
|  | A\$/oz   | <b>1,266</b>         | 1,385    | 1,207    |
| AIC  | US\$/oz  | <b>873</b>           | 963      | 902      |

## St Ives gold mine *continued*

### EXPLORATION AND RESOURCES DEFINITION DRILLING

2019/2020 exploration expenditures are presented in the Australia regional section.

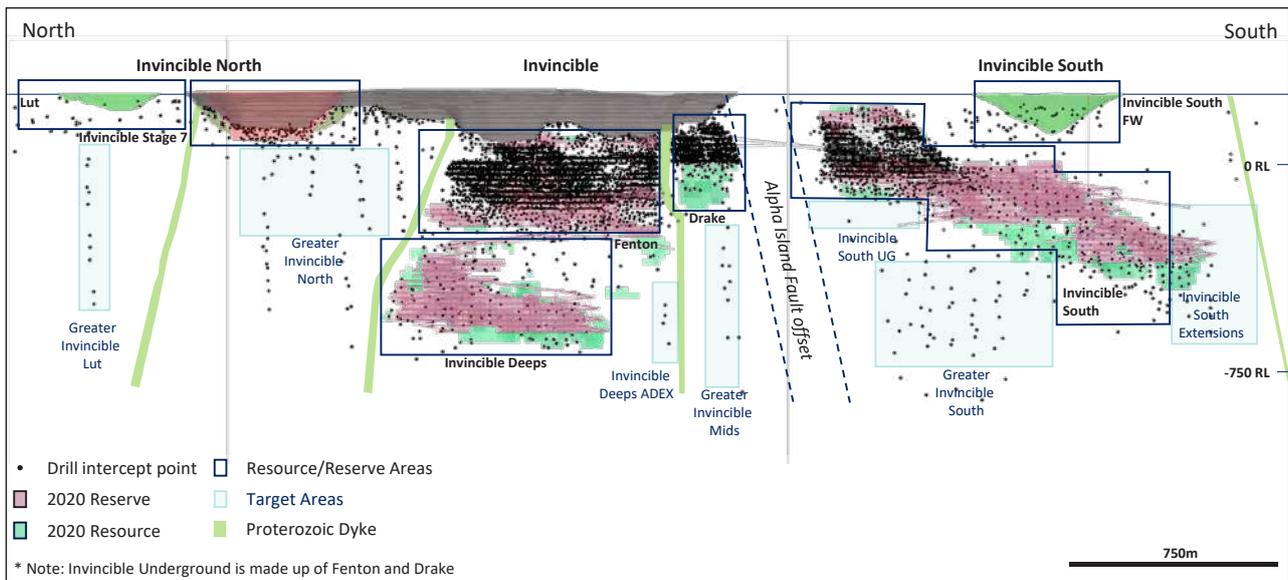
In June 2018, St Ives entered into a Farm-in Agreement with Hogans Resources Proprietary Limited and Lefroy Exploration Limited (LEX JV), where St Ives may earn up to 70% equity in the LEX JV tenements through exploration expenditure. This agreement allows St Ives to earn exploration and mineral rights over an additional 37,017ha.

The site exploration team is supported by in-house geophysics, regional and corporate technical teams. Exploration activities use a combination of auger, aircore and RC drilling, supported by geochemistry and geophysics to generate an integrated prospectivity model to prioritise and direct future investment.

In 2020, extensional exploration targeted additions to the Invincible and Neptune complexes that will continue into 2021. Drilling at Invincible will focus on the conversion of open pit resources at Invincible Footwall South and Lut into reserves. Growth in underground reserves at Invincible will be targeted from surface drilling at Invincible South, assessing strike extensions and from underground drilling at Invincible South and the Link area between the Invincible and Invincible Deeps zones. Surface DD was completed in 2020 at Hamlet North that extends economic mineralisation down dip of the current reserve. This area is targeted for reserve and resource addition by underground drilling during Q1 2021. Extensional drilling will continue at the Neptune Surface complex, targeting additional open pit stages.

Additional brownfield exploration continued to focus on the LEX JV, the Central Corridor, Kambalda West and the Eastern and Western Basin areas in 2020. Exploration of the Northern Speedway trend was completed in 2020 as a result of the "Beyond 18 Permit" being granted with this area now tested for large open pit potential. A small resource was added at the Lut target adjacent to the Invincible Stage 7 open pit reserve as part of the Speedway North drilling. Notable activities completed in 2020 included additional foundational data set collection at the Southern St Ives, LEX JV, and Western and Eastern Basin Project areas. The foundation datasets collected have defined several targets that were followed up in late 2020 and will continue to be tested during 2021.

St Ives: Schematic NS long section through the Invincible ore body complex



The Invincible complex is located on an extensive mineralisation trend. The Invincible area includes the active underground mining areas of Fenton, Drake and Invincible South. Exploration drilling is being conducted across a range of stages from resource and reserve definition to near-mine exploration targeting.

### PROJECT AND STUDY PIPELINE

A broad range of projects are scheduled, ranging from strategic option analysis, desktop and scoping studies to PFSS

and FSs to underpin the LoM plan and life extension. The 2021 projects include advancing the FSs on Invincible Deeps underground, and the open pits at Delta

Island, Pistol Club and Justice. PFSS are planned for the greater Invincible underground extensions and the Swiftsure and Santa Ana open pits.

## MINERAL RESOURCES AND MINERAL RESERVES

### Mineral Resources classification

| Classification                        | Tonnes (kt)   |               |               | Grade (g/t) |             |             | Au (koz)     |              |              |
|---------------------------------------|---------------|---------------|---------------|-------------|-------------|-------------|--------------|--------------|--------------|
|                                       | Dec 2020      | Dec 2019      | Dec 2018      | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020     | Dec 2019     | Dec 2018     |
| <b>Open pit and underground</b>       |               |               |               |             |             |             |              |              |              |
| Measured                              | 1,940         | 1,574         | 2,154         | 4.35        | 3.95        | 3.58        | 271          | 200          | 248          |
| Indicated                             | 26,456        | 20,958        | 19,815        | 4.10        | 4.61        | 4.13        | 3,487        | 3,106        | 2,628        |
| Inferred                              | 10,078        | 7,696         | 7,779         | 3.28        | 3.83        | 3.58        | 1,064        | 947          | 895          |
| <b>Total open pit and underground</b> | <b>38,474</b> | <b>30,228</b> | <b>29,747</b> | <b>3.90</b> | <b>4.38</b> | <b>3.94</b> | <b>4,822</b> | <b>4,253</b> | <b>3,771</b> |
| <b>Surface</b>                        |               |               |               |             |             |             |              |              |              |
| Measured stockpiles                   | 3,209         | 4,240         | 3,436         | 1.37        | 1.10        | 1.42        | 142          | 149          | 157          |
| <b>Grand total</b>                    | <b>41,683</b> | <b>34,468</b> | <b>33,183</b> | <b>3.70</b> | <b>3.97</b> | <b>3.68</b> | <b>4,964</b> | <b>4,403</b> | <b>3,928</b> |

### Mineral Resources classification per mining area

| Area                     | Measured     |             |            | Indicated     |             |              | Inferred      |             |              | Total Mineral Resources |             |              |
|--------------------------|--------------|-------------|------------|---------------|-------------|--------------|---------------|-------------|--------------|-------------------------|-------------|--------------|
|                          | Tonnes (kt)  | Grade (g/t) | Au (koz)   | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)             | Grade (g/t) | Au (koz)     |
| <b>Open pit</b>          |              |             |            |               |             |              |               |             |              |                         |             |              |
| APN                      | —            | —           | —          | 324           | 7.63        | 80           | —             | —           | —            | 324                     | 7.63        | 80           |
| Apollo                   | 11           | 2.03        | 1          | 339           | 3.15        | 34           | 204           | 2.36        | 16           | 554                     | 2.84        | 51           |
| Incredible               | —            | —           | —          | 2,178         | 1.29        | 90           | 1             | 0.84        | —            | 2,178                   | 1.29        | 91           |
| Invincible pit           | 443          | 2.91        | 41         | 166           | 3.00        | 16           | 259           | 1.78        | 15           | 867                     | 2.59        | 72           |
| Invincible South         | —            | —           | —          | —             | —           | —            | 1,566         | 2.38        | 120          | 1,566                   | 2.38        | 120          |
| Justice                  | —            | —           | —          | 630           | 2.45        | 50           | 185           | 2.99        | 18           | 816                     | 2.57        | 67           |
| Neptune                  | 272          | 2.99        | 26         | 3,009         | 2.52        | 244          | 467           | 1.85        | 28           | 3,748                   | 2.47        | 297          |
| Pistol Club              | —            | —           | —          | 476           | 3.85        | 59           | 15            | 1.61        | 1            | 491                     | 3.78        | 60           |
| Santa Ana                | —            | —           | —          | 1,814         | 2.16        | 126          | 276           | 2.06        | 18           | 2,990                   | 2.15        | 144          |
| Swiftsure                | —            | —           | —          | 277           | 4.76        | 42           | 17            | 2.29        | 1            | 294                     | 4.62        | 44           |
| Trinidad                 | —            | —           | —          | 519           | 2.62        | 50           | 35            | 2.12        | 2            | 627                     | 2.59        | 52           |
| Yorick                   | —            | —           | —          | 102           | 4.59        | 15           | 479           | 3.41        | 52           | 581                     | 3.62        | 68           |
| Other                    | 69           | 2.08        | 5          | 1,305         | 2.50        | 105          | 751           | 2.76        | 67           | 2,125                   | 2.58        | 176          |
| <b>Total open pit</b>    | <b>795</b>   | <b>2.85</b> | <b>73</b>  | <b>11,211</b> | <b>2.53</b> | <b>911</b>   | <b>4,255</b>  | <b>2.47</b> | <b>338</b>   | <b>16,262</b>           | <b>2.53</b> | <b>1,321</b> |
| <b>Underground</b>       |              |             |            |               |             |              |               |             |              |                         |             |              |
| Argo                     | 151          | 4.82        | 23         | 481           | 4.67        | 72           | 187           | 3.75        | 23           | 819                     | 4.49        | 118          |
| Cave Rocks               | 22           | 3.37        | 2          | 139           | 4.46        | 20           | 247           | 4.91        | 39           | 408                     | 4.68        | 61           |
| Hamlet                   | —            | —           | —          | 515           | 4.46        | 74           | 125           | 4.00        | 16           | 640                     | 4.37        | 90           |
| Hamlet North             | 143          | 8.65        | 40         | 400           | 11.01       | 142          | 38            | 9.58        | 12           | 581                     | 10.34       | 193          |
| Invincible underground   | 390          | 5.04        | 63         | 1,700         | 4.18        | 228          | 93            | 4.41        | 13           | 2,183                   | 4.34        | 305          |
| Invincible Deeps         | —            | —           | —          | 3,811         | 5.00        | 612          | 899           | 4.59        | 133          | 4,711                   | 4.92        | 745          |
| Invincible South         | 227          | 6.46        | 47         | 5,730         | 6.29        | 1,159        | 2,667         | 4.10        | 351          | 8,624                   | 5.62        | 1,557        |
| North Orchin             | —            | —           | —          | 570           | 4.28        | 78           | 699           | 3.51        | 79           | 1,269                   | 3.85        | 157          |
| Sirius                   | 211          | 3.29        | 22         | 1,899         | 3.13        | 191          | 867           | 2.17        | 61           | 2,977                   | 2.86        | 274          |
| <b>Total underground</b> | <b>1,144</b> | <b>5.39</b> | <b>198</b> | <b>15,245</b> | <b>5.26</b> | <b>2,576</b> | <b>5,823</b>  | <b>3.88</b> | <b>727</b>   | <b>22,212</b>           | <b>4.90</b> | <b>3,501</b> |
| <b>Surface</b>           |              |             |            |               |             |              |               |             |              |                         |             |              |
| Surface stockpiles       | 3,209        | 1.37        | 142        | —             | —           | —            | —             | —           | —            | 3,209                   | 1.37        | 142          |
| <b>Grand total</b>       | <b>5,148</b> | <b>2.49</b> | <b>413</b> | <b>26,456</b> | <b>4.10</b> | <b>3,487</b> | <b>10,078</b> | <b>3.28</b> | <b>1,064</b> | <b>41,683</b>           | <b>3.70</b> | <b>4,964</b> |

## St Ives gold mine continued

### Modifying factors

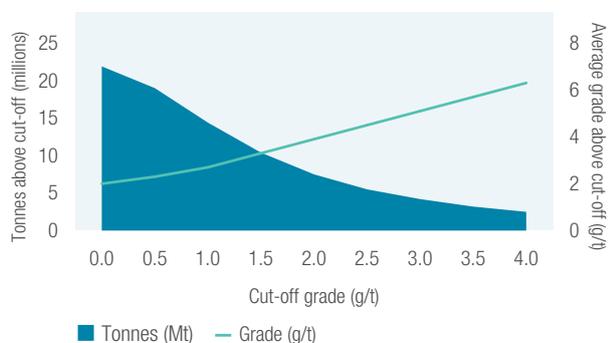
|                                      | Units   | December           |             |             |
|--------------------------------------|---------|--------------------|-------------|-------------|
|                                      |         | 2020               | 2019        | 2018        |
| <b>Mineral Resources parameters</b>  |         |                    |             |             |
| Mineral Resources Au price           | US\$/oz | <b>1,500</b>       | 1,400       | 1,400       |
|                                      | A\$/oz  | <b>2,000</b>       | 1,850       | 1,850       |
| Cut-off for oxide ore                | g/t     | <b>0.69 – 1.02</b> | 0.74 – 1.03 | 0.74 – 1.03 |
| Cut-off for fresh ore                | g/t     | <b>0.69 – 3.1</b>  | 0.74 – 3.6  | 0.74 – 3.3  |
| Cut-off for mill feed                | g/t     | <b>0.69 – 1.02</b> | 0.74 – 1.03 | 0.74 – 1.03 |
| Cut-off for open pit                 | g/t     | <b>0.69 – 1.02</b> | 0.74 – 1.03 | 0.74 – 1.03 |
| Cut-off for underground              | g/t     | <b>1.9 – 3.1</b>   | 2.0 – 3.6   | 2.0 – 3.3   |
| <b>Mineral Reserves parameters</b>   |         |                    |             |             |
| Mineral Reserves Au price            | US\$/oz | <b>1,300</b>       | 1,200       | 1,200       |
|                                      | A\$/oz  | <b>1,750</b>       | 1,600       | 1,600       |
| Cut-off for oxide ore                | g/t     | <b>0.35 – 0.45</b> | 0.30 – 0.40 | 0.35 – 0.40 |
| Cut-off for fresh ore                | g/t     | <b>0.35 – 2.7</b>  | 0.30 – 3.0  | 0.35 – 2.7  |
| Cut-off for mill feed underground    | g/t     | <b>1.9 – 2.7</b>   | 2.0 – 3.0   | 2.0 – 2.7   |
| Cut-off for mill feed open pit       | g/t     | <b>0.35 – 0.45</b> | 0.30 – 0.40 | 0.35 – 0.40 |
| Mining recovery factor (underground) | %       | <b>90 – 97</b>     | 90 – 97     | 90 – 97     |
| Mining recovery factor (open pit)    | %       | <b>91 – 100</b>    | 91 – 100    | 91 – 100    |
| Strip ratio (waste:ore)              | ratio   | <b>6.4</b>         | 6.8         | 5.7         |
| MCF                                  | %       | <b>100</b>         | 100         | 100         |
| Dilution open pit                    | %       | <b>5 – 52</b>      | 15 – 52     | 15 – 52     |
| Dilution underground                 | %       | <b>11 – 25</b>     | 11 – 25     | 11 – 25     |
| Plant recovery <sup>1</sup>          | %       | <b>66 – 96</b>     | 61 – 96     | 69 – 96     |
| Processing capacity                  | Mtpa    | <b>4.7</b>         | 4.7         | 4.7         |

<sup>1</sup> The range in recoveries is stated; forecast recoveries are calculated using derived and regularly updated recovery models that also depend on ore source and type

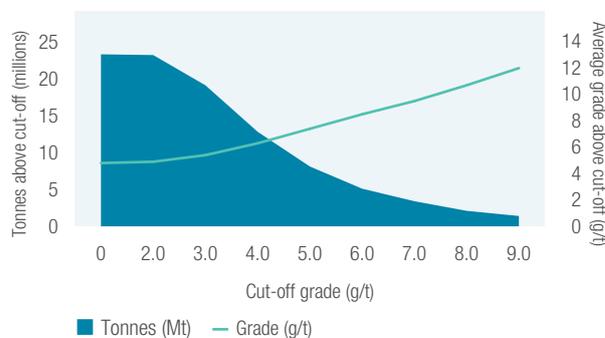
### Grade tonnage curves

The grade tonnage curves for the surface and underground Mineral Resources are presented below. Stockpiles are excluded from the grade tonnage curves.

**GRADE-TONNAGE CURVE – OPEN PIT**



**GRADE-TONNAGE CURVE – UNDERGROUND**



**Mineral Reserves classification**

| Classification                        | Tonnes (kt)   |               |               | Grade (g/t) |             |             | Au (koz)     |              |              |
|---------------------------------------|---------------|---------------|---------------|-------------|-------------|-------------|--------------|--------------|--------------|
|                                       | Dec 2020      | Dec 2019      | Dec 2018      | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020     | Dec 2019     | Dec 2018     |
| <b>Open pit and underground</b>       |               |               |               |             |             |             |              |              |              |
| Proved                                | 1,539         | 723           | 1,648         | 3.76        | 3.88        | 2.21        | 186          | 90           | 117          |
| Probable                              | 20,731        | 15,894        | 14,006        | 3.51        | 4.00        | 3.26        | 2,337        | 2,043        | 1,467        |
| <b>Total open pit and underground</b> | <b>22,270</b> | <b>16,618</b> | <b>15,654</b> | <b>3.52</b> | <b>3.99</b> | <b>3.15</b> | <b>2,523</b> | <b>2,133</b> | <b>1,584</b> |
| <b>Surface</b>                        |               |               |               |             |             |             |              |              |              |
| Proved                                | 3,209         | 4,240         | 3,436         | 1.37        | 1.10        | 1.42        | 142          | 149          | 157          |
| <b>Grand total</b>                    | <b>25,479</b> | <b>20,858</b> | <b>19,090</b> | <b>3.25</b> | <b>3.40</b> | <b>2.84</b> | <b>2,665</b> | <b>2,283</b> | <b>1,741</b> |

**Mineral Reserves classification per mining area**

| Area                     | Proved       |             |            | Probable      |             |              | Total Mineral Reserves |             |              |
|--------------------------|--------------|-------------|------------|---------------|-------------|--------------|------------------------|-------------|--------------|
|                          | Tonnes (kt)  | Grade (g/t) | Au (koz)   | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)            | Grade (g/t) | Au (koz)     |
| <b>Open pit</b>          |              |             |            |               |             |              |                        |             |              |
| Incredible               | —            | —           | —          | 1,420         | 1.01        | 46           | 1,420                  | 1.01        | 46           |
| Invincible pit           | 554          | 2.29        | 41         | 206           | 2.38        | 16           | 760                    | 2.32        | 57           |
| Justice                  | —            | —           | —          | 917           | 1.68        | 49           | 917                    | 1.68        | 49           |
| Neptune                  | 251          | 2.32        | 19         | 2,280         | 2.07        | 152          | 2,531                  | 2.10        | 171          |
| Pistol Club              | —            | —           | —          | 702           | 2.53        | 57           | 702                    | 2.53        | 57           |
| Santa Ana                | —            | —           | —          | 1,596         | 1.45        | 74           | 1,596                  | 1.45        | 74           |
| Swiftsure                | —            | —           | —          | 308           | 3.92        | 39           | 308                    | 3.92        | 39           |
| Trinidad                 | —            | —           | —          | 679           | 2.03        | 44           | 679                    | 2.03        | 44           |
| Other                    | 7            | 1.82        | 0.4        | 825           | 2.09        | 56           | 832                    | 2.09        | 56           |
| <b>Total open cut</b>    | <b>812</b>   | <b>2.30</b> | <b>60</b>  | <b>8,933</b>  | <b>1.86</b> | <b>533</b>   | <b>9,745</b>           | <b>1.89</b> | <b>593</b>   |
| <b>Underground</b>       |              |             |            |               |             |              |                        |             |              |
| Hamlet North             | 131          | 7.97        | 33         | 485           | 8.13        | 127          | 615                    | 8.09        | 160          |
| Invincible underground   | 438          | 4.33        | 61         | 1,763         | 3.37        | 191          | 2,201                  | 3.56        | 252          |
| Invincible Deeps         | —            | —           | —          | 3,965         | 4.14        | 528          | 3,965                  | 4.14        | 528          |
| Invincible South         | 159          | 6.24        | 32         | 5,586         | 5.33        | 958          | 5,745                  | 5.36        | 990          |
| <b>Total underground</b> | <b>727</b>   | <b>5.40</b> | <b>126</b> | <b>11,798</b> | <b>4.76</b> | <b>1,804</b> | <b>12,525</b>          | <b>4.79</b> | <b>1,930</b> |
| <b>Surface</b>           |              |             |            |               |             |              |                        |             |              |
| Surface stockpiles       | 3,209        | 1.37        | 142        | —             | —           | —            | 3,209                  | 1.37        | 142          |
| <b>Grand total</b>       | <b>4,748</b> | <b>2.15</b> | <b>328</b> | <b>20,731</b> | <b>3.51</b> | <b>2,337</b> | <b>25,479</b>          | <b>3.25</b> | <b>2,665</b> |

# St Ives gold mine continued

## Mineral Resources and Mineral Reserves reconciliation year-on-year

| Factors that affected Mineral Resources reconciliation year-on-year                       |
|---|
| Mining depletion (-438koz)  |
| Higher gold price A\$1,850/oz to A\$2,000/oz (+120koz)                                    |
| Discovery dominated by Invincible South, Invincible South Footwall, and Neptune (+880koz) |

| Factors that affected Mineral Reserves reconciliation year-on-year                    |
|---|
| Mining depletion (-404koz)  |
| Higher gold price A\$1,600/oz to A\$1,750/oz (+130koz)                                |
| Discovery dominated by Invincible South, Neptune and Invincible underground (+663koz) |

### MINERAL RESOURCE RECONCILIATION

Gold (koz)



### MINERAL RESERVE RECONCILIATION

Gold (koz)



### Mineral Reserves sensitivity

To illustrate the impact of fluctuations in gold price and exchange rates on the current declaration, St Ives generated sensitivities for Mineral Reserves. The following graph indicates the Managed Mineral Reserves sensitivity at -15%, -10%, -5%, base, +5%, +10% and +15% to the base A\$1,750/oz reserve gold price.

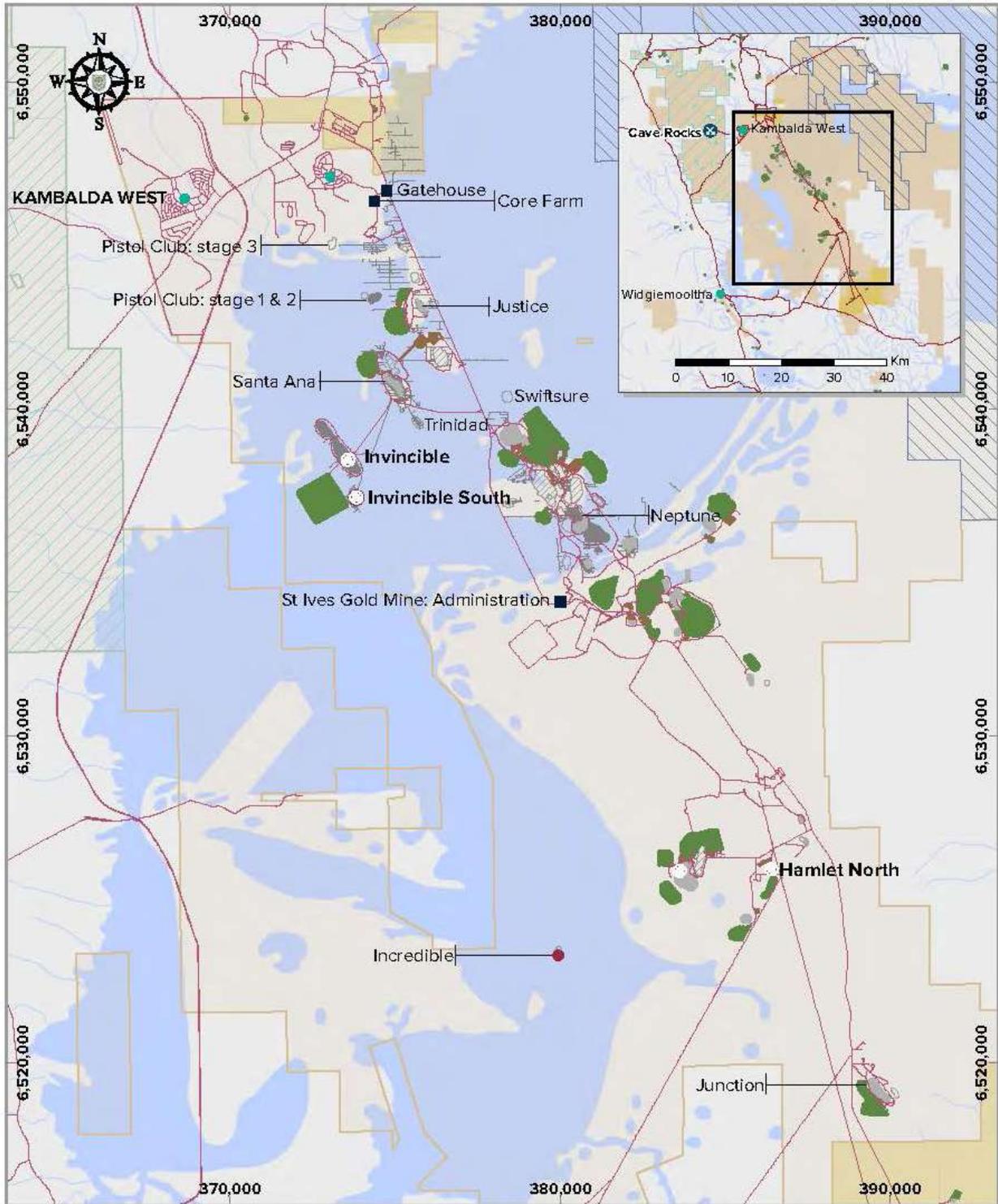
These sensitivities (other than for the base case) are not supported by detailed plans and depletion schedules. They should only be considered on an indicative basis, specifically as such sensitivities assume 100% selectivity, without any operating cost increases.

### MINERAL RESERVE SENSITIVITY

GOLD (koz)



St Ives: Lake rig drilling on Lake Lefroy

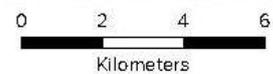


**Reference**

|                     |   |  |   |
|---------------------|---|--|---|
| Buildings           | ■ | Open Pit - Active                          | ■ |
| UG Mines            | ○ | Open Pit - Inactive                        | ■ |
| Significant Deposit | ● | Open Pit - Inactive (Partially Backfilled) | ■ |
| Main Roads          | — | Open Pit - Proposed                        | ■ |
| Lease Outline       | ▭ | Stockpiles                                 | ■ |
| Kambalda West       | ▭ | Tailings Dams                              | ■ |
| LEX JV              | ▭ | Waste Dump                                 | ■ |
| Gold Rights Only    | ▭ |  |   |

**Gold Fields Limited  
St Ives Gold Mine**

MINE INFRASTRUCTURE AS AT DECEMBER 2020

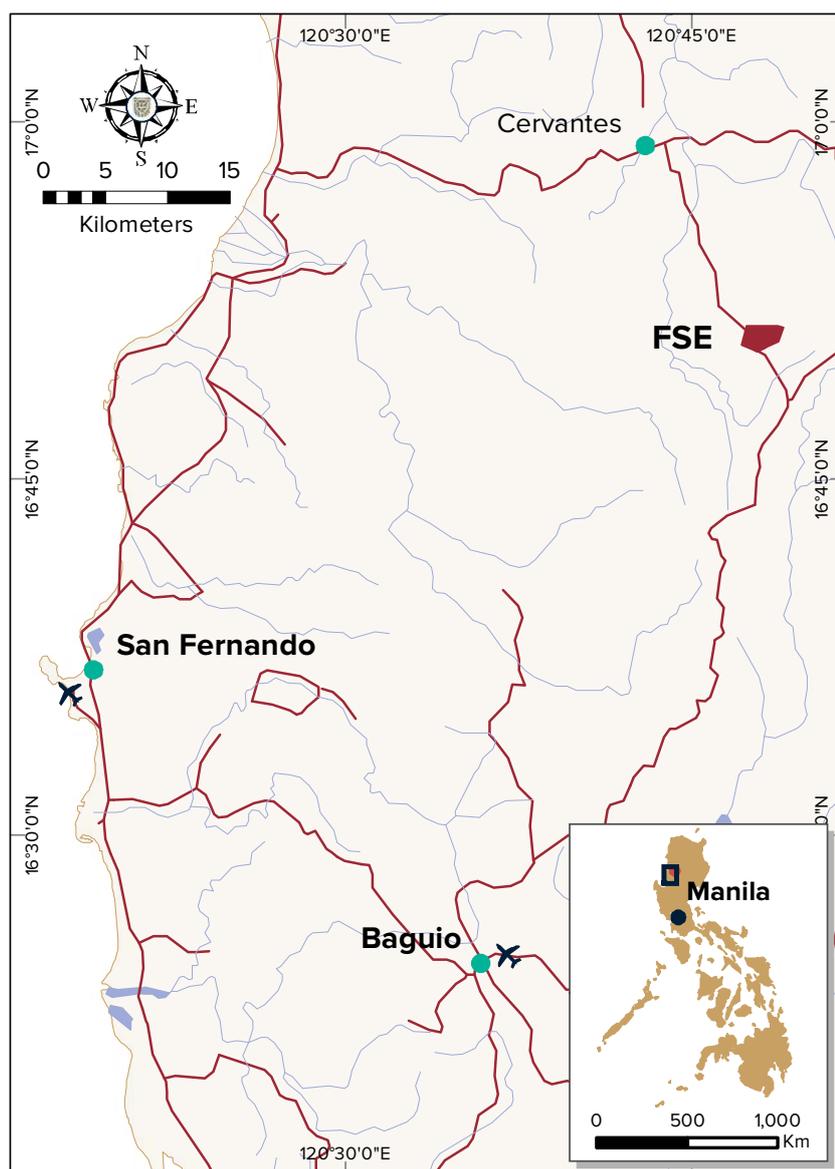


Co ordinate System: Map Grid of Australia Zone 51  
(Geocentric Datum of Australia 1994)

## Far Southeast – 40% attributable to Gold Fields



The Far Southeast (FSE) project is a gold and copper deposit in the Philippines, with Mineral Resources of 19.8Moz gold and 9,921Mlb copper.



### Brief history and regional geology

The Annexure to this Supplement includes a brief history and regional geology summary for the FSE project.

### Deposit geology

The FSE copper-gold porphyry is a deeply concealed deposit associated with a Pleistocene diorite-dacite intrusion complex intruded into Eocene basaltic country rocks. The intrusion complex is cross-cut by several phreatomagmatic breccia pipes which are pre, syn and post-mineralisation. The mineralisation is mostly hosted in the intrusion complex and, to a lesser extent, the basaltic country rocks, and is characterised by disseminated sulphides and multi-phase sulphide-bearing quartz and quartz-anhydrite vein sets and stock works.

No exploration or additional conceptual mine design studies were conducted on the FSE project during 2020, and no further updates were made to the geology and/or Resources model.

### Social licence to operate

For Gold Fields to obtain a further 20% interest in the FSE project, a Financial or Technical Assistance Agreement (FTAA) will be required from the Philippine government. This depends on obtaining the free, prior and informed consent (FPIC) of the local Kankana-ey Indigenous People. In mid-2013, the Kankana-ey Indigenous People voted in favour of the project and a Memorandum of Agreement was signed with the Council of Elders in February 2015. The agreement, together with supporting documentation, is being considered by the National Commission on Indigenous Peoples (NCIP) before issuance of a formal certification precondition, which will complete the FPIC process.

### Location

The FSE project is located in the well-known mining district of Mankayan in the Cordillera region of Northern Luzon, ~250km north of Manila.

### Project ownership and capex

The project is held by Far Southeast Gold Resources Inc. (FSGRI), a JV between Lepanto Consolidated Mining Company (LCMC) and Gold Fields. To date, Gold Fields has acquired 40% of FSGRI for US\$230m, and has the option to acquire a further 20% for US\$110m, incurring initial development costs totalling US\$165m.

In June 2014, LCMC and FSGRI jointly applied for the renewal of Mineral Production Sharing Agreement 001 (MPSA 001), which is the mineral tenement jointly held by the two companies in which most of the FSE deposit occurs. The initial 25-year term of MPSA 001 was due to expire in March 2015.

In February 2015, LCMC and FSGRI commenced arbitration proceedings against the Philippine government regarding whether FPIC is also required for the renewal of the MPSA 001. In November 2015, the arbitration panel issued an award that FPIC may not be imposed as a requirement for the renewal of MPSA 001 and that the MPSA 001 should be renewed under the same terms and conditions.

In December 2015, the Republic of the Philippines filed a petition to vacate the arbitral award with the court – a decision which the court rendered in May 2016. After the court denied a motion for reconsideration, LCMC and FSGRI subsequently filed a petition for review with the Court of Appeals in July 2016.

In May 2018, the Court of Appeals ruled in favour of MPSA 001 renewal without the need for FPIC and, in response, the government filed a motion for reconsideration. The motion for reconsideration was denied by the Court of Appeals on 14 January 2019. The government filed a petition for review in the Supreme Court on 12 March 2019. LCMC and FSGRI filed their comment to the petition on 10 June 2019. In September 2019, the Supreme Court required the

government to file a reply. There was no significant development in the proceedings in 2020.

Court proceedings were affected and delayed due to the Covid-19 pandemic. By 2020, pursuant to a previous Supreme Court decision that the NCIP's jurisdiction is limited only to disputes between members of the same indigenous group, the NCIP dismissed all legal proceedings filed by indigenous clans against LCMC and FSGRI on the grounds of lack of jurisdiction.

There were positive developments for FTAA's in the country during 2020. An FTAA is a form of mining tenure that allows majority foreign ownership and control of a mining project. An FTAA generally has an initial term of 25 years, renewable for another 25 years. The first FTAA in the country (FTAA 001) became due for renewal in June 2019 and the mining company involved (ASX and TSX listed) commenced the renewal process with the Department of Environment and Natural Resources (DENR) in March 2018. The DENR favourably endorsed the FTAA 001 renewal to the Office of the President in June 2019. In December 2020, the Office of the President, whose approval is required for an FTAA, instructed

the DENR to engage the Department of Finance and commence negotiations with the mining company to finalise the terms of the FTAA 001 renewal.

The current view and perspective on the Philippines is that matters in the country have not deteriorated relative to 2019, and there were some positive updates in 2020 as outlined above.

## MINERAL RESOURCES

The historical Inferred Mineral Resource for the FSE deposit, first declared in August 2012, is 891.7Mt at 0.7g/t gold and 0.5% copper for 19.8Moz of gold and 9,921Mlb of copper, was maintained for 2020. The Resource was reported inside a mining constraint, which assumed an eventual non-selective, bulk underground mining method. The classification of Inferred Resources was applied based on drill hole spacing, estimation quality, geological continuity and geological understanding of the deposit in early 2012, supported by a view on reasonable prospects for eventual economic extraction which is viewed as being relevant today. The Inferred Resources have a lower confidence than Indicated Resources and cannot be converted to Mineral Reserves.

| Resource classification | Tonnes (Mt)  | Grade (Au g/t) | Metal (Au Moz) | Grade (Cu %) | Metal (Cu Mlb) |
|-------------------------|--------------|----------------|----------------|--------------|----------------|
| Inferred                | 891.7        | 0.7            | 19.8           | 0.5          | 9,921          |
| <b>Total</b>            | <b>891.7</b> | <b>0.7</b>     | <b>19.8</b>    | <b>0.5</b>   | <b>9,921</b>   |

FSE Mineral Resources effective from and unchanged since 31 August 2012

### Notes:

- These Mineral Resources are not Mineral Reserves as an assessment to a minimum of a PFS is required
- There was no further technical work or economic assessments in 2020 to update previous input or commodity prices
- The Mineral Resources are reported in accordance with the SAMREC Code
- The Mineral Resources are reported in an optimised underground bulk mining shell derived using scoping study mining, processing and cost parameters, and commodity prices of US\$1,650/oz gold and US\$8,600/t copper. All Inferred Resources material in the shell are reported
- Mineral Resources are reported without dilution and ore loss parameters
- Rounding of figures may result in minor computational discrepancies. Where this happens, it is not deemed significant
- LCMC holds a 60% interest, while Gold Fields holds a 40% interest in the FSE. Attributable metal is 11.9Moz gold and 5,953Mlb copper to LCMC and 7.9Moz gold and 3,968Mlb copper to Gold Fields

## TAILINGS

To support ongoing improvement studies, a 2019 third-party audit of the TSF associated with the FSE project and the existing LCMC mine revealed that the facility is being well managed, with no visible signs of instability and with adequate freeboard. The decant outlet structure was inspected by LCMC, and reported to be in a good condition. The inlet conditions appeared to be satisfactory. Adequate monitoring protocols are in place and construction records largely meet accepted practice.

However, the facility is classified as an extreme consequence category facility in terms of the ANCOLD guidelines. Therefore, the overall integrity of the facility must be tested against different seismic loading conditions and flood events. Additional work is currently being done as part of the TD5A Improvement Studies, investigating additional risk reduction measures in an attempt to improve the overall risk profile of the facility.

## OUTLOOK

The outlook for the FSE project is subject to the permitting issues being resolved and the socio-political environment becoming more conducive to mining licence approvals or new mine development. The project is assisting its JV partner to obtain renewal of MPSA 001 and is completing the process to obtain the FTAA. Community projects, stakeholder engagement, environmental and social baseline data gathering and studies will continue to support the permitting process.

# SOUTH AFRICA REGION

## SALIENT POINTS

### MINERAL RESOURCES

**62.7Moz\***  
(+4% NET OF DEPLETION)

### MINERAL RESERVES

**34.8Moz\***  
(+6% NET OF DEPLETION)

\* 90.538% attributable to Gold Fields (life-of-mine (LoM) 2020)

South Deep mineral processing plant and Twin Shaft headgear

# SOUTH AFRICA REGION

## South Deep gold mine

### South Deep demonstrated tangible progress and a strong financial and operational recovery to the Covid-19-related restrictions experienced in 2020.

South Deep improved in most key measures during 2020, attributed to productivity improvement programmes introduced in 2019 starting to bear fruit and the effective protocols implemented to manage and mitigate the impacts of Covid-19. Ore mined increased by 7% to 1,136kt in 2020 from 1,060kt in 2019. Gold production increased by 2% to 7,056kg (226.9koz) in 2020 from 6,907kg (222.1koz) in 2019. The increased gold production was due to improved volume and grade mined.

The restructuring further embedded in 2020 incorporated a reduced workforce and mobile equipment levels aligned to overall mining activity that increased focus on the core productivity process and supported a recalibration of the cost base. Going forward, emphasis is on South Deep continuing to show substantive progress on the mine’s core strategic project themes, key performance indicators and enablers in the short to medium term. Sustaining traction in these areas remains integral to facilitating delivery on the production ramp-up and is pivotal to maintaining the mine’s trajectory to deliver LoM steady state volumes and projected financial metrics. 2021 represents a major challenge and milestone for executing the restructure plan, continuing the LoM ramp-up and establishing sustainable business improvement.



## South Deep gold mine *continued*

### OPERATION

#### South Deep

| ASSET FUNDAMENTALS   |  |
|--|--|
| <b>General location</b>  | South Deep gold mine is situated in the magisterial districts of Westonaria and Vanderbijlpark (Gauteng province), some 45km southwest of Johannesburg at latitude 26°25'S and longitude 27°40'E. It is accessed via the N12 provincial road between Johannesburg and Potchefstroom.   |
| <b>Brief history and regional geology</b>                        | The Annexure to this Mineral Resources and Mineral Reserves Supplement (the Supplement) provides a brief history of South Deep and a summary of the regional geology.  |
| <b>Climate</b>   | The regional climate is classified as Cwb (warm temperature, winter dry, warm summer) under the Köppen-Geiger climate classification.  |
| <b>Licence status and holdings</b>                               | South Deep converted its mining right (old order) to new order mining rights in July 2010, as required by the Mineral and Petroleum Resources Development Act No 28 of 2002 (MPRDA) (as amended). The new order mining rights were granted for the mining area totalling 4,268ha.  |
| <b>Mining method</b>   | South Deep is an underground mechanised mine, using an owner mining workforce. Reserves are accessed through de-stress and shadow development cuts to manage rock stress and seismic activity. A number of selective mining methods, including drifts and benches, are employed but long-hole stoping with paste fill is the primary bulk mining method. Significant focus is on frontline coaching to improve compliance to plan and productivity. Mining method and extraction sequence optimisation is ongoing.   |
| <b>Mining operational infrastructure</b>                         | <p>The workings are accessed from the surface through two shaft systems, the Twin Shaft complex (main and ventilation shafts), of which the main shaft comprises a single-drop to 110A level, a depth of 2,998m, the vent shaft to 110 level at a depth of 2,947m and the South Shaft complex, which is a sub-vertical system (three operating shafts) to 95 level at a depth of 2,786m.</p> <p>The mine is divided into three main areas:</p> <ol style="list-style-type: none"> <li>1. Current Mine (CM), characterised by selective mining methods scattered over a large area originally exploited by means of conventional tabular mining. CM is accessed from four active levels (90, 93 and 95) from both the South Shaft and Twin Shaft complexes</li> <li>2. The North of Wrench (NoW), directly south and down dip of CM, comprises six mining corridors separated by regional pillars that extend southwards to the Wrench fault. A bulk non-selective mining method is applied, resulting in a higher Resources to Reserves conversion ratio</li> <li>3. The South of Wrench (SoW) east and west areas, situated south and down dip of NoW, will be mined in the same manner as NoW</li> </ol>   |
| <b>Mineral processing and tailings storage facilities (TSFs)</b> | <p>The South Deep processing plant consists of a conventional semi-autogenous grinding (SAG)/ball milling circuit, a gravity gold recovery circuit and a conventional leach/Carbon in Pulp (CIP) circuit. Final product from both the gravity and CIP circuits is smelted into bullion.</p> <p>For pre-processing tailings, the South Deep plant also includes a tailings retreatment section that consists of a thickener followed by a dedicated CIL circuit.</p> <p>South Deep has one active TSF, the Doornpoort TSF, and four dormant TSFs, known as TSF 1, 2, 3 and 4. TSF 2 is undergoing re-mining using hydraulic mining methods (ie using a water cannon). The top portion of TSF 1 has also been re-mined to date. TSFs 1 and 2 were commissioned in 1968 and operated as upstream raised paddock dams as is typical in South African gold mines. These TSFs cover a combined footprint of 69ha and have a maximum height of 47m. TSFs 3 and 4 were commissioned in 1982 and are also upstream raised paddock dams. These TSFs cover a combined footprint of 100ha and have a maximum height of 41m. Deposition on these TSFs ceased in 2011.</p> <p>The Doornpoort TSF was commissioned in April 2011 and three upstream wall raises have been constructed. The Doornpoort TSF incorporates a gravity decant system with drainage structures placed beneath the tailings itself. This facility has a remaining LoM storage capacity of ~149Mt (Phase 2).</p> |
| <b>Mineralisation characteristics</b>                            | <ol style="list-style-type: none"> <li>1. Mineralisation hosted by conglomerates (reefs)</li> <li>2. Laterally continuous with long-range predictability</li> <li>3. Clear patterns of predictable mineralisation governed by sedimentary characteristics</li> <li>4. Ore body definition and resource modelling programmes are ongoing for the current mining areas (CM and NoW) as well as for SoW</li> </ol>  |

## ASSET FUNDAMENTALS continued

|  |  |
|--|--|
| <b>Local geology and deposit type</b>    | <p>The reef horizons exploited in the South Deep LoM comprise the Upper Elsburg formation conglomerates. In the western half of the mining right area, the VCR occurs as a single reef horizon that overlies footwall lithologies of the Turffontein sub-group. The Upper Elsburg reefs, sub-cropping below the VCR in a north northeast trend, comprise multiple stacked reef horizons forming an easterly divergent clastic wedge.</p> <p>This wedge attains a thickness of approximately 120m – 130m in the vicinity of the eastern boundary of the mining right area. The Upper Elsburg reefs constitute 100% of the South Deep Mineral Reserve ounces, the VCR was excluded from Reserves and contributes only to Mineral Resources.</p>  |
| <b>LoM: Proved and Probable Reserves</b> | <p>It is estimated that the current Mineral Reserves will be depleted in 2106 (86 years).</p>  |
| <b>Sustainable development</b>           | <p>South Deep's commitment to continued improvement in health, safety and environmental management is underpinned by its ISO 14001:2015 and ISO 45000 certifications and its certification to the International Cyanide Management Code (ICMC). The mine's ISO 14001:2015 certification was extended to include underground operations in 2020. South Deep reports its level of compliance in respect of its Social and Labour Plan (SLP) and Mining Charter commitments, annually. The 2018 – 2022 SLP was approved in 2019 and implementation started immediately after approval. Implementation of the SLP and Mining Charter requirements continues although Covid-19 impacted negatively on some projects.</p> <p>In 2019, the Department of Water Affairs and Sanitation approved the Integrated Water Use Licence (IWUL) lodged in May 2015. South Deep updated its water management plan to align with the new licence. An annual compliance against IWUL conditions was conducted in 2020, and there were no findings raised against the mine.</p> <p>A revised Environmental Management Plan (EMP) was submitted for approval during Q4 2016, this is still under review by the Department of Mineral Resources and Energy (DMRE). During Q4 2020, the mine conducted external compliance audit of the EMP and scored 97%. This audit takes place every two years.</p> <p>A new Mining Charter was published by the DMRE in mid-2018, with implementation guidelines issued in December 2018. The Minerals Council of South Africa undertook some aspects of the new charter under judicial review. The Minerals Council of South Africa won a court case recognising the "once empowered, always empowered" principle, which would guarantee the legislated black economic empowerment (BEE) ownership levels for South Deep until its licence renewal in 2040.</p> <p>Three months prior to the lapse of the mining right, South Deep has to apply for the renewal of the mining right, whereby South Deep then has to adhere to the amended requirements as per the Mining Charter.</p> |

## RESOURCE DEFINITION/MINE DEFINITION DRILLING AND EXPENDITURE

The Mineral Resource base is predominantly classified as Measured and Indicated, with ~10% in the Inferred category. With the surface drilling exploration programme completed by Gold Fields in 2013 and subsequently integrated with the results of the 3D seismic survey undertaken in 2004, drilling is now focused on resource and mine definition as opposed to brownfield exploration. Reprocessing of the 3D seismic data is underway and will be incorporated in the 2021 model updates. In time, it will be integrated with the long inclined borehole (LIB) drilling focused on the SoW Resource to further enhance ore body confidence. The mine's drilling strategy and standard operating procedure aims to profile the appropriate resource confidence level to support and de-risk the short, medium and long-term mine design and schedules. Three distinct drilling programmes are employed, namely:

- Resource definition drilling provides information for medium-term planning and design refinement, and is based on a 60m – 120m grid, up to 300m ahead of the advancing faces. The drilling is conducted from footwall infrastructure and executed ahead of the advancing de-stress cut echelon. The first phase is on a 60m – 120m grid, up to 300m ahead of the face.
- LIB drilling attains a 300m grid, up to 1,000m ahead of the de-stress echelon. This drilling provides additional data for structural definition, stratigraphic modelling, facies determination and assaying for grade estimation for LoM planning.
- Infill grade control (GC) drilling (mine definition) is the final phase of drilling and data acquisition prior to stoping. Underground channel sampling is not undertaken because of safety, access, logistical constraints and spatial control due to the massive nature of the ore body. The drilling programme provides the infill drilling to the existing resources definition drill grid to achieve an approximate 30m x 30m coverage to support long-hole stoping. The data generated is used for local scale facies determination, structural definition, stratigraphic modelling, assaying for resource estimation and detailed stope design. Cover drilling is conducted simultaneously. It is a series of low inclined cover holes (~30°) from within the de-stress cut to enhance detail on geological structure. Up to four holes are drilled per corridor up to a depth of 100m ahead of the advancing cut, and will facilitate a series of geophysical surveys for increased geological confidence, and for geotechnical modelling and domaining purposes.

## South Deep gold mine *continued*

On-lease metres drilled and expenditure for the 12-month period ended 31 December 2020 are summarised below.

| Resource and mine definition drilling | December 2020  |             |             | December 2019  |              |             |
|---------------------------------------|----------------|-------------|-------------|----------------|--------------|-------------|
|                                       | Metres drilled | Rm          | US\$m       | Metres drilled | Rm           | US\$m       |
| <b>Operations</b>                     |                |             |             |                |              |             |
| GC drilling                           | 8,472          | 17.07       | 1.04        | 10,442         | 20.96        | 1.44        |
| LIB drilling <sup>1</sup>             | 2,918          | 4.73        | 0.28        | 3,700          | 6.40         | 0.44        |
| <b>Total</b>                          | <b>11,390</b>  | <b>21.8</b> | <b>1.32</b> | <b>14,142</b>  | <b>27.36</b> | <b>1.88</b> |

<sup>1</sup> Only LIB drilling is classed as exploration drilling

### KEY DEVELOPMENTS AND MATERIAL ISSUES

The key enablers and themes embedded in the LoM plan set out in 2018 continue to progress well with good traction on both production and cost metrics.

#### 2020 highlights

- During 2020, South Deep had to deal with the devastating effects associated with the Covid-19 pandemic. In response, the mine created and supported a strategic framework to mitigate the negative effects. This framework was aligned to the Mandatory Code of Practice for the Management of Covid-19 Pandemic as issued by the DMRE. In addition to the extensive Covid-19 mitigation strategy, South Deep's executive management further developed a Covid-19 Steering Committee that ensured day-to-day awareness, monitoring and effective actions. 2020 saw an increased reliance on digital management tools as a reduced on-mine workforce forced many employees to continue working from home
- Seismicity remains a challenging aspect of mining at depth and new de-stress and pillar design modifications from east/west to north/south orientation were implemented with encouraging results regarding pillar behaviours and face bursts
- In 2020, the mine continued to progress on most of the performance metrics relative to 2019, including production quality and efficiency measures with a notable improvement in stope compliance improving year-on-year from 79% to 88%
- Continued improvement on backfilling capability and new backfill product development
- A "shotcrete from backfill" system was designed and partially implemented to provide backfill on demand
- Revised stope sequencing: mining below fill, top down and from the back of the cut to the front
- The mine's modernisation programme continues to leverage the implementation of innovation and

technology (I&T) and is realising value in safety and productivity and tele-remote loading was established towards the end of 2020

- The mine further improved its central control facility initiated in 2019
- A structured leadership system was implemented, building leadership and technical capability and capacity through Siyaphambili, the frontline productivity programme
- Notwithstanding the global year-on-year reduction in the Reserve grade (-5.3%), it is significant that NoW, which dominates production over the next ~20 years, increased from 5.85g/t to 5.94g/t

#### Mine design, seismicity and execution

- South Deep is an ultradeep bulk mechanised mine exploiting the shallow dipping Elsburg clastic wedge, rendering it unique in its pioneering mining method. The mining method has evolved through various stages, endeavouring to continuously improve where warranted
- Due to its depth, seismicity remains a constraint and a key consideration in mine design and execution. The medium and longer-term control programmes are designed to manage this risk and recent enhancements, including face support, pre-conditioning, improved pillar design, layout protocols and extraction sequencing, are all proving to be effective and will benefit from ongoing improvements where warranted. A recent specialist third-party review by the Geotechnical Review Board (GRB) found the mine's seismic management practices to be appropriate and ongoing monitoring and assessment suitable to drive continuous improvement
- South Deep's ramp-up plan is based on increased stoping output from mechanised de-stressed areas, together with improvements required in equipment productivities. In 2020, the

mine demonstrated that the required productivity rates are achievable and good progress was made to develop the infrastructure for the new de-stress cuts

#### Mine planning and scheduling

- Mining dilution and loss factors applied to Reserves are calibrated in line with actual performance trends
- Modifying factors are deemed conservative with incremental improvements in metal loss and mining recovery anticipated in the future
- Detailed modelling that profiles realistic mining sequences and equipment productivities is incorporated into the development, de-stress and stoping activities to produce a fully integrated production schedule encompassing all key activities and their interdependencies
- Commissioning of underground capital infrastructure is aligned to enable increased output, which includes crushers and conveyors being operational in 2022 and the mining corridors achieving their planned design geometry in 2023. Significant logistical improvements are anticipated due to independent ventilation districts, in-cut ore flow and improved fleet maintenance facilities
- The strategy, restructuring and revised operating model initiated in 2018 and embedded in 2019 – 2020 is engrained in this LoM plan, which will continue to be updated and recalibrated with time as more empirical operational data is gathered

#### Mine plan execution

Realisation of the planned production and cost performance enhancements requires the achievement of the planned efficiency improvements to production cycle time. The execution of the strategy to sustainably turn around South Deep and unlock long-term value is progressing

## KEY DEVELOPMENTS AND MATERIAL ISSUES continued

well. All five of the key tenants (Shape the Culture, Build Capacity, Manage the Work, Improve the Work, and Sustain the Improvement) have been rolled out. The Maintenance Improvement Programme, aligned and integrated with the Siyaphambili Productivity Intervention, continues to show encouraging results, particularly with the reliability of the drill rigs.

Six key strategic improvement themes remain pivotal to South Deep's success:

- Purposeful Visible Felt Leadership (VFL)
- Reinvigorating our leadership system
- Improving face time
- Improving the effectiveness of face time
- Enabling logistics
- Modernisation (I&T)

Several projects were rolled out to support these six themes and progressed well, delivering improved results notably on face time effectiveness and the enabling logistics.

Ore mined increased by 7% to 1,136kt in 2020 from 1,060 kt in 2019. NoW increased its production contribution year-on-year from 60% to 65%, while CM reduced its production contribution from 40% to 35% as part of the focus to transition the mine from CM to NoW. Gold production increased by 2% to 7,056kg (226.9koz) in 2020 from 6,907kg (222.1koz) in 2019. The increased gold production was due to improved volume and grade mined despite lower-than-expected grade yield.

Destress square metres developed increased by 34% to 35,545m<sup>2</sup> in 2020 from 26,606m<sup>2</sup> in 2019 and waste mined increased by 11% to 86kt in 2020 from 77kt in 2019, predominantly as growth capital development was ramped up in Q4 2020.

Secondary support decreased by 26% and backfill by 24% in 2020 as these activities were reinstated later than production post-Covid-19 lockdown restrictions.

Surface re-mining and processing increased dramatically by 104% due to fully utilising the separate processing circuit to maximise value from this operation and supplying sufficient underground backfill quantities.

### Power supply

Reliable and cost-effective electrical power supply in South Africa remains a significant risk. The national power supply grid remains relatively constrained, which

often leads to load curtailment. Since the mine is not shaft or mill constrained, spare capacity exists in these large power consuming activities, offering the mine flexibility during load curtailment. However, this does not fully mitigate the risk and could hamper productive output. To moderate the risk, South Deep is far advanced in increasing its back-up generation capacity and pursuing solar power generation capability. The existing emergency generator station will be adequate to weather stage 4 load curtailment sessions that do not extend over 14 days. Good progress was made in 2020 towards attaining the generation licence for the 40MW solar plant from the National Energy Regulator of South Africa. The licence was granted in February 2021. Once all these initiatives are concluded, the risk exposure will reduce and will lower the mine's consumption and environmental impact. The solar plant will cover up to 20% of energy consumption for South Deep, thus reducing carbon footprint and reliance on Eskom.

### Risks to the execution of the LoM plan include:

- Covid-19-related interruptions – deploy the Management Response Plan formulated during the first wave and adjust where warranted
- Seismicity – medium and long-term seismicity mitigation strategy is in place and reviewed routinely by the GRB
- Ability to extract stopes efficiently – the Siyaphambili programme, production engineering department and mining teams continue to focus on improved stoping compliance
- Operational underperformance/cost inflation – addressed through the productivity intervention and business improvement themes, together with the implementation of the modernisation strategy
- Unidentified complex geological structures resulting in a need to change the mine design – this risk is accounted for by applying geological and geotechnical loss factors to the LoM plan. These are reviewed and recalibrated annually where necessary. The resource and mine definition drilling procedures are aimed at mitigating this risk
- Regional hydrology – Ezulwini plan is in place supported by continuous engagement with relevant stakeholders

### Cooke 4 mine partial closure and regional dewatering

On 31 August 2016, Sibanye-Stillwater Limited (Sibanye) announced that it would be closing its Ezulwini (Cooke 4) Shaft.

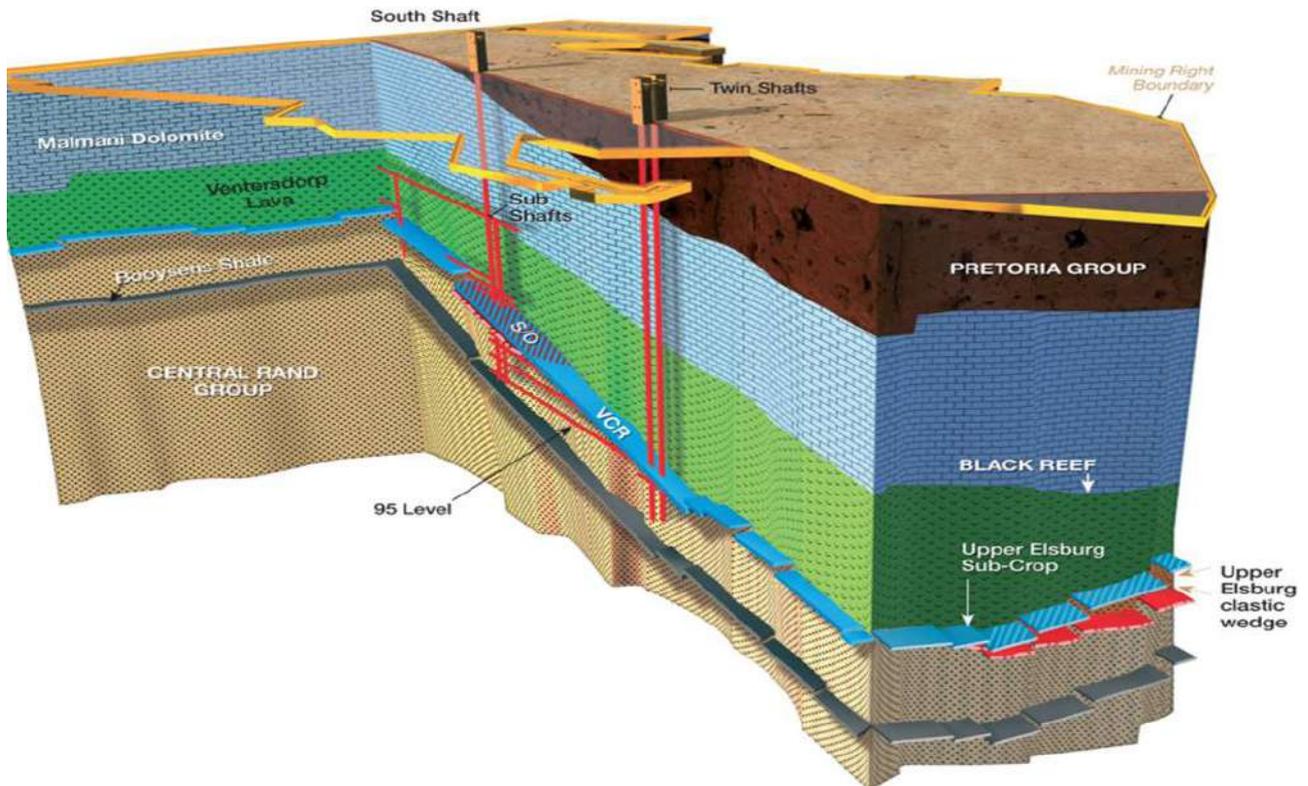
Sibanye commenced with an application for an Environmental Authorisation for closure and the cessation of dewatering from the Ezulwini mine (Ezulwini). On 30 April 2018, the DMRE refused the Environmental Authorisation for partial closure and cessation of dewatering. Sibanye appealed the finding, and Sibanye made new submissions and submissions were made by Interested and Affected Parties, such as South Deep, by May 2019. Subsequent to the additional submissions, the Basic Assessment Environmental Authorisation was refused on 3 December 2020.

Prior to the final decision from the DMRE, Ezulwini brought an application for a declaratory order in June 2019, against seven respondents, including South Deep, in relation to the cessation of dewatering from Ezulwini (Cooke 4) Shaft. South Deep opposed this application and filed a counter application seeking to ensure Ezulwini remains responsible for the pumping and dewatering of the shaft up and until the DMRE issued a closure certificate. The counter application was determined on paper by Honourable Judge Fabricius on 3 and 4 December 2020. Judgment was received on 15 January 2021 whereby Ezulwini remains responsible for the pumping and treatment of the extraneous water from the underground workings up until the Minister issues a closure certificate in terms of section 43 of the MPRDA. On 4 February 2021, Ezulwini filed a "Notice of Application for Leave to Appeal". In summary, the grounds for the Application for Leave to Appeal are that the Judge erred in terms of the obligations of holders of mining and related rights in relation to the pumping and treatment of extraneous water.

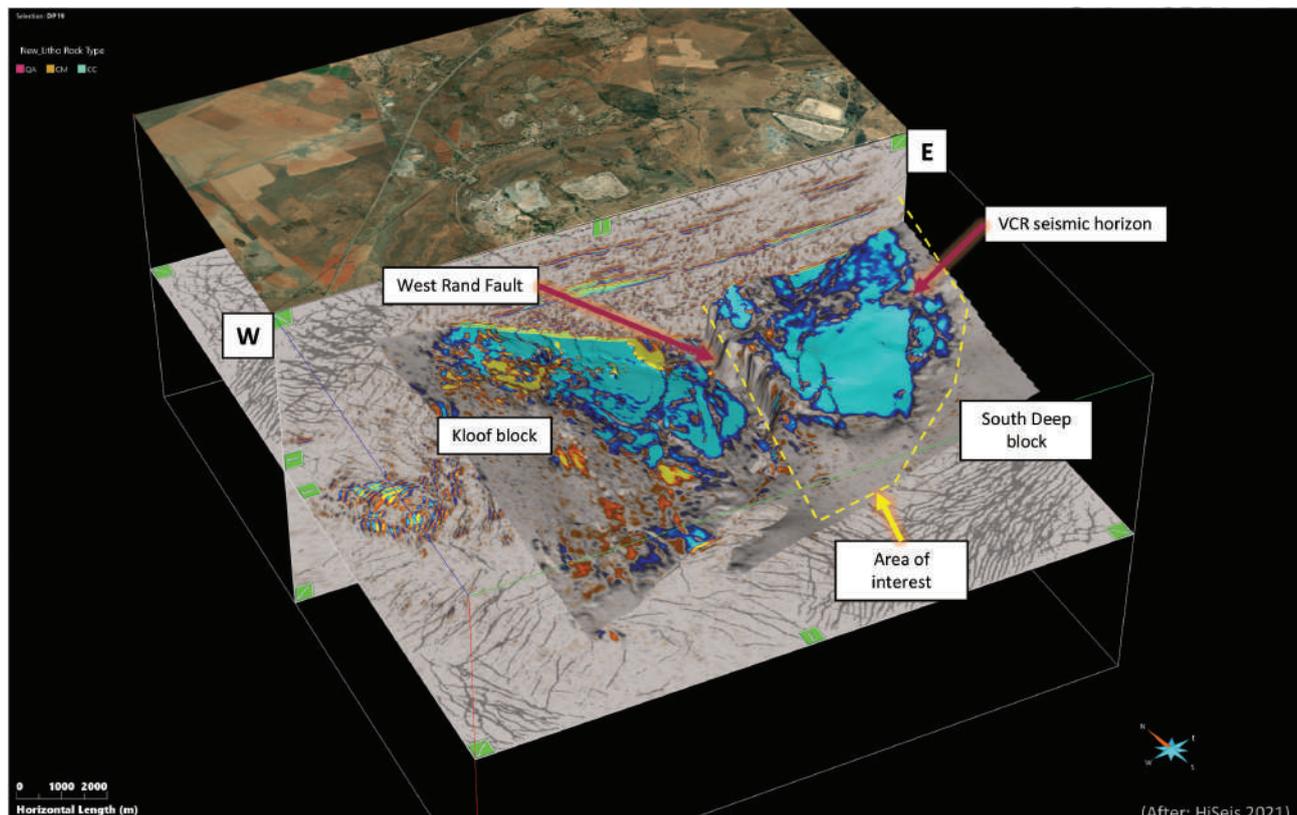
In the meantime, Rand Uranium, also a subsidiary of Sibanye, started with a Basic Assessment Process for the closure of Cooke 1 to 3 in October 2021. South Deep submitted its objection as part of the public participation process to the Environmental Authorisation on 16 November 2020. An objection to the WUL application submitted by Rand Uranium was submitted on 14 December 2020. The ultimate outcome of these matters, including its impact on South Deep, remains uncertain. However, the cessation of pumping by Sibanye-Stillwater and dewatering of Cooke 4, as well as the regional closure of the bigger area that includes Cooke 3, 2 and 1 could have a material adverse effect on South Deep's business.

# South Deep gold mine continued

**South Deep: Schematic 3D cross-section showing stratigraphy and primary mine infrastructure**



The diagram above is a 3D isometric view of the stratigraphy of South Deep including the primary mine infrastructure. The stratigraphic package hosts the economically significant Upper Elsburg and VCR conglomerate units. The Upper Elsburg (red) forms a clastic wedge that attains a thickness of 120m in the east and truncates against the VCR (blue) to the west



South Deep: East-West cross-section showing seismic stratigraphy after Reverse Time Migration highlighting the VCR seismic surface

## OPERATING STATISTICS

|  | Units          | Historic performance |          |          |
|--|----------------|----------------------|----------|----------|
|  |                | Dec 2020             | Dec 2019 | Dec 2018 |
| <b>Development</b>                                 |                |                      |          |          |
| Total development                                  | m              | <b>7,161</b>         | 7,485    | 7,649    |
| – Waste development                                | m              | <b>1,569</b>         | 1,444    | 2,670    |
| – Reef development                                 | m              | <b>5,591</b>         | 6,041    | 4,979    |
| <b>Underground mining (including) development</b>  |                |                      |          |          |
| Total de-stress mined                              | m <sup>2</sup> | <b>35,545</b>        | 26,606   | 18,793   |
| Total mined  | kt             | <b>1,221</b>         | 1,138    | 1,036    |
| – Waste mined                                      | kt             | <b>86</b>            | 77       | 200      |
| – Ore mined  | kt             | <b>1,136</b>         | 1,060    | 836      |
| Mined grade (ore only)                             | g/t            | <b>6.3</b>           | 6.2      | 6.0      |
| Mined grade (ore and waste)                        | g/t            | <b>5.9</b>           | 5.8      | 4.9      |
| Au broken  | kg             | <b>7,161</b>         | 6,545    | 5,048    |
| <b>Processing</b>                                  |                |                      |          |          |
| TSF mining   | kt             | <b>1,048</b>         | 515      | 282      |
| TSF value  | g/t            | <b>0.23</b>          | 0.28     | 0.24     |
| Waste treated                                      | kt             | <b>55</b>            | 53       | 210      |
| Underground ore treated                            | kt             | <b>1,154</b>         | 1,098    | 828      |
| Total tonnes treated                               | kt             | <b>2,258</b>         | 1,666    | 1,320    |
| Underground ore yield                              | g/t            | <b>6.0</b>           | 6.2      | 5.9      |
| Head grade (combined) <sup>1</sup>                 | g/t            | <b>3.3</b>           | 4.4      | 3.9      |
| Yield (combined)                                   | g/t            | <b>3.1</b>           | 4.1      | 3.7      |
| Plant recovery (underground)                       | %              | <b>95.4</b>          | 95.4     | 95.8     |
| Plant recovery (surface)                           | %              | <b>47</b>            | 57       | 59       |
| Total Au production                                | kg             | <b>7,056</b>         | 6,907    | 4,885    |
| Au sold  | koz            | <b>227</b>           | 222      | 157      |
| <b>Financials</b>                                  |                |                      |          |          |
| Au price received                                  | US\$/oz        | <b>1,763</b>         | 1,418    | 1,252    |
|  | R/kg           | <b>928,707</b>       | 659,111  | 531,253  |
| Exchange rate (annual average)                     | R:US\$         | <b>16.38</b>         | 14.46    | 13.20    |
| Cost of sales before amortisation and depreciation | Rm             | <b>3,751</b>         | 3,503    | 3,586    |
|  | R/kg           | <b>531,607</b>       | 507,162  | 734,032  |
| Capex  | Rm             | <b>804</b>           | 479      | 770      |
|  | R/kg           | <b>113,933</b>       | 69,364   | 157,613  |
|  | US\$/oz        | <b>216</b>           | 149      | 371      |
| AIC  | R/kg           | <b>663,635</b>       | 585,482  | 854,049  |
|  | US\$/oz        | <b>1,260</b>         | 1,259    | 2,012    |

<sup>1</sup> Includes TSF and underground waste development

Rounding of figures presented in this report may result in minor computational discrepancies. Where this occurs, it is not deemed significant

### PROJECT AND STUDY PIPELINE

In 2020, several geology and resource estimation projects were initiated, specifically focusing on supporting continuous mine plan improvements in the NoW and SoW areas:

- Reprocessing the 2004 3D seismic data set utilising the latest processing techniques and attribute analysis methods to increase resolution on structural and palinspastic modelling
- Review of the Upper Elsburg regional and local sedimentology and facies geometry to support enhanced geozone and domain interpretations for improved resource estimation

A broad range of projects are scheduled for commencement in 2021 aimed at enhancing the current LoM plan:

- Cut 4 infrastructure installations
- Commissioning the second Charge Master and two Epiroc Bolters/Meshers
- Backfill to shotcrete project and application of product on roadways
- Alternative mining methods are being assessed during 2020 to 2021 through trial mining programmes and include mining under-fill and non-de-stress methods. Where the trials produce positive results, further optimisation studies could indicate the adoption of different mining methods to improve safety, mining efficiency and costs

- Doornpoort TSF upgrade (Phase 2)
- Confirmation of TSF dam break studies, the extent of inundation zones, and reclassification of all TSFs in support of GISTM compliance roadmap
- Mine of the Future projects:
  - Digital enablement of backfill process underground
  - Expansion of tele-remote operations
  - SoW access optimisation study

## South Deep gold mine continued

### MINERAL RESOURCES AND MINERAL RESERVES

All Mineral Resources and Mineral Reserves reported are 90.538% attributable to Gold Fields.

#### Mineral Resources classification

| Classification            | Tonnes (kt)    |                |                | Grade (g/t) |             |             | Au (koz)      |               |               |
|---------------------------|----------------|----------------|----------------|-------------|-------------|-------------|---------------|---------------|---------------|
|                           | Dec 2020       | Dec 2019       | Dec 2018       | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020      | Dec 2019      | Dec 2018      |
| <b>Underground</b>        |                |                |                |             |             |             |               |               |               |
| Measured                  | 33,040         | 29,941         | 20,201         | 5.83        | 6.55        | 7.04        | 6,189         | 6,308         | 4,570         |
| Indicated                 | 262,115        | 239,959        | 221,840        | 5.85        | 6.10        | 6.31        | 49,259        | 47,039        | 44,981        |
| Inferred                  | 25,548         | 22,440         | 20,966         | 8.27        | 8.79        | 9.13        | 6,795         | 6,339         | 6,152         |
| <b>Total underground</b>  | <b>320,703</b> | <b>292,340</b> | <b>263,007</b> | <b>6.04</b> | <b>6.35</b> | <b>6.59</b> | <b>62,243</b> | <b>59,686</b> | <b>55,703</b> |
| <b>Surface stockpiles</b> |                |                |                |             |             |             |               |               |               |
| TSF (Measured)            | 61,774         | 62,743         | 65,020         | 0.22        | 0.22        | 0.21        | 441           | 444           | 449           |
| <b>Grand total</b>        | <b>382,476</b> | <b>355,083</b> | <b>328,027</b> | <b>5.10</b> | <b>5.27</b> | <b>5.32</b> | <b>62,684</b> | <b>60,130</b> | <b>56,152</b> |

#### Mineral Resources classification per mining area (excluding stockpiles)

| Area                     | Measured      |             |              | Indicated      |             |               | Inferred      |             |              | Total Mineral Resources |             |               |
|--------------------------|---------------|-------------|--------------|----------------|-------------|---------------|---------------|-------------|--------------|-------------------------|-------------|---------------|
|                          | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)    | Grade (g/t) | Au (koz)      | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)             | Grade (g/t) | Au (koz)      |
| <b>Underground</b>       |               |             |              |                |             |               |               |             |              |                         |             |               |
| CM                       | 21,703        | 5.10        | 3,559        | 10,814         | 5.33        | 1,852         | —             | —           | —            | 32,517                  | 5.18        | 5,411         |
| NoW                      | 10,549        | 6.45        | 2,188        | 51,673         | 6.42        | 10,666        | —             | —           | —            | 62,223                  | 6.43        | 12,855        |
| SoW east                 | —             | —           | —            | 74,182         | 5.56        | 13,267        | 3,331         | 4.88        | 523          | 77,513                  | 5.53        | 13,789        |
| SoW west                 | —             | —           | —            | 120,691        | 5.62        | 21,806        | 12,113        | 6.60        | 2,570        | 132,803                 | 5.71        | 24,377        |
| VCR                      | 787           | 17.45       | 441          | 4,756          | 10.91       | 1,668         | 10,104        | 11.40       | 3,702        | 15,646                  | 11.55       | 5,811         |
| <b>Total underground</b> | <b>33,040</b> | <b>5.83</b> | <b>6,189</b> | <b>262,115</b> | <b>5.85</b> | <b>49,259</b> | <b>25,548</b> | <b>8.27</b> | <b>6,795</b> | <b>320,703</b>          | <b>6.04</b> | <b>62,243</b> |
| <b>Surface</b>           |               |             |              |                |             |               |               |             |              |                         |             |               |
| Surface TSF              | 61,774        | 0.22        | 441          | —              | —           | —             | —             | —           | —            | 61,774                  | 0.22        | 441           |
| <b>Grand Total</b>       | <b>94,813</b> | <b>2.17</b> | <b>6,629</b> | <b>262,115</b> | <b>5.85</b> | <b>49,259</b> | <b>25,548</b> | <b>8.27</b> | <b>6,795</b> | <b>382,476</b>          | <b>5.10</b> | <b>62,684</b> |

The Mineral Resource reporting protocol involves reporting Resources on a minimum mining width with a generic minimum Resources block dimension of 5m x 5m x 5m, which is reflective of the excavation types and mining methods employed in the LoM plan. It provides a practical block model geometry and grade tonnage curve better aligned to the current mining method

The Resources for CM, NoW and SoW all accommodate the latest mine design shapes (inclusive of the in-design material) and include the additional tonnes at a lower average grade that will be sourced from these areas

### Modifying factors

- Regional pillars are excluded from the Mineral Resources
- All reserved excavation designs are generated in full 3D virtual space

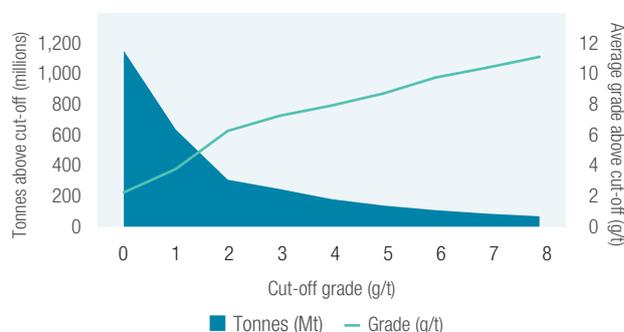
|                                     | Units   | Dec 2020  | Dec 2019  | Dec 2018  |
|-------------------------------------|---------|-----------|-----------|-----------|
| <b>Mineral Resources parameters</b> |         |           |           |           |
| Mineral Resources Au price          | US\$/oz | 1,500     | 1,400     | 1,400     |
|                                     | R/kg    | 750,000   | 625,000   | 600,000   |
| Cut-off grade <sup>1</sup> (COG)    | g/t     | 3.0 – 6.0 | 3.4 – 6.0 | 3.7 – 4.1 |
| <b>Mineral Reserves parameters</b>  |         |           |           |           |
| Mineral Reserves Au price           | US\$/oz | 1,300     | 1,200     | 1,200     |
|                                     | R/kg    | 650,000   | 550,000   | 525,000   |
| COG (NoW – SoW)                     | g/t     | 3.8 – 4.2 | 4.1 – 4.5 | 4.1 – 4.5 |
| Mine Call Factor                    | %       | 100       | 100       | 100       |
| Dilution underground                | %       | 13.5      | 13.5      | 11.1      |
| Losses underground                  | %       | 13        | 14        | 17        |
| Mining recovery                     | %       | 87        | 85        | 83        |
| Plant recovery                      | %       | 96.3      | 96.3      | 96.5      |
| Processing capacity                 | Mtpa    | 4.0       | 4.0       | 4.0       |

<sup>1</sup> Elsburg reefs only, VCR COG used is 6.0g/t

### GRADE TONNAGE CURVES

The grade tonnage curve for the underground Mineral Resources is presented opposite. Stockpiles are excluded from the grade tonnage curves. Grade estimation is based on a simple Kriged block model that is further processed using Local Direct Conditioning methodology

#### GRADE-TONNAGE CURVE – UNDERGROUND<sup>1</sup>



Note

<sup>1</sup> Reserves material profiled as “in-design” material added to the resource footprint has not been accounted for by the Mineable Shape Optimiser (MSO) generated stopes and is consequently excluded in the grade tonnage curve

The Broad-Based Black Economic Empowerment (B-BBEE) transaction, concluded in December 2010, grants an empowerment consortium ~10% of South Deep’s total Reserves. Based on the relevant sliding scale of the vesting of the economic benefit attached to the 10% and the current LoM profile, the Mineral Reserves portion currently attributable to Gold Fields is 90.538%.

### Mineral Reserves classification

|                    | Tonnes (kt)    |                |                | Grade (g/t) |             |             | Au (koz)      |               |               |
|--------------------|----------------|----------------|----------------|-------------|-------------|-------------|---------------|---------------|---------------|
|                    | Dec 2020       | Dec 2019       | Dec 2018       | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020      | Dec 2019      | Dec 2018      |
| <b>Underground</b> |                |                |                |             |             |             |               |               |               |
| Proved             | 16,094         | 14,407         | 11,811         | 5.76        | 5.85        | 6.05        | 2,981         | 2,712         | 2,296         |
| Probable           | 189,589        | 168,880        | 170,446        | 5.23        | 5.54        | 5.57        | 31,853        | 30,106        | 30,512        |
| <b>Grand total</b> | <b>205,682</b> | <b>183,287</b> | <b>182,258</b> | <b>5.27</b> | <b>5.57</b> | <b>5.60</b> | <b>34,834</b> | <b>32,817</b> | <b>32,808</b> |

## South Deep gold mine continued

### Mineral Reserves classification per mining area

| Area                     | Proved        |             |              | Probable       |             |               | Total Mineral Reserves |             |               |
|--------------------------|---------------|-------------|--------------|----------------|-------------|---------------|------------------------|-------------|---------------|
|                          | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)    | Grade (g/t) | Au (koz)      | Tonnes (kt)            | Grade (g/t) | Au (koz)      |
| <b>Underground</b>       |               |             |              |                |             |               |                        |             |               |
| CM                       | 5,850         | 5.48        | 1,030        | 1,113          | 4.39        | 157           | 6,963                  | 5.30        | 1,187         |
| NoW                      | 10,244        | 5.92        | 1,951        | 36,319         | 5.94        | 6,941         | 46,562                 | 5.94        | 8,891         |
| SoW east                 | —             | —           | —            | 50,534         | 5.18        | 8,418         | 50,534                 | 5.18        | 8,418         |
| SoW west                 | —             | —           | —            | 101,623        | 5.00        | 16,337        | 101,623                | 5.00        | 16,337        |
| <b>Total underground</b> | <b>16,094</b> | <b>5.76</b> | <b>2,981</b> | <b>189,589</b> | <b>5.23</b> | <b>31,853</b> | <b>205,682</b>         | <b>5.27</b> | <b>34,834</b> |

Mineral Reserves at South Deep are reported at mill head grade inclusive of ore and in-section (in-design stoping horizon waste from ramps and accesses) development tonnes, which cannot be separated in the ore flow. The capital footwall development waste is excluded due to future separation potential in the ore flow NoW. If included in the ore flow for the LoM, the impact on the Mineral Reserves grade would be a reduction of ~0.2g/t with the related volume increase

### Mineral Resources and Mineral Reserves reconciliation year-on-year

| Factors that affected the Mineral Resources reconciliation   |
|--|
| Production depletion (-223koz)   |
| Higher gold price R625,000/kg to R750,000/kg   |
| Geological changes leading to remodelling and resource estimation (+730koz)  |
| COG decrease from 3.4 to 3.0g/t (NoW and CM) and 3.8 to 3.4g/t SoW (+3,500koz)   |
| Year-on-year decrease of in-design material (low-grade Mineral Reserve material outside the Mineral Resource envelope) |

| Factors that affected the Mineral Reserves reconciliation   |
|---|
| Production depletion (-223koz)  |
| Higher gold price R550,000/kg to R650,000/kg  |
| Increased costs with longer LoM primarily due to 12t gold per annum risk adjusted plan cap  |
| Geological changes, resource estimation and conversion of pillar resources  |
| NoW +1,216koz, SoW east 274koz, SoW west +432koz and CM +93koz; higher NoW increase due to the reduced cut-off (higher gold price) and the increase in thickness of the targeted reefs associated with new data |

#### MINERAL RESOURCE RECONCILIATION

Gold (koz)



#### MINERAL RESERVE RECONCILIATION

Gold (koz)



Waterfall graphs represent underground material only

### MINERAL RESERVES SENSITIVITY

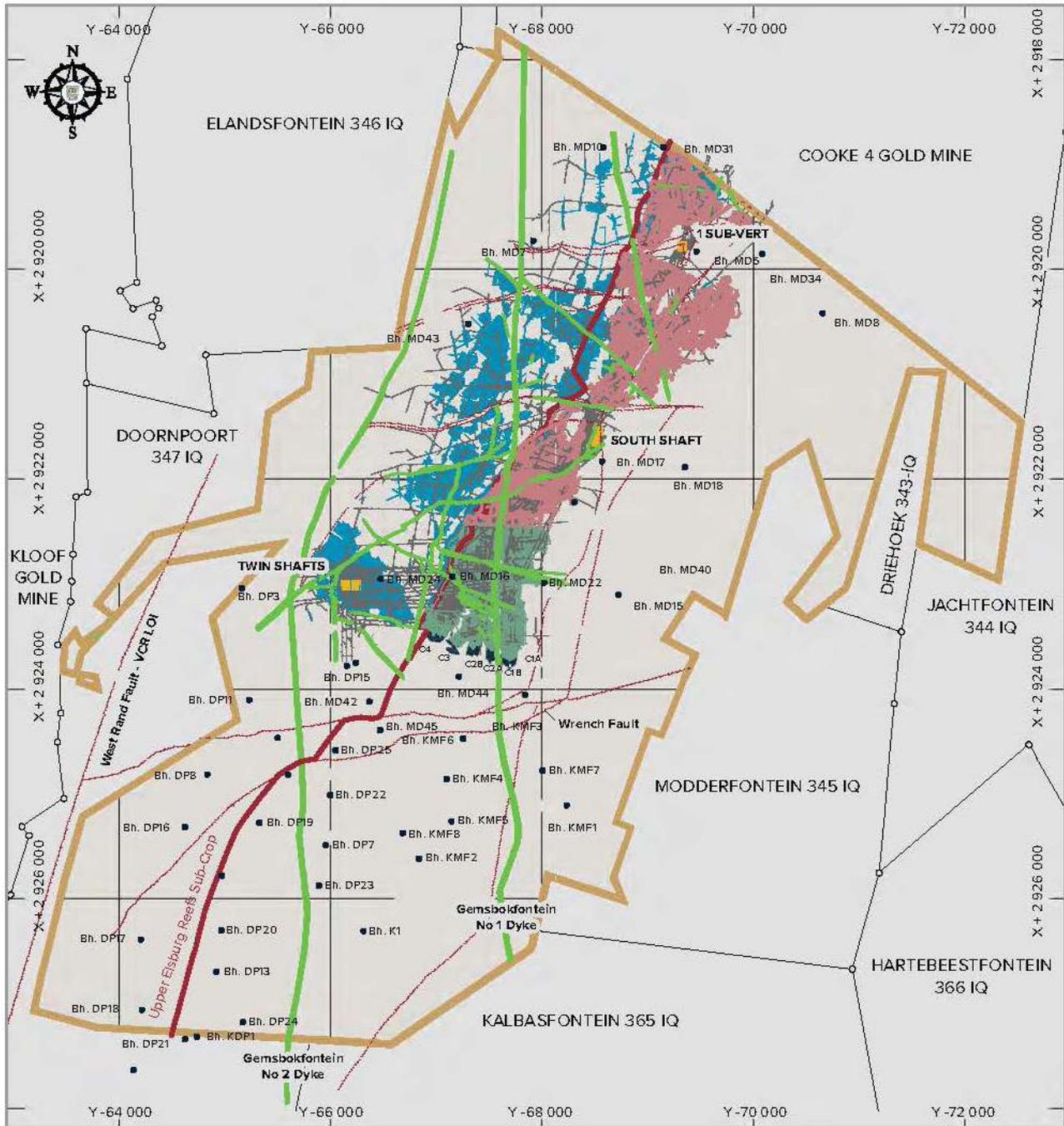
To illustrate the impact of fluctuations in gold price and exchange rates on the current declaration, South Deep generated sensitivities for Mineral Reserves. The following graph indicates the Managed Mineral Reserves sensitivity at -15%, -10%, -5%, base, +5%, +10% and +15% to the base R650,000/kg (US\$1,300/oz) reserve gold price.

These sensitivities (other than for the base case) are not supported by detailed plans and depletion schedules. They should only be considered on an indicative basis, specifically as such sensitivities assume 100% selectivity, without any operating cost increases.

#### MINERAL RESERVE SENSITIVITY

GOLD (Moz)





**Reference**

- Farm Boundary
- Dykes
- Upper Elsburg Reefs Sub-Crop
- Faults
- Mining rights area
- Shafts
- Borehole No. and surface position
- Mining Corridors
- Stoping Ventersdorp Contact Reef
- Stoping Upper Elsburg Reefs
- Development and distress
- Mine Development
- Development and distress 2020

**Gold Fields Limited  
South Deep Gold Mine**

PLAN SHOWING UNDERGROUND WORKINGS  
AS AT DECEMBER 2020



Gause Conform Projection, Central Meridian Lo. 27 East

# WEST AFRICA REGION

## SALIENT POINTS

### MINERAL RESOURCES

**16.3Moz\***

### MINERAL RESERVES

**7.1Moz\***

*\* 90% attributable to Gold Fields and  
excludes Asanko joint venture (JV) 45%  
attributable to Gold Fields*

## WEST AFRICA REGION

### Tarkwa, Damang and Asanko JV gold mines located in Ghana

Tarkwa continues to be a long-life, low-cost surface mining operation with a robust Mineral Reserve supporting a 14-year life-of-mine (LoM). Delivery against the Damang Reinvestment project (DRP) continued on track in 2020, with current Mineral Reserves scheduled for depletion in 2025. Importantly, LoM extension opportunities are the focus for studies at both Damang and Tarkwa in 2021.

Our Asanko JV partner, Galiano Gold, informed Gold Fields that an updated Mineral Resources and Mineral Reserves estimate is expected to be released in H2 2021. This estimate is expected to incorporate information from new exploration and infill drilling, updated geological models, updated modifying factors and a recalibrated cost base. As a result, Gold Fields is not in a position to provide relevant estimates and an updated LoM plan for Asanko as at 31 December 2020, and has excluded Mineral Reserves and Mineral Resources estimates for Asanko at this time. Gold Fields does not believe that the Mineral Reserves and Mineral Resources attributable to Asanko are material to Gold Fields’ Mineral Reserves and Mineral Resources as a whole. Gold Fields will assess the work when it is completed by Galiano Gold to determine whether an updated Mineral Reserves and Mineral Resources statement can be reported in H2 2021 or at the end of the year in accordance with our normal reporting cycle.



## Tarkwa, Damang and Asanko JV gold mines located in Ghana

continued

### Exploration drilling and expenditure

In 2020, Damang's exploration focused on early-stage exploration (target definition) programmes comprising scout reverse circulation (RC) drilling on the mining lease (ML). Aimed at continuing the success of 2019, Tarkwa's exploration programme in 2020 remained focused on the on-lease palaeoplacer potential by delineating new resources and upgrading known resource areas. At Asanko, there is a strong focus on exploration across the largely under-explored tenement package.

| Exploration drilling                | December 2020  |             | December 2019  |       |
|-------------------------------------|----------------|-------------|----------------|-------|
|                                     | Metres drilled | US\$m       | Metres drilled | US\$m |
| <b>Operations</b>                   |                |             |                |       |
| Damang <sup>1</sup>                 | 357            | 0.4         | 13,190         | 1.81  |
| Tarkwa <sup>2</sup>                 | 27,969         | 5.70        | 27,007         | 6.28  |
| Asanko (100% physicals; 50% costs)  | 42,897         | 3.70        | 5,971          | 4.69  |
| <b>Total West Africa operations</b> | <b>71,223</b>  | <b>9.80</b> | 46,168         | 12.80 |

Exclusive of grade control (GC) drilling

<sup>1</sup> Damang's reduction in exploration drilling from 2019 to 2020 is due to the completion of extensive exploration drilling programmes in 2019. Future exploration work is planned to move to near-mine Mineral Resource definition drilling proximal to the main pit

<sup>2</sup> Tarkwa includes 7,648m of close-spaced (10m x 10m) drilling at Kobada pit

### MINERAL RESOURCES AND MINERAL RESERVES

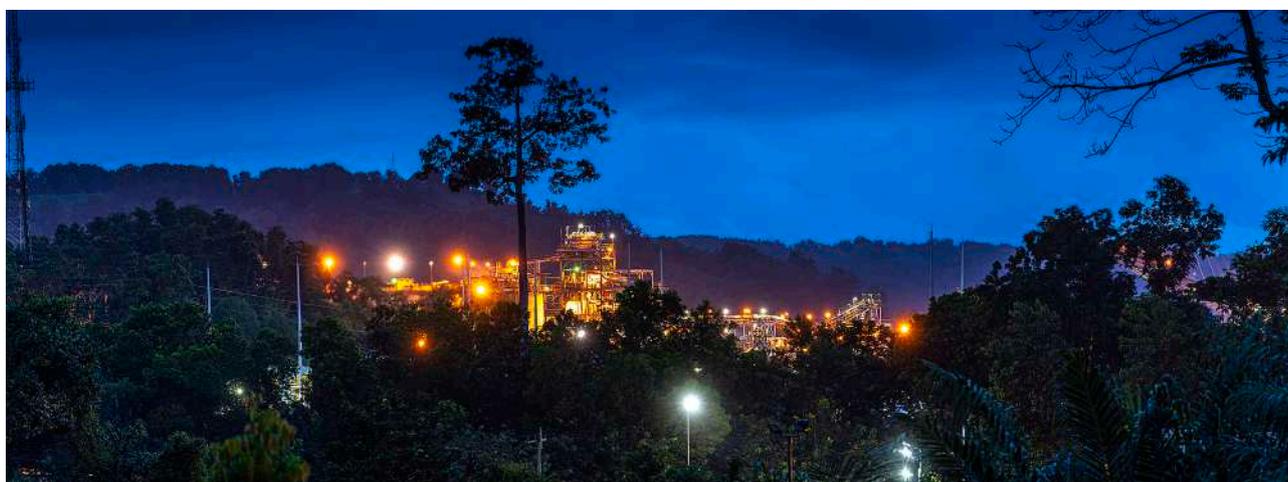
West Africa region summary of the Mineral Resources and Mineral Reserves estimates<sup>1,2</sup>

|                                  | Mineral Resources |             |              |          |                           | Mineral Reserves |             |             |          |
|----------------------------------|-------------------|-------------|--------------|----------|---------------------------|------------------|-------------|-------------|----------|
|                                  | December 2020     |             |              | Dec 2019 |                           | December 2020    |             |             | Dec 2019 |
| Measured, Indicated and Inferred | Tonnes (Mt)       | Grade (g/t) | Au (Moz)     | Au (Moz) | Proved and Probable       | Tonnes (Mt)      | Grade (g/t) | Au (Moz)    | Au (Moz) |
| Damang                           | 83.1              | 2.13        | 5.69         | 5.92     | Damang                    | 21.2             | 1.52        | 1.03        | 1.35     |
| Asanko <sup>2</sup> (50%)        |                   |             |              | 1.93     | Asanko <sup>2</sup> (50%) |                  |             |             | 1.19     |
| Tarkwa – open pits               | 224.1             | 1.32        | 9.53         | 9.77     | Tarkwa – open pits        | 124.8            | 1.24        | 4.98        | 4.76     |
| Tarkwa – surface stocks          | 72.9              | 0.47        | 1.11         | 1.14     | Tarkwa – surface stocks   | 72.9             | 0.47        | 1.11        | 1.14     |
| <b>Total West Africa</b>         | <b>380.1</b>      | <b>1.34</b> | <b>16.33</b> | 18.76    | <b>Total West Africa</b>  | <b>218.8</b>     | <b>1.01</b> | <b>7.13</b> | 8.43     |

Mineral Resources are inclusive of Mineral Reserves (excludes Asanko). All tonnes (t) relate to metric units. Rounding of figures may result in minor computational discrepancies; where this happens it is not deemed significant. In West Africa (Damang and Tarkwa) the Mineral Resources and Mineral Reserves were determined using a gold price of US\$1,500/oz and US\$1,300/oz, respectively

<sup>1</sup> Managed, unless otherwise stated

<sup>2</sup> Asanko is managed by Galiano Gold and reported as 50% owned. Galiano Gold informed Gold Fields that an updated Mineral Resources and Mineral Reserves estimate was not available for December 2020 reporting, and is expected to be released in H2 2021



Damang mineral processing plant

## Damang gold mine



Damang had a strong H2 2020 as it moved into the heart of the main ore body, and is expected to deliver good cash-flows as it delivers on the investment in the DRP pit cutback. Cash-flow was bolstered in 2020 on the back of improved mining productivity, higher head grades and cost efficiency enhancements.

As scheduled in 2020, mining transitioned through the bulk of the remaining Huni Sandstone unit, with characteristically erratic gold grades, into the heart of the ore body dominated by the more consistently mineralised Tarkwa Phyllites, Intrusive Dolerites and the Banket Hangingwall lithologies. Execution of the DRP has been a major success for the West Africa region.

The Amoanda-Tomento corridor continues to be assessed to identify potential options for accessing extensions to the main mineralised zone trending progressively deeper to the north of the Amoanda pit.

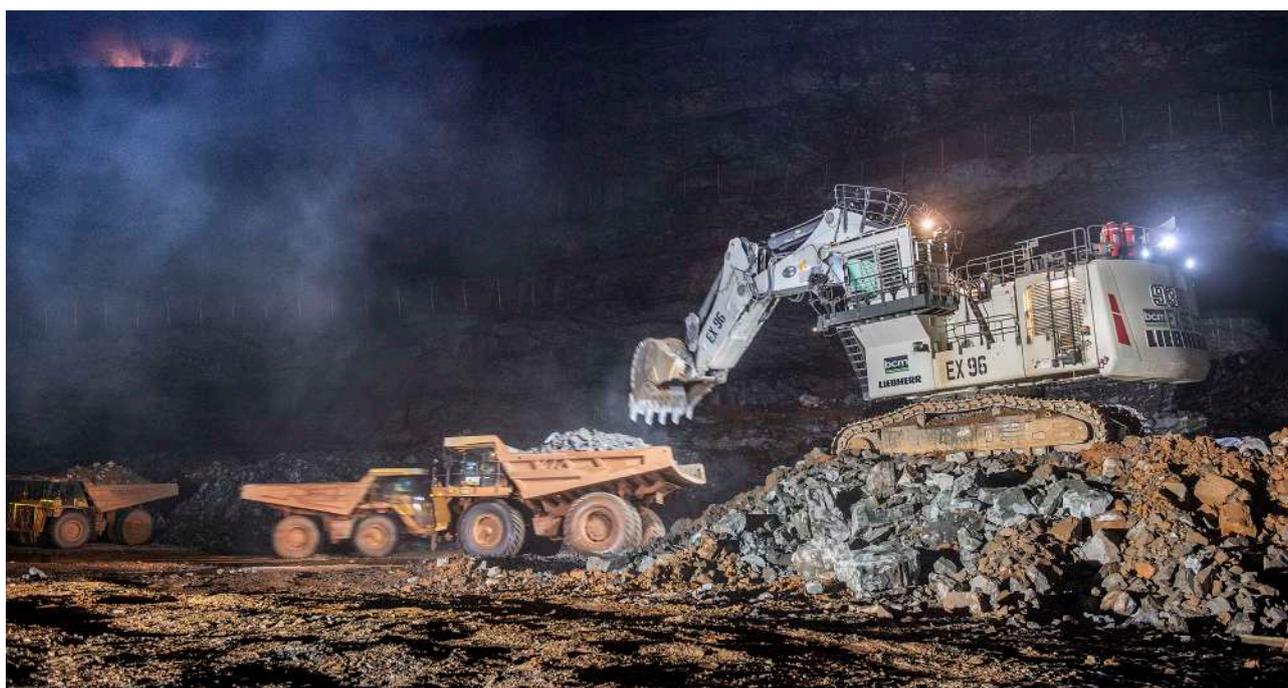
Securing life extension beyond 2025 at Damang is a strategic priority and the current mini cutback study is assessing opportunities to achieve this along with the Damang unconstrained study to assess site full potential.

### ASSET FUNDAMENTALS

|   |   |
|---|---|
| <b>General location</b>                   | Damang is located in southwest Ghana, ~300km by road west of Accra, the capital, at latitude 5°11'N and longitude 1°57'W. The Damang concession lies to the north of and joins the Tarkwa concession, which is located near the town of Tarkwa. The area is served by access roads with established infrastructure, and a main road connects the mine to the port of Takoradi, some 90km to the southeast.  |
| <b>Brief history and Regional geology</b> | The Annexure to this Mineral Resources and Mineral Reserves Supplement (the Supplement) provides a brief history of Damang and a summary of the Regional geology.   |
| <b>Climate</b>                            | A tropical climate, characterised by two distinct rainy seasons from approximately March to July and September to November. Average annual rainfall in the area exceeds 2,200mm. Although there may be minor disruptions to operations during the wet season, there is no operating or long-term constraints to production due to the climate, as measures have been taken to build resilience to climate change.   |
| <b>Licence status and holdings</b>        | <p>The Damang concession covers 24,265ha. All necessary statutory mining authorisations and permits are in place for the Damang and Lima South MLs. Abooso Goldfields holds a ML in respect of the Damang mine dated 19 April 1995, as amended by an agreement dated 4 April 1996. This lease expires in 2025, but is renewable under its terms and the provisions of the Minerals and Mining Law, by agreement between Abooso Goldfields and the Ghanaian government. The licence renewal application submitted to the Minerals Commission (MINCOM) for the extension of the Lima South ML was approved by the Minister of Lands and Natural Resources in November 2018. The change to the Damang concession area reported year on year (+504ha) is due to the addition of the Huni extension area, which was approved by MINCOM during 2020.</p> <p>The application for the relinquishment of the southern portion of the Damang ML in the Abooso underground and Abooso tailings area was submitted to MINCOM for approval during 2020. This submission was granted in principal by MINCOM and the area was slated for inclusion into a community mining project.</p> <p>While we were hoping to get this finalised before the end of 2020, MINCOM has subsequently requested that, as part of the relinquishment process, the revised ML boundary must be blocked in compliance with the mining law (Regulation 279(1) of the Minerals and Mining (Licensing) Regulations, 2012 (L.I.2176)).</p> <p>To comply, we need to provide MINCOM with a set of maps and coordinates of both the retained and relinquished areas which are signed by a licensed surveyor and approved by a regional surveyor. We have received quotes from various vendors for the work to be undertaken. The final notice of approval is therefore pending this final step during 2021.</p> |
| <b>Mining method</b>                      | Open pit, conventional drill and blast with truck and shovel. Mining operations are carried out by contract mining. Mining is focused on the Damang complex. Gold mineralisation is mined selectively to cut-off grades (COG) and segregated into grade ranges to balance ore production and processing capacities. The east wall of Damang has been re-engineered to mitigate geotechnical challenges with additional controls being implemented to ensure safe operations.  |
| <b>Operational infrastructure</b>         | Damang has two open pits constituting the Mineral Reserves, seven open pits comprising the Mineral Resources, one ore stockpile, a centralised administrative office, engineering workshops and residence villages.   |

## Damang gold mine continued

| ASSET FUNDAMENTALS <small>continued</small>                  |   |
|--|---|
| <b>Mineral processing and tailing storage facility (TSF)</b> | <p>The processing plant, treating predominantly fresh ore, consists of a three-stage crushing circuit, a SAG/Ball mill with pebble crushing (SABC) circuit, gravity recovery circuit and a carbon-in-leach (CIL) gold recovery circuit. The plant has been optimised to process 4.5Mtpa.</p> <p>Deposition of tailings is currently occurring on the Far East TSF (FETSF), which was commissioned in January 2018. The second stage of the downstream embankment lift, which commenced in November 2019, has been completed. The next stage is planned to commence in 2021.</p> <p>The ETSF was constructed as a combined TSF and waste dump, using compacted earth fill and fresh waste rock for the embankment construction. The main cross-valley embankments are the north and south embankments. The western side of the facility comprises the Damang open pit and Victoria waste dump, while the eastern side is formed by the eastern embankment which links a series of low-lying hills. Closure deposition of tailings into the ETSF was embarked upon in early 2017 until January 2018 when deposition was ceased.</p> <p>The FETSF is located south of the existing ETSF abutting the ETSF's south embankment. The FETSF has been designed and constructed with a compacted clay liner across the facility basin and upstream slopes. The facility is planned to be constructed through four stages and has a remaining LoM storage capacity of approximately 19Mt. The ANCOLD consequence classification for both the ETSF and FETSF is High C. The consequence rating for the STSF will be assessed in Q2 2021.</p> |
| <b>Local geology, deposit type and mineralisation style</b>  | <p>The Damang ore body is hosted by a northeast plunging antiform, developed within Tarkwaian sediments, which reflect an important mineralised stratigraphic component of the Ashanti belt in southwest Ghana. The main Damang pit is located near to the closure of the antiform, and all other known palaeoplacer mineralisation is located on the east and west limbs of the Damang anticline. The hydrothermal fresh ore is associated with predominantly east-dipping thrust faults and sub-horizontal quartz veins. Damang now exploits hydrothermal style mineralisation but historically has also produced from palaeoplacer deposits.</p>   |
| <b>LoM: Proved and Probable Mineral Reserves</b>             | <p>It is estimated that current Mineral Reserves will be depleted in 2025 (five years).</p>   |
| <b>Sustainable development</b>                               | <p>Damang obtained certification for ISO 45001:2018 and completed a remote surveillance audit for ISO 14001:2015 in 2020. The mine is scheduled for the first ISO 45001:2018 surveillance audits and ISO14001:2015 and International Cyanide Management Code (ICMC) recertification audits in 2021.</p> <p>All water use permits for Damang are up to date. The mining and explosives permits were received from the MINCOM. Damang submitted the Environmental Management Plan (2020 – 2023) to the Environmental Protection Agency (EPA) and awaits the issue of the environmental certificate.</p>   |



Damang: Liebherr EX96 excavator and CAT 777 trucks in Damang main pit

## KEY DEVELOPMENTS AND MATERIAL ISSUES

- Maintained operational performance with high levels of compliance to plan in 2020 under the Covid-19 disruptions
- The DRP progressed according to plan during 2020 and ahead of the original DRP mining schedule
- The Mineral Reserves are constrained by the ETSF, which is adjacent to the east of the Damang main pit, while the Mineral Resources are unconstrained by the ETSF, resulting in 2.29Moz of Mineral Resource gold not yet converting to Mineral Reserves. This is in addition to the 1.37Moz Inferred Mineral Resource component. Under these constraints, the current LoM extends for another five years and would trigger the mine closure programme in preparation for 2025
- The Huni pit is currently scheduled in the LoM plan from 2023 but will be subject to a final feasibility study (FS) in 2021 to confirm the improved investment metrics indicated by bringing the pit forward in the LoM schedule
- The Damang mini cutback and full Damang unconstrained studies continue to assess opportunities to extend the LoM beyond 2025, including incremental or full pit cutbacks to access the deeper portions of the ore body beyond the constraints of the current DRP and, specifically, the ETSF. This would require full or partial relocation of the existing ETSF located proximal to the Damang pit east wall and the construction of a new TSF. The project has progressed from scoping study level in 2020 and is now progressing to the PFS phase
- TSF dam break studies, the extent of inundation zones, and reclassification of all TSFs in support of the Global Industry Standard on Tailings Management (GISTM) compliance roadmap have been confirmed
- Risks to the execution of the LoM plan include the following:
  - The stability and performance of the mining contractor continues to be closely monitored to ensure delivery on the DRP mining schedule and planned cost metrics
  - Potential ore loss and dilution is managed on an ongoing basis with tight controls on blasting to minimise blast movement
  - The relatively stable Tarkwa Phyllites and Intrusives are now being exposed along the east wall. Kinematic analysis results are positive, and the general condition of the east wall and the area below the east ramp continues to be good
  - Installation of wall draping at the upper elevations of the east wall (above the ramp), together with continuous radar monitoring, pre-splitting, dewatering and blast and clean up practices, maintain pit wall stability and are endorsed by the Geotechnical Review Board (GRB) as best practice
  - The geological confidence below the 771-mRL, marking access to the higher-grade heart of the ore body with more consistent gold grades, is supported by an advanced GC programme and enhanced resource block models taking account of reconciliation trends

## OPERATING STATISTICS

|  | Units     | Historic performance |          |          |
|--|-----------|----------------------|----------|----------|
|  |           | Dec 2020             | Dec 2019 | Dec 2018 |
| <b>Open pit mining</b>                             |           |                      |          |          |
| Total mined  | kt        | <b>29,229</b>        | 34,098   | 45,937   |
| – Waste mined (operating expenditure (opex))       | kt        | <b>22,541</b>        | 12,168   | 7,835    |
| – Waste mined (capital expenditure (capex))        | kt        | <b>8</b>             | 17,250   | 33,607   |
| – Ore mined  | kt        | <b>6,680</b>         | 4,680    | 4,495    |
| Mined grade  | g/t       | <b>1.62</b>          | 1.58     | 1.68     |
| Strip ratio (tonnes)                               | waste:ore | <b>3.4</b>           | 6.3      | 9.2      |
| <b>Processing</b>                                  |           |                      |          |          |
| Tonnes treated                                     | kt        | <b>4,798</b>         | 4,645    | 4,205    |
| Head grade   | g/t       | <b>1.60</b>          | 1.51     | 1.42     |
| Yield  | g/t       | <b>1.45</b>          | 1.40     | 1.34     |
| Plant recovery                                     | %         | <b>91</b>            | 92       | 94.1     |
| Total Au production                                | koz       | <b>223</b>           | 208      | 181      |
|  | kg        | <b>6,936</b>         | 6,481    | 5,625    |
| <b>Financials</b>                                  |           |                      |          |          |
| Au price received                                  | US\$/oz   | <b>1,798</b>         | 1,384    | 1,266    |
| Cost of sales before amortisation and depreciation | US\$m     | <b>172</b>           | 142      | 124      |
|  | US\$/oz   | <b>771</b>           | 680      | 761      |
| Capex  | US\$m     | <b>20</b>            | 76       | 139      |
|  | US\$/oz   | <b>89</b>            | 366      | 769      |
| All-in costs (AIC)                                 | US\$/oz   | <b>1,035</b>         | 1,147    | 1,506    |

## Damang gold mine continued

### EXPLORATION AND RESOURCE DEFINITION DRILLING

2019/2020 exploration expenditure is presented in the regional West Africa overview section.

Damang exploration in 2020 focused on early stage exploration (target definition) programmes, comprising scout RC drilling on the mining lease. The scout RC programme followed-up on historical

regional scale soil geochemical sampling and subsequent pitting/trenching exercises. Six scout RC holes were drilled (for a total of 357m) to probe areas previously identified as having anomalous gold expressions but that were untested with drilling. The drilling focused on probing up to about 50m below surface for indications of hydrothermal mineralisation. Results of the drilling programme indicated that the project area is underlain by Kawere and

Huni Sandstone stratigraphic units, which are generally of low prospectivity in the Damang area.

In 2021, the team will focus on infill drilling within the proposed mini cutback design, which would be an expansion to the current DRP main pit aimed at increasing ore body confidence in support of the mini cutback PFS.

### MINERAL RESOURCES AND MINERAL RESERVES

All Mineral Resources and Mineral Reserves reported are 100% managed by Gold Fields unless otherwise stated.

#### Mineral Resources classification

| Classification        | Tonnes (kt)   |               |               | Grade (g/t) |             |             | Au (koz)     |              |              |
|-----------------------|---------------|---------------|---------------|-------------|-------------|-------------|--------------|--------------|--------------|
|                       | Dec 2020      | Dec 2019      | Dec 2018      | Dec 2020    | Dec 2019    | Dec 2018    | Dec 2020     | Dec 2019     | Dec 2018     |
| <b>Open pit</b>       |               |               |               |             |             |             |              |              |              |
| Measured              | 7,781         | 9,116         | 9,829         | 1.69        | 1.75        | 1.78        | 423          | 514          | 563          |
| Indicated             | 52,158        | 54,719        | 57,681        | 2.24        | 2.28        | 2.30        | 3,750        | 4,010        | 4,259        |
| Inferred              | 18,230        | 17,966        | 15,250        | 2.34        | 2.30        | 2.37        | 1,371        | 1,331        | 1,160        |
| <b>Total open pit</b> | <b>78,169</b> | <b>81,802</b> | <b>82,760</b> | <b>2.21</b> | <b>2.23</b> | <b>2.25</b> | <b>5,544</b> | <b>5,855</b> | <b>5,983</b> |
| <b>Stockpiles</b>     |               |               |               |             |             |             |              |              |              |
| Stockpiles            | 4,953         | 2,622         | 2,385         | 0.94        | 0.74        | 0.98        | 149          | 63           | 75           |
| <b>Grand total</b>    | <b>83,122</b> | <b>84,423</b> | <b>85,145</b> | <b>2.13</b> | <b>2.18</b> | <b>2.21</b> | <b>5,693</b> | <b>5,918</b> | <b>6,058</b> |

#### Mineral Resources classification per mining area

| Area                      | Measured      |             |            | Indicated     |             |              | Inferred      |             |              | Total Mineral Resources |             |              |
|---------------------------|---------------|-------------|------------|---------------|-------------|--------------|---------------|-------------|--------------|-------------------------|-------------|--------------|
|                           | Tonnes (kt)   | Grade (g/t) | Au (koz)   | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)             | Grade (g/t) | Au (koz)     |
| Damang (including Saddle) | 3,322         | 1.79        | 192        | 36,292        | 2.41        | 2,808        | 16,275        | 2.42        | 1,266        | 55,889                  | 2.37        | 4,266        |
| Huni                      | 1,199         | 1.44        | 55         | 4,365         | 1.54        | 216          | 302           | 1.46        | 14           | 5,866                   | 1.52        | 286          |
| Juno                      | 2,133         | 1.83        | 126        | 5,954         | 2.26        | 432          | 13            | 2.48        | 1            | 8,100                   | 2.14        | 558          |
| Amoanda                   | 234           | 1.75        | 13         | 1,511         | 2.43        | 118          | 98            | 1.45        | 5            | 1,844                   | 2.29        | 136          |
| Rex                       | 893           | 1.29        | 37         | 2,359         | 1.55        | 117          | 1,541         | 1.71        | 85           | 4,793                   | 1.55        | 239          |
| Other                     | —             | —           | —          | 1,677         | 1.09        | 59           | —             | —           | —            | 1,677                   | 1.09        | 59           |
| <b>Total open pit</b>     | <b>7,781</b>  | <b>1.69</b> | <b>423</b> | <b>52,158</b> | <b>2.24</b> | <b>3,750</b> | <b>18,230</b> | <b>2.34</b> | <b>1,371</b> | <b>78,169</b>           | <b>2.21</b> | <b>5,544</b> |
| Stockpiles                | 4,953         | 0.94        | 149        | —             | —           | —            | —             | —           | —            | 4,953                   | 0.94        | 149          |
| <b>Grand total</b>        | <b>12,734</b> | <b>1.40</b> | <b>572</b> | <b>52,158</b> | <b>2.24</b> | <b>3,750</b> | <b>18,230</b> | <b>2.34</b> | <b>1,371</b> | <b>83,122</b>           | <b>2.13</b> | <b>5,693</b> |

## Modifying factors

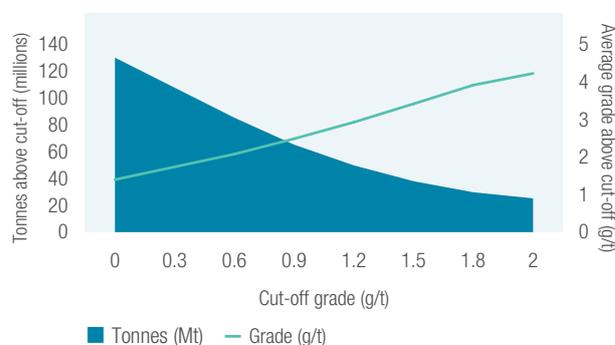
|                                      | Units     | December           |             |             |
|--------------------------------------|-----------|--------------------|-------------|-------------|
|                                      |           | 2020               | 2019        | 2018        |
| <b>Mineral Resources parameters</b>  |           |                    |             |             |
| Mineral Resources Au price           | US\$/oz   | <b>1,500</b>       | 1,400       | 1,400       |
| Cut-off for fresh ore                | g/t       | <b>0.60 – 0.86</b> | 0.64 – 0.86 | 0.67 – 0.90 |
| Cut-off for oxide ore                | g/t       | <b>0.47 – 0.66</b> | 0.50 – 0.69 | 0.52 – 0.71 |
| <b>Mineral Reserves parameters</b>   |           |                    |             |             |
| Mineral Reserves Au price            | US\$/oz   | <b>1,300</b>       | 1,200       | 1,200       |
| Cut-off for fresh ore                | g/t       | <b>0.66 – 0.73</b> | 0.69 – 0.77 | 0.72 – 0.77 |
| Cut-off for oxide ore                | g/t       | <b>0.51 – 0.59</b> | 0.54 – 0.62 | 0.55 – 0.60 |
| Strip ratio                          | waste:ore | <b>2.10</b>        | 2.58        | 3.20        |
| Dilution (hydrothermal)              | %         | <b>17 – 25</b>     | 17 – 25     | 17 – 25     |
| Dilution (palaeoplacer) <sup>1</sup> | cm        | <b>50</b>          | 50          | 50          |
| Mining recovery factor               | %         | <b>95</b>          | 95          | 95          |
| Mine Call Factor (MCF)               | %         | <b>95</b>          | 95          | 95          |
| Plant recovery                       | %         | <b>92</b>          | 92          | 91          |
| Processing capacity                  | Mtpa      | <b>4.5</b>         | 4.5         | 4.3         |

<sup>1</sup> 50cm skin dilution translates to different percentages for the respective reef widths

## GRADE TONNAGE CURVES

The grade tonnage curves for the surface Mineral Resources are presented. Stockpiles are excluded from the grade tonnage curves.

### GRADE-TONNAGE CURVE – OPEN PIT



## Mineral Reserves classification

| Classification        | Tonnes (kt)   |          |          | Grade (g/t) |          |          | Au (koz)     |          |          |
|-----------------------|---------------|----------|----------|-------------|----------|----------|--------------|----------|----------|
|                       | Dec 2020      | Dec 2019 | Dec 2018 | Dec 2020    | Dec 2019 | Dec 2018 | Dec 2020     | Dec 2019 | Dec 2018 |
| <b>Open pit</b>       |               |          |          |             |          |          |              |          |          |
| Proved                | <b>3,307</b>  | 4,720    | 5,520    | <b>1.33</b> | 1.42     | 1.42     | <b>141</b>   | 216      | 251      |
| Probable              | <b>13,320</b> | 17,778   | 21,629   | <b>1.77</b> | 1.88     | 1.88     | <b>756</b>   | 1,075    | 1,308    |
| <b>Total open pit</b> | <b>16,627</b> | 22,497   | 27,149   | <b>1.68</b> | 1.78     | 1.79     | <b>897</b>   | 1,291    | 1,559    |
| <b>Surface</b>        |               |          |          |             |          |          |              |          |          |
| Surface stockpiles    | <b>4,530</b>  | 2,544    | 1,729    | <b>0.92</b> | 0.71     | 1.02     | <b>134</b>   | 58       | 57       |
| <b>Grand total</b>    | <b>21,157</b> | 25,042   | 28,878   | <b>1.52</b> | 1.68     | 1.74     | <b>1,031</b> | 1,349    | 1,616    |

## Damang gold mine continued

### Mineral Reserves classification per mining area

| Mining area           | Proved       |             |            | Probable      |             |            | Total Mineral Reserves |             |              |
|-----------------------|--------------|-------------|------------|---------------|-------------|------------|------------------------|-------------|--------------|
|                       | Tonnes (kt)  | Grade (g/t) | Au (koz)   | Tonnes (kt)   | Grade (g/t) | Au (koz)   | Tonnes (kt)            | Grade (g/t) | Au (koz)     |
| <b>Open pit</b>       |              |             |            |               |             |            |                        |             |              |
| Huni                  | 1,153        | 1.20        | 44         | 2,923         | 1.26        | 118        | 4,076                  | 1.24        | 162          |
| Damang                | 2,155        | 1.40        | 97         | 10,397        | 1.91        | 638        | 12,551                 | 1.82        | 735          |
| <b>Total open pit</b> | <b>3,307</b> | <b>1.33</b> | <b>141</b> | <b>13,320</b> | <b>1.77</b> | <b>756</b> | <b>16,627</b>          | <b>1.68</b> | <b>897</b>   |
| <b>Surface</b>        |              |             |            |               |             |            |                        |             |              |
| Surface stockpiles    | 4,530        | 0.92        | 134        | —             | —           | —          | 4,530                  | 0.92        | 134          |
| <b>Grand total</b>    | <b>7,837</b> | <b>1.09</b> | <b>275</b> | <b>13,320</b> | <b>1.77</b> | <b>756</b> | <b>21,157</b>          | <b>1.52</b> | <b>1,031</b> |

### Mineral Resources and Mineral Reserves reconciliation year-on-year

| Factors that affected Mineral Resources reconciliation year-on-year                |
|--|
| Mined depletions and non-continuous Huni Sandstone geology changes (-496koz)       |
| Higher gold price US\$1,400/oz to US\$1,500/oz (+188koz)                           |
| Reduced ounces from Kwesie Lima Gap resource model based on new data and modelling |
| Increase in stockpiles year-on-year (+86koz)                                       |

| Factors that affected Mineral Reserves reconciliation year-on-year |
|--|
| Mined depletions (-245koz)   |
| Higher gold price US\$1,200/oz to US\$1,300/oz                     |
| Mineral Reserve model update (-51koz)                              |
| Mining loss and reconciliation (-15koz)                            |

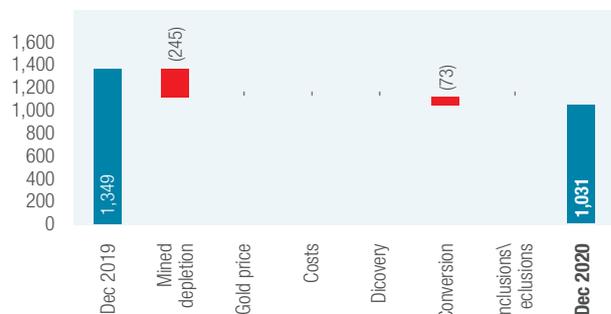
#### MINERAL RESOURCE RECONCILIATION

Gold (koz)



#### MINERAL RESERVE RECONCILIATION

Gold (koz)



### Mineral Reserves sensitivity

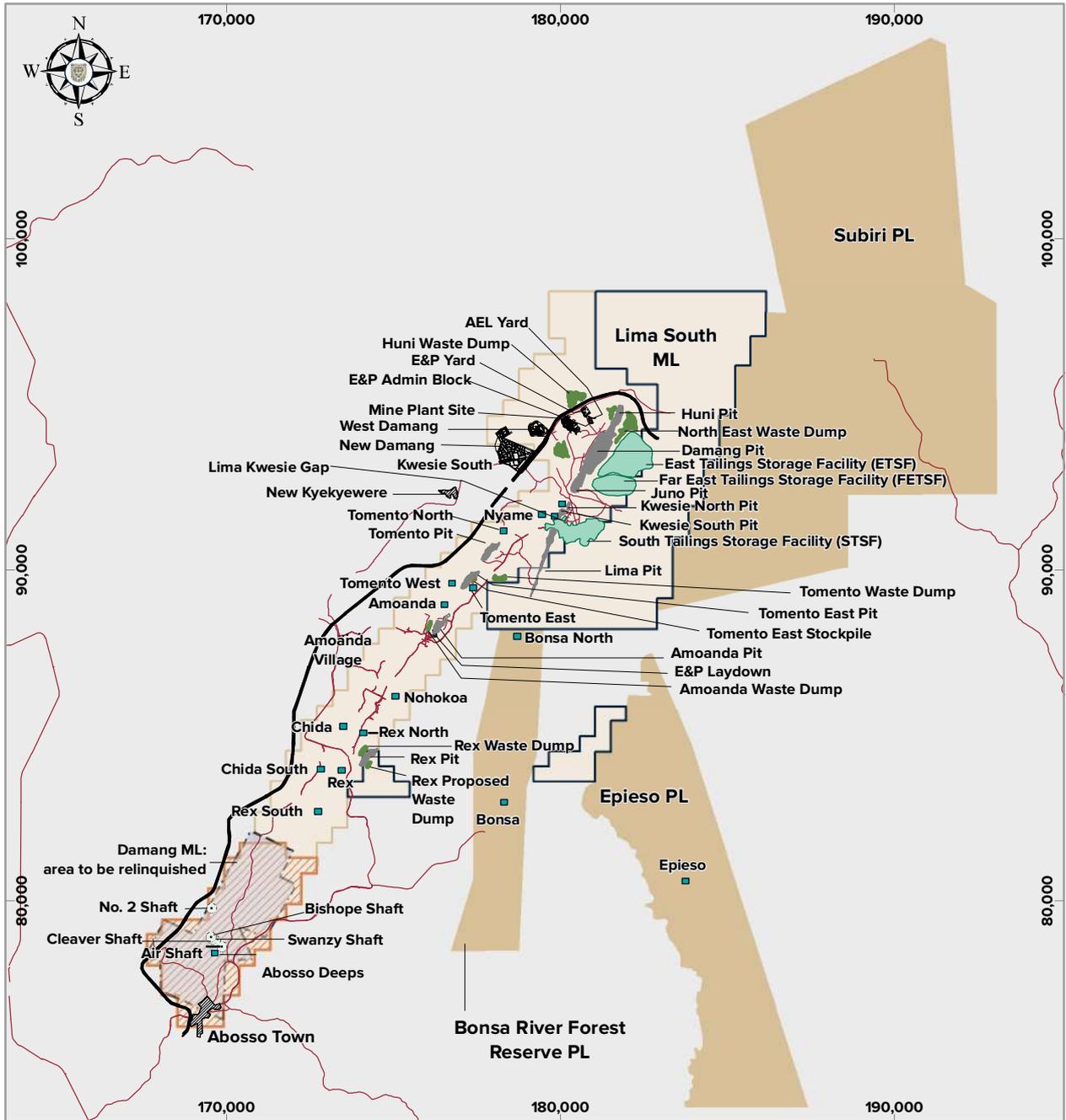
To illustrate the impact of fluctuations in gold price and exchange rates on the current declaration, Damang has generated sensitivities for Mineral Reserves. The following graph indicates the Managed Mineral Reserves sensitivity at -15%, -10%, -5%, base, +5%, +10% and +15% to the base US\$1,300/oz Mineral Reserve gold price.

These sensitivities (other than for the base case) are not supported by detailed plans and depletion schedules. They should only be considered on an indicative basis, specifically as such sensitivities assume 100% selectivity, without any operating cost increases.

#### MINERAL RESERVE SENSITIVITY

GOLD (koz)





**Reference**

- |                                |  |                                 |  |
|--------------------------------|--|---------------------------------|--|
| Roads                          |  | Stockpile                       |  |
| Railroad                       |  | Waste Dump                      |  |
| Towns                          |  | Exploration Drilling Sites      |  |
| Prospecting Area               |  | Tailings Storage Facility (TSF) |  |
| Mining Lease - Damang          |  | Open Pit                        |  |
| Mining Lease - Lima South      |  | Damang overlap area             |  |
| Damang Mining Lease            |  | Damang has surface to 30m       |  |
| Area undergoing relinquishment |  | Tarkwa has below 30m            |  |

**Gold Fields Limited  
Damang Gold Mine**

PLAN SHOWING MINE INFRASTRUCTURE AS AT DECEMBER 2020



Ghana National Grid Co-ordinate system

## Tarkwa gold mine



Tarkwa continues to operate as a world-class, low-cost surface mine supporting a 14 year life based on current Mineral Reserves. Additional exploration that focuses on a number of potential extensions to the open pits could further extend the LoM, as evidenced by success in the Akontansi Underlap area in 2019. 2020 delivered a 3.5% increase in the Mineral Reserve, and marks the second consecutive year that Tarkwa has increased its Mineral Reserves post-depletion.

On-lease palaeoplacer exploration and infill drilling will continue, as more conversion to Mineral Reserves is envisaged proximal to the Akontansi Underlap zone, as well as other areas targeted down dip of existing pits. The latter may require the possible relocation of infrastructure to enable potential new mining fronts to be established in currently constrained areas.

| ASSET FUNDAMENTALS                        |  |
|---|--|
| <b>General location</b>                   | Tarkwa is located in southwest Ghana, approximately 300km by road west of Accra, the capital, at latitude 5°15'N and longitude 2°00'W. The Tarkwa gold mine is located 4km west of the town of Tarkwa with good access roads and an established infrastructure. The mine is served by a main road connecting to the port of Takoradi some 60km to the south on the Atlantic coast.   |
| <b>Brief history and Regional geology</b> | The Annexure to this Supplement provides a brief history of Tarkwa and a summary of the Regional geology.  |
| <b>Climate</b>                            | A tropical climate, characterised by two distinct rainy seasons from approximately March to July and September to November. Average annual rainfall near the site is 2,245mm. Although there may be minor disruptions to operations during the wet season, there is no operating or long-term constraint on production due to climate, as measures have been taken to build resilience to climate change.  |
| <b>Licence status and holdings</b>        | The Tarkwa mine operates under MLs covering a total area of ~20,825ha. Five MLs, dated 18 April 1997, cover the Tarkwa property, while two MLs, dated 2 February 1988 and 18 June 1992 respectively, cover the Teberebie property. The Tarkwa concession MLs expire in 2027 and the Teberebie property MLs in 2036. The new Cadastral system was implemented, and Tarkwa has a total area of 1,007 blocks (20,292ha), excluding the overlap area between Tarkwa and Damang. All necessary statutory mining authorisations and permits are in place for the Tarkwa ML.  |
| <b>Mining method</b>                      | Open pit, conventional drill and blast with truck and shovel. Mining operations are carried out using contractor mining. Mining occurs from several pits which haul to the processing facility. Blast restrictions are applied to the Teberebie cut 4 pit only. Pit wall steepening has been supported by effective wall monitoring and blasting practices.  |
| <b>Operational infrastructure</b>         | Four large open pits currently exploit the stacked narrow auriferous conglomerates. Tarkwa has an ore stockpile and 'spent ore' on the South Heap Leach pad included in Mineral Resources and Mineral Reserves. Tarkwa has a centralised administrative office, engineering workshops and residence villages.  |
| <b>Mineral processing and TSFs</b>        | <p>Ore is processed through a conventional gold recovery plant, consisting of two gyratory crushers; with one gyratory crusher being followed by a tertiary crushing circuit, both feeding a SAG mill and ball mill (SABC) circuit, thickeners and twin CIL circuits. Gold is recovered from both a gravity recovery circuit and the CIL carbon elution circuit pregnant solution by electrowinning and smelting in an induction furnace. The current plant capacity is 14.0Mtpa.</p> <p>LoM tailings deposition requirements are catered for in the short term by wall raise sequences on TSFs 1, 2 and 5. In the longer term, LoM tailings deposition requirements will be catered for by additional raises at TSFs 1, 2 and 5. LoM TSF requirements are reviewed and updated annually by the Engineer of Record (EoR). TSF 3 is decommissioned and is in the process of being closed. The ANCOLD consequence classifications for TSFs 1, 2, 3, and 5 are High C, Extreme, High A, and High C.</p> |

**ASSET FUNDAMENTALS** continued

**Local geology, deposit type and mineralisation style**

The open pit surface operation currently exploits mainly the tabular auriferous conglomerates similar to those mined in the Witwatersrand Basin of South Africa from four open pits – Pepe-Mantraim, Teberebie, Akontansi and Kottraverchy. During 2021, Tarkwa will be exploiting a maiden hydrothermal style mineralisation at Kobada.

The local geology of the Tarkwa ore body is dominated by the Basket series, which can be further subdivided into a footwall and hangingwall barren quartzite, separated by a sequence of mineralised conglomerates and pebbly quartzites.

The stratigraphy of the individual quartzite units is well established, with auriferous reefs interbedded with barren immature quartzites. The units thicken to the west and current sedimentological parameters indicate a flow from the east and northeast. Structurally, the Tarkwaian belt has been subject to moderate folding, and at least five episodes of deformation are recognised.

The major lithological units which overlay the Kobada pit area are immature pebbly sandstones, poorly sorted conglomerate, fine-grained sandstones, a highly altered feldspathic sandstone unit and a micro-diorite which hosts gold mineralisation. The polymictic conglomerate horizon which occurs above the mineralised micro-diorite is a reliable stratigraphic marker traceable on the ground.

**LoM: Proved and Probable Mineral Reserves**

The current LoM is based on in-pit mining activities continuing until 2031, the SHL material is then treated fully through the CIL plant until 2034. It is estimated that the current Mineral Reserves will be depleted in 2034 (14 years). Additional exploration and potential extensions to the open pits could further extend the LoM, as evidenced by the Akontansi Underlap growth in 2019.

**Sustainable development**

Tarkwa transitioned from OHSAS 18001:2007 to ISO 45001:2018 (safety and occupational health management system) and maintained its ISO 14001:2015 certifications (environmental management system) in 2020. Tarkwa also maintained operational compliance with the ICMC. The mine is scheduled for the first ISO 45001:2018 surveillance audit and an ISO 14001:2015 recertification audit in 2021.

Tarkwa submitted an updated Environmental Management Plan (2019 – 2021) to the EPA, and it has since been issued with an environmental certificate valid until January 2022.

**KEY DEVELOPMENTS AND MATERIAL ISSUES**

- Maintaining operational stability with high levels of compliance to plan and retaining momentum on the waste strip at Teberebie and Akontansi to open up ore was a significant achievement under Covid-19 disruptions
- 2020 saw a focus on drilling to support resource to reserve conversion, which underpinned the 3% year-on-year increase in Mineral Reserves post depletion and the increased confidence in the Akontansi area, where Inferred Mineral Resources were upgraded
- Future mining rates and costs at Tarkwa remain subject to submission and approval of a fully revised mining contractor package, which is under current assessment and could impact future cash-flows and margins
- Emphasis on mining contractor performance and sustainability will continue in 2021 to drive further productivity improvements, compliance to plan and cost performance
- Two additional Knelson gravity concentrators were installed in 2020, bringing the total number of concentrators to five
- The 2021 exploration campaign will continue to target extensions to existing palaeoplacer ore bodies
- During 2021, Tarkwa will be exploiting a hydrothermal-style ore body for the first time at the 64koz Mineral Reserve Kobada pit
- Confirmation of TSF dam break studies, the extent of inundation zones, and reclassification of all TSFs in support of the GISTM compliance roadmap will be completed
- Risks to the execution of the LoM plan include the following:
  - Managing the mining contractor's performance to maintain delivery on planned productivity and cost metrics
  - Blast restrictions at Teberebie Cut 4 require ongoing adherence to defined blasting practices
  - Maintenance of pit wall stability will require elevated geotechnical monitoring in certain areas
  - Higher strip ratios for down dip pit extensions and longer hauls from pits to existing waste dumps are emerging challenges which will require monitoring to maintain planned delivery and cost metrics

## Tarkwa gold mine continued

### OPERATING STATISTICS

|  | Units     | Historic performance |          |          |
|--|-----------|----------------------|----------|----------|
|  |           | Dec 2020             | Dec 2019 | Dec 2018 |
| <b>Open pit mining</b>                             |           |                      |          |          |
| Total mined  | kt        | <b>88,904</b>        | 92,523   | 89,647   |
| – Waste mined (opex)                               | kt        | <b>28,756</b>        | 42,163   | 25,043   |
| – Waste mined (capex)                              | kt        | <b>48,271</b>        | 35,331   | 50,428   |
| – Ore mined  | kt        | <b>11,877</b>        | 15,029   | 14,176   |
| Mined grade  | g/t       | <b>1.40</b>          | 1.23     | 1.26     |
| Strip ratio (tonnes)                               | waste:ore | <b>6.5</b>           | 5.2      | 5.3      |
| <b>Processing</b>                                  |           |                      |          |          |
| <b>CIL</b>   |           |                      |          |          |
| Tonnes treated                                     | kt        | <b>14,234</b>        | 13,749   | 13,791   |
| Head grade   | g/t       | <b>1.19</b>          | 1.20     | 1.22     |
| Yield  | g/t       | <b>1.15</b>          | 1.17     | 1.18     |
| Plant recovery                                     | %         | <b>97.1</b>          | 97.3     | 96.9     |
| Total Au production                                | koz       | <b>526</b>           | 519      | 525      |
|  | kg        | <b>16,370</b>        | 15,977   | 16,325   |
| <b>Financials</b>                                  |           |                      |          |          |
| Average Au price received                          | US\$/oz   | <b>1,763</b>         | 1,385    | 1,271    |
| Cost of sales before amortisation and depreciation | US\$m     | <b>297</b>           | 396      | 309      |
|  | US\$/oz   | <b>564</b>           | 608      | 589      |
| Capex  | US\$m     | <b>147</b>           | 126      | 156      |
|  | US\$/oz   | <b>280</b>           | 242      | 297      |
| AIC  | US\$/oz   | <b>1,017</b>         | 958      | 951      |

### EXPLORATION AND RESOURCE DEFINITION DRILLING

2019/2020 exploration expenditure is presented in the regional West Africa overview section.

The bulk of the Tarkwa open pit palaeoplacer Mineral Resource has been drilled and classified into the Measured and Indicated categories under prevailing costs and a gold price of US\$1,500/oz.

In 2020, exploration activities focused on testing the palaeoplacer mineralisation extension of the Underlap ore body in four prime target areas, namely: Ulap South/West Hill, Ulap East and West. A drilling programme was successfully executed in Akontansi-Ridge North to convert known resources in the down-dip extension

of the Akontansi ore body into Mineral Reserves.

In 2021, the exploration programme will focus on the completion of the drilling programmes over the Ulap East, Pepe Central, Kottraverchy East, West Hill and Akontansi-Ridge North areas. A comprehensive resource range analysis (RRA) process, aimed at reassessing the technical and economic potential of the exploration portfolio, will be conducted to assist with target prioritisation and drilling, and to support work on the planned Tarkwa unconstrained PFS.

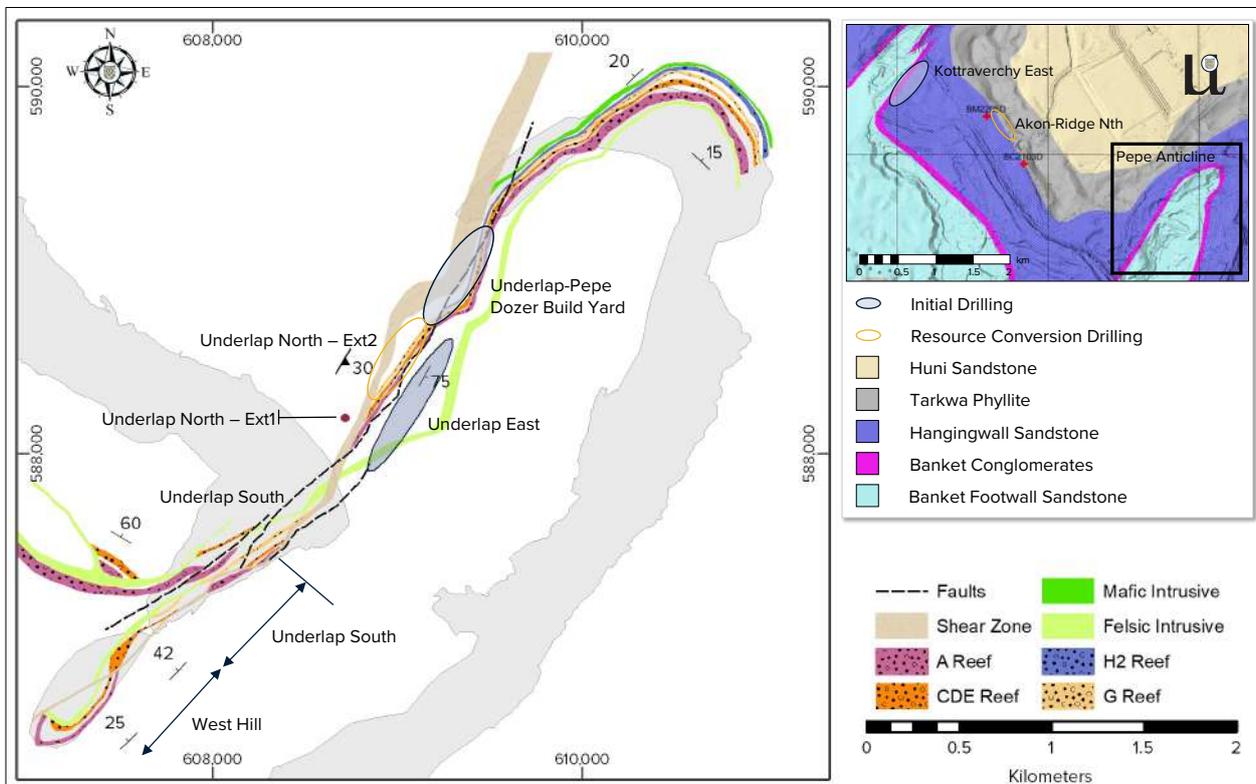
The Kottraverchy and Teberebie underground resource base is being reevaluated using the latest cost and mining method assumptions to assess the potential.

### PROJECT AND STUDY PIPELINE

2021 projects include scoping the strategically focused Tarkwa unconstrained study to assess and mitigate the infrastructure constraints currently impacting potential resource and reserve expansions presently being tested through step-out drilling to assess pit extension potential.

In support of the mine's modernisation innovation and technology (I&T) programme, a number of initiatives being progressed in 2021 will be a vehicle collision avoidance system, network backbone installation and scoping for LNG DGB trials.

**Tarkwa: Plan showing active exploration areas in the Underlap - Pepe Anticline area**



Exploration in the vicinity of the Underlap and Pepe Anticline area is continuing with further Resource definition and infill drilling

**MINERAL RESOURCES AND MINERAL RESERVES**

All Mineral Resources and Mineral Reserves reported are 100% managed by Gold Fields unless otherwise stated.

Stockpile tonnage and grade estimates are based on accumulations of estimated tonnage and grades trucked throughout the history of the mine, and are therefore considered to be reasonably accurate.

However, the grades and tonnages are discounted by 3% for processing purposes, as experience has shown that this is realistically achievable when reclaiming a stockpile.

**Mineral Resources classification**

| Classification               | Tonnes (kt)    |          |          | Grade (g/t) |          |          | Au (koz)      |          |          |
|------------------------------|----------------|----------|----------|-------------|----------|----------|---------------|----------|----------|
|                              | Dec 2020       | Dec 2019 | Dec 2018 | Dec 2020    | Dec 2019 | Dec 2018 | Dec 2020      | Dec 2019 | Dec 2018 |
| <b>Open pit</b>              |                |          |          |             |          |          |               |          |          |
| Measured                     | <b>54,145</b>  | 55,142   | 57,952   | <b>1.47</b> | 1.46     | 1.44     | <b>2,563</b>  | 2,593    | 2,680    |
| Indicated                    | <b>157,930</b> | 157,592  | 138,577  | <b>1.29</b> | 1.26     | 1.25     | <b>6,535</b>  | 6,390    | 5,591    |
| Inferred                     | <b>12,059</b>  | 20,331   | 16,643   | <b>1.11</b> | 1.21     | 1.16     | <b>431</b>    | 791      | 621      |
| <b>Total open pit</b>        | <b>224,134</b> | 233,065  | 213,172  | <b>1.32</b> | 1.30     | 1.30     | <b>9,529</b>  | 9,774    | 8,891    |
| <b>Surface</b>               |                |          |          |             |          |          |               |          |          |
| Measured stockpiles          | <b>12,897</b>  | 14,861   | 13,139   | <b>0.82</b> | 0.77     | 0.76     | <b>340</b>    | 367      | 320      |
| South Heap Leach (Indicated) | <b>59,960</b>  | 59,977   | 59,977   | <b>0.40</b> | 0.40     | 0.40     | <b>771</b>    | 771      | 771      |
| <b>Total surface</b>         | <b>72,857</b>  | 74,837   | 73,116   | <b>0.47</b> | 0.47     | 0.46     | <b>1,111</b>  | 1,138    | 1,091    |
| <b>Grand total</b>           | <b>296,991</b> | 307,903  | 286,288  | <b>1.11</b> | 1.10     | 1.08     | <b>10,640</b> | 10,913   | 9,983    |

## Tarkwa gold mine continued

### Mineral Resources classification per mining area

| Area                         | Measured      |             |              | Indicated      |             |              | Inferred      |             |            | Total Mineral Resources |             |               |
|------------------------------|---------------|-------------|--------------|----------------|-------------|--------------|---------------|-------------|------------|-------------------------|-------------|---------------|
|                              | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)    | Grade (g/t) | Au (koz)     | Tonnes (kt)   | Grade (g/t) | Au (koz)   | Tonnes (kt)             | Grade (g/t) | Au (koz)      |
| Akontansi                    | 23,015        | 1.39        | 1,026        | 107,638        | 1.29        | 4,461        | 11,947        | 1.11        | 428        | 142,601                 | 1.29        | 5,915         |
| Kotraverchy                  | 14,583        | 1.69        | 792          | 533            | 1.21        | 21           | —             | —           | —          | 15,117                  | 1.67        | 813           |
| Pepe/Mantraim                | 7,650         | 1.21        | 298          | 23,680         | 1.07        | 815          | 64            | 0.87        | 2          | 31,394                  | 1.10        | 1,115         |
| Teberebie                    | 8,382         | 1.54        | 415          | 25,253         | 1.46        | 1,182        | —             | —           | —          | 33,635                  | 1.48        | 1,597         |
| Kobada                       | 513           | 1.97        | 33           | 827            | 2.10        | 56           | 48            | 1.24        | 2          | 1,388                   | 2.02        | 90            |
| <b>Total open pit</b>        | <b>54,145</b> | <b>1.47</b> | <b>2,563</b> | <b>157,930</b> | <b>1.29</b> | <b>6,535</b> | <b>12,059</b> | <b>1.11</b> | <b>431</b> | <b>224,134</b>          | <b>1.32</b> | <b>9,529</b>  |
| <b>Surface</b>               |               |             |              |                |             |              |               |             |            |                         |             |               |
| Spent Ore (South Heap Leach) | —             | —           | —            | 59,960         | 0.40        | 771          | —             | —           | —          | 59,960                  | 0.40        | 771           |
| Surface stockpiles           | 12,897        | 0.82        | 340          | —              | —           | —            | —             | —           | —          | 12,897                  | 0.82        | 340           |
| <b>Total surface</b>         | <b>12,897</b> | <b>0.82</b> | <b>340</b>   | <b>59,960</b>  | <b>0.40</b> | <b>771</b>   | <b>—</b>      | <b>—</b>    | <b>—</b>   | <b>72,857</b>           | <b>0.47</b> | <b>1,111</b>  |
| <b>Grand total</b>           | <b>67,042</b> | <b>1.35</b> | <b>2,903</b> | <b>217,891</b> | <b>1.04</b> | <b>7,306</b> | <b>12,059</b> | <b>1.11</b> | <b>431</b> | <b>296,991</b>          | <b>1.11</b> | <b>10,640</b> |

### Modifying factors

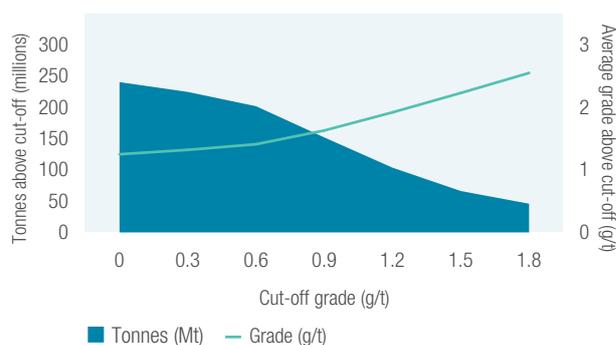
|                                     | Units   | December     |       |       |
|-------------------------------------|---------|--------------|-------|-------|
|                                     |         | 2020         | 2019  | 2018  |
| <b>Mineral Resources parameters</b> |         |              |       |       |
| Mineral Resources Au price          | US\$/oz | <b>1,500</b> | 1,400 | 1,400 |
| Cut-off for mill feed               | g/t     | <b>0.31</b>  | 0.32  | 0.35  |
| <b>Mineral Reserves parameters</b>  |         |              |       |       |
| Mineral Reserves Au price           | US\$/oz | <b>1,300</b> | 1,200 | 1,200 |
| Cut-off for mill feed               | g/t     | <b>0.36</b>  | 0.38  | 0.42  |
| Mining recovery factor (open pit)   | %       | <b>100</b>   | 100   | 100   |
| Strip ratio (waste:ore)             | ratio   | <b>5.5</b>   | 5.6   | 5.1   |
| MCF                                 | %       | <b>97</b>    | 97    | 97    |
| Dilution open pit <sup>1</sup>      | cm      | <b>30/20</b> | 30/20 | 30/20 |
| Plant recovery                      | %       | <b>97.2</b>  | 97.2  | 97.2  |
| Plant capacity                      | Mtpa    | <b>14.0</b>  | 13.7  | 13.7  |

<sup>1</sup> Refers to 30cm hangingwall and 20cm footwall dilution skins, respectively

### GRADE TONNAGE CURVES

The grade tonnage curves for the surface Mineral Resources are presented opposite. Stockpiles are excluded from the grade tonnage curves.

### GRADE-TONNAGE CURVE – OPEN PIT



### Mineral Reserves classification

| Classification              | Tonnes (kt)    |          |          | Grade (g/t) |          |          | Au (koz)     |          |          |
|-----------------------------|----------------|----------|----------|-------------|----------|----------|--------------|----------|----------|
|                             | Dec 2020       | Dec 2019 | Dec 2018 | Dec 2020    | Dec 2019 | Dec 2018 | Dec 2020     | Dec 2019 | Dec 2018 |
| <b>Open Pit</b>             |                |          |          |             |          |          |              |          |          |
| Proved                      | 37,928         | 38,355   | 43,534   | 1.27        | 1.27     | 1.24     | 1,551        | 1,561    | 1,731    |
| Probable                    | 86,905         | 83,491   | 77,874   | 1.23        | 1.19     | 1.18     | 3,433        | 3,195    | 2,956    |
| <b>Total open pit</b>       | <b>124,833</b> | 121,846  | 121,408  | <b>1.24</b> | 1.21     | 1.20     | <b>4,984</b> | 4,756    | 4,687    |
| <b>Surface</b>              |                |          |          |             |          |          |              |          |          |
| Proved stockpiles           | 12,897         | 14,861   | 13,139   | 0.82        | 0.77     | 0.76     | 340          | 367      | 320      |
| South Heap Leach (Probable) | 59,960         | 59,977   | 59,977   | 0.40        | 0.40     | 0.40     | 771          | 771      | 771      |
| <b>Total surface</b>        | <b>72,857</b>  | 74,837   | 73,116   | <b>0.47</b> | 0.47     | 0.46     | <b>1,111</b> | 1,138    | 1,091    |
| <b>Grand total</b>          | <b>197,690</b> | 196,683  | 194,525  | <b>0.96</b> | 0.93     | 0.92     | <b>6,095</b> | 5,894    | 5,778    |

<sup>1</sup> Open pit Mineral Reserves grade = 1.24g/t (excluding surface stockpiles)

### Mineral Reserves classification per mining area

| Area                            | Proved        |             |              | Probable       |             |              | Total Mineral Reserves |             |              |
|---------------------------------|---------------|-------------|--------------|----------------|-------------|--------------|------------------------|-------------|--------------|
|                                 | Tonnes (kt)   | Grade (g/t) | Au (koz)     | Tonnes (kt)    | Grade (g/t) | Au (koz)     | Tonnes (kt)            | Grade (g/t) | Au (koz)     |
| <b>Open pit</b>                 |               |             |              |                |             |              |                        |             |              |
| Akontansi                       | 20,674        | 1.18        | 788          | 67,919         | 1.20        | 2,630        | 88,593                 | 1.20        | 3,418        |
| Kotraverchy                     | 5,124         | 1.38        | 228          | 1              | 0.56        | —            | 5,125                  | 1.38        | 228          |
| Pepe/Mantraim                   | 1,178         | 1.13        | 43           | 236            | 0.64        | 5            | 1,414                  | 1.05        | 48           |
| Teberebie                       | 10,144        | 1.37        | 448          | 18,479         | 1.31        | 779          | 28,623                 | 1.33        | 1,227        |
| Kobada                          | 807           | 1.74        | 45           | 270            | 2.18        | 19           | 1,078                  | 1.85        | 64           |
| <b>Total open pit</b>           | <b>37,928</b> | <b>1.27</b> | <b>1,551</b> | <b>86,905</b>  | <b>1.23</b> | <b>3,433</b> | <b>124,833</b>         | <b>1.24</b> | <b>4,984</b> |
| <b>Surface</b>                  |               |             |              |                |             |              |                        |             |              |
| Spent Ore (SHL)                 | —             | —           | —            | 59,960         | 0.40        | 771          | 59,960                 | 0.40        | 771          |
| Surface stockpiles              | 12,897        | 0.82        | 340          | —              | —           | —            | 12,897                 | 0.82        | 340          |
| <b>Total surface stockpiles</b> | <b>12,897</b> | <b>0.82</b> | <b>340</b>   | <b>59,960</b>  | <b>0.40</b> | <b>771</b>   | <b>72,857</b>          | <b>0.47</b> | <b>1,111</b> |
| <b>Grand total</b>              | <b>50,825</b> | <b>1.16</b> | <b>1,891</b> | <b>146,865</b> | <b>0.89</b> | <b>4,205</b> | <b>197,690</b>         | <b>0.96</b> | <b>6,095</b> |

### Mineral Resources and Mineral Reserves reconciliation year-on-year

| Factors that affected Mineral Resources reconciliation year-on-year | Factors that affected Mineral Reserves reconciliation year-on-year       |
|---|--|
| Depletion by mining (-558koz)                                       | Depletion by mining (-542koz)  |
| Higher gold price US\$1,400/oz to US\$1,500/oz (+1,010koz)          | Higher gold price US\$1,200/oz to US\$1,300/oz (+880koz)                 |
| Contractor mining cost adjustment (-786koz)                         | Mineral Resources model updates and Mineral Reserve conversion (+133koz) |
| Mineral Resources model updates and exploration (+61koz)            | Contractor mining cost adjustment (-270koz)                              |

## Tarkwa gold mine continued

### MINERAL RESOURCE RECONCILIATION Gold (koz)



### MINERAL RESERVE RECONCILIATION Gold (koz)



### MINERAL RESERVES SENSITIVITY

The Mineral Reserves sensitivity has been derived from the application of the relevant COGs to individual grade tonnage curves of the optimised pit shells for the open pits.

To illustrate the impact of fluctuations in gold price and exchange rates on the current declaration, Tarkwa has generated sensitivities for Mineral Reserves. The following graph indicates the Managed

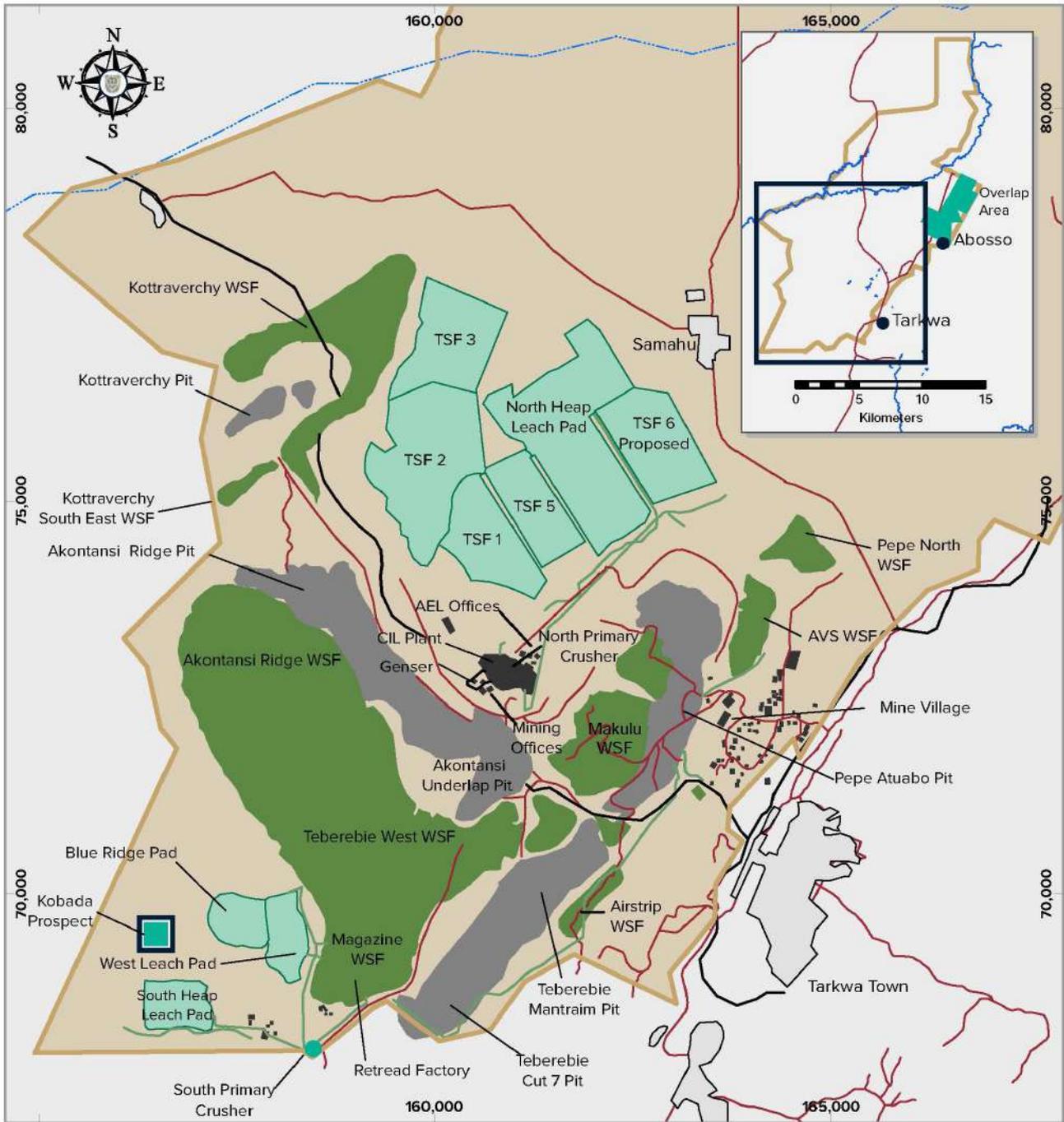
Mineral Reserves sensitivity at -15%, -10%, -5%, base, +5%, +10% and +15% to the base US\$1,300/oz Mineral Reserve gold price.

These sensitivities (other than for the base case) are not supported by detailed plans and depletion schedules. They should only be considered on an indicative basis, specifically as such sensitivities assume 100% selectivity, without any operating cost increases.

### MINERAL RESERVE SENSITIVITY GOLD (koz)



Tarkwa: view from the Dispatch (fleet management) hill



**Reference**

- Roads
- Railroad
- Town
- Prospect
- Mining Leases

- Pipeline
- Building
- Open Pit
- Tailings Storage Facility (TSF)
- Waste Storage Facility (WSF)
- Damang overlap area
- Damang has surface to 30m
- Tarkwa has below 30m

**Gold Fields Limited  
Tarkwa Gold Mine**

PLAN SHOWING MINE INFRASTRUCTURE AS AT DECEMBER 2020



Ghana National Grid Co-ordinate system

## Asanko JV gold mine – 45% attributable to Gold Fields



The Asanko gold mine is a multi-deposit complex with two main open pit ore bodies, Nkran and Esaase, and a number of satellite deposits jointly owned by Galiano Gold and Gold Fields. The JV is a 50:50 partnership, covering 90% of the Mineral Resources and Mineral Reserves attributable to the JV, with the remaining 10% held by the Ghanaian government as a free-carried interest. The mine is managed and operated by Galiano Gold and holds a significant land package over 70km in strike length from Esaase in the north, to the Fromenda targets approximately 20km south of the Nkran pit, on the highly prospective and under-explored Asankrangwa Belt in Ghana. A 5.4Mtpa conventional CIL processing plant located at Obotan, adjacent to the Nkran deposit, commenced operations in early 2016.

Due to substantive technical and economic work needing to be completed by Galiano Gold, which they indicate will be completed in H2 2021, Gold Fields is not in a position to provide an Asanko Mineral Resource and Mineral Reserve estimate as at 31 December 2020. This work is required to underpin a comprehensive revision to last year's reported Mineral Resource and Mineral Reserve estimates, which were supported by the 2019 PFS study.

Gold Fields will provide a market update once the work has been completed by Galiano Gold and after our own internal technical and financial review, which may be in H2 2021 or in alignment with our normal end of year reporting cycle.

### ASSET FUNDAMENTALS

|   |  |
|---|--|
| <b>General location</b>                   | The Asanko concessions are located in the Amansie West and Amansie South Districts of the Ashanti Region of Ghana, about 280km northwest of the capital Accra, and about 80km southwest of the regional capital of Kumasi. There are daily flights from Accra to Kumasi and, in addition, there is an airstrip located at the Obotan operation, which is used by Asanko to transport staff and service providers to and from Accra.  |
| <b>Brief history and Regional geology</b> | The Annexure to this Supplement provides a brief history of Asanko and a summary of the Regional geology.  |
| <b>Climate</b>                            | Asanko experiences a tropical climate, characterised by two distinct rainy seasons from March to July and September to November. Average annual rainfall in the area is 1,596mm. Although there may be minor disruptions to operations during the wet season, there is no operating or long-term constraints to production due to the climate.   |
| <b>Licence status and holdings</b>        | Asanko holds seven valid MLs, as well as prospecting and reconnaissance licences, which collectively make up Asanko and span 30km strike length of the Asankrangwa Gold Belt. The ML concessions cover an area of approximately 213.2km <sup>2</sup> , between latitudes 6°11'54.985"N and 6°35'33.074"N, and longitudes 2°4'59.195"W and 1°51'25.040"W. The Esaase, Abore, Abirem, Datano, Jeni River, Miradani and Adubea MLs contain all of the Mineral Resources defined to date. All other concessions held by Asanko Gold in the area reflect exploration potential.   |
| <b>Mining method</b>                      | The mining method for the two active Asanko ore bodies utilises contract miners and are conventional open pit truck and shovel operations. Vegetation, topsoil and overburden is stripped and stockpiled for future reclamation use. The ore and waste rock is mined with 6m benches, drilled, blasted and loaded into rigid framed haul trucks (94t) with hydraulic excavators (17m <sup>3</sup> ). The primary mining fleet of trucks and excavators is supported by standard open pit drilling and auxiliary equipment. GC drilling ahead of mining is standard practice. Mining operations occur around the clock on two 12-hour shifts. A pre-split wall control method is being implemented along all the pit walls in the fresh zones to ensure the stability of the pit walls. |
| <b>Operational infrastructure</b>         | Two open pits are currently exploiting the auriferous lode deposits at Akwasiso pit and Esaase pit. Nkran Cut 2 pit Mineral Reserve was depleted in June 2020, with approximately 68koz deferred to Cut 3 because of the wall failure in Q3 2019. Ore is hauled from Esaase via the 27km haul road to the Obotan plant. Asanko operates with several stockpiles at Esaase and at the Obotan plant area. Asanko has a centralised administrative office, engineering workshops and residence village.   |

| <b>ASSET FUNDAMENTALS</b>                                   |   |
|---|---|
| <b>Mineral processing and TSFs</b>                          | <p>The Asanko processing plant was commissioned during Q1 2016 and is currently operating at a throughput of 5.4Mtpa and achieving recoveries of 93.5% to 94.0%. The plant consists of primary crushing, SAG/Ball milling circuit (SABC), gravity recovery circuit, followed by a conventional CIL circuit.</p> <p>Plant tailings are deposited into a single TSF that is fully lined with an HDPE liner and raised downstream. The TSF is raised periodically and is designed to be able to contain the Mineral Reserve LoM ore volume.</p> <p>The facility's safety classification has been carried out following the requirements of L.I. 2182 and ANCOLD. Based on the L.I. 2182 classification criteria, the TSF has a Class A hazard classification. Under ANCOLD, and based on the dam breach assessment conducted in 2019, the existing facility's consequence category rating is High B.</p>   |
| <b>Local geology, deposit type and mineralisation style</b> | <p>Although each gold occurrence within Asanko has its own local mineralisation style, geological and geophysical studies have profiled a similar mine scale setting for all the deposits discovered to date. There is an underlying structural relationship between reactivated west northwest basement structures and the dominant northeast to southwest shears that have juxtaposed the sandstone, siltstone and lesser shale metasedimentary packages, coupled with north south structures that may control flexures in the steeply dipping sediments. All deposits have intrusive tonalitic-porphyrific dykes.</p> <p>Episodic gold mineralisation has occurred at least twice during distinct deformational events.</p> <p>Gold occurs largely as free particles. It is deposited in economic concentrations predominantly around zones of rheological contrast between sandstone (porous) and siltstone facies (non-porous) that are sub-vertical shear zones, as well as in late, shallow dipping conjugate quartz vein arrays that transgress rheologically contrasting metasedimentary units and the later granite intrusives.</p> |
| <b>LoM: Proved and Probable Mineral Reserves</b>            | <p>Mineral Resources and Mineral Reserves to be updated in H2 2021 or in line with Gold Fields' 2021 end of year reporting cycle</p>  |
| <b>Sustainable development</b>                              | <p>Asanko has fully implemented its Fihankra safety system, which is based on OHSAS 18001. Asanko is audited annually by the Minerals Commission on its safety, environmental and operational activities. The purpose of the audit is to determine the level of operational safety standards and environmental compliance. The mine also undergoes the annual environmental audit conducted by the Ghana Chamber of Mines using the EPA's Akoben criteria.</p>  |

## KEY DEVELOPMENTS AND MATERIAL ISSUES

- The 2019 PFS that underpinned the reported maiden December 2019 Mineral Resource and Mineral Reserve estimates is presently undergoing revision by Galiano Gold including technical and cost optimisation studies. As no updates were available from our JV partner in line with our end-of-year reporting cycle the Mineral Resources and Mineral Reserves have accordingly been temporarily removed from the Gold Fields statement. Mineral Resources and Mineral Reserves are expected to be updated in H2 2021 or in line with Gold Fields' 2021 end year reporting cycle
- Confirmation of TSF dam break studies, the extent of inundation zones, and reclassification of all TSFs in support of the GISTM compliance roadmap need to be completed
- Risks to the execution of the plan include the following:
  - Observed geological complexity in the Asanko ore bodies has contributed to poor model reconciliation which has emphasized the need for the resource models to be underpinned by robust geological modelling and for the grade control and resource infill drilling programs to be configured to provide adequate drill density
  - Reconciliation of resource and grade control models with mine production will be monitored to optimise dilution and ore loss
  - Process and timing for obtaining regulatory and community consent to execute the plan is essential and an update of the EISA (and the subsequent Environmental Management Plan) is likely to be a pre-condition to commencing construction of required infrastructure upgrades
  - Executing the schedule for haulage road construction upgrades with the necessary permitting is key and will be addressed through the integrated permit/approval, system design, engineering design and funding work streams, which also need to support the necessary preconstruction activities
  - Any extended use of the haul road from Esaase to the Plant, involving increased use or higher volumes will require community, safety and environmental risk assessment, along with mitigation and management measures
  - Lack of alternative sources of ore if there are challenges with executing the plan which could include the timing of the Akwasiso and Nkran pit cut-backs
  - Geotechnical stability of the potential Nkran Cut 3 and the Esaase pit as it moves into transition/fresh ore will be closely monitored and proactive remedial action taken if required
  - Pockets of waste rock have the potential for elevated levels of arsenic. To minimise the leaching of arsenic from the WRDs the material will be identified prior to mining and selectively handled in a manner that allows covering by low arsenic waste material and/or typical oxide waste
  - Potential lower than predicted gold recoveries due to 'preg-robbing' from mineralised zones containing elevated concentrations of naturally occurring organic carbon at Esaase

## Asanko JV gold mine continued

### OPERATING STATISTICS

|  | Units     | Historic performance |          |
|--|-----------|----------------------|----------|
|  |           | Dec 2020             | Dec 2019 |
| <b>Open pit mining</b>                             |           |                      |          |
| Total mined  | kt        | <b>44,465</b>        | 30,791   |
| – Waste mined (opex)                               | kt        | <b>33,298</b>        | 16,687   |
| – Waste mined (capex)                              | kt        | <b>4,974</b>         | 9,032    |
| – Ore mined  | kt        | <b>6,193</b>         | 5,071    |
| Mined grade  | g/t       | <b>1.45</b>          | 1.52     |
| Strip ratio (tonnes)                               | waste:ore | <b>6.18</b>          | 5.07     |
| <b>Processing</b>                                  |           |                      |          |
| Tonnes treated                                     | kt        | <b>5,943</b>         | 5,498    |
| Head grade   | g/t       | <b>1.39</b>          | 1.49     |
| Yield  | g/t       | <b>1.31</b>          | 1.40     |
| Plant recovery                                     | %         | <b>94</b>            | 94       |
| Total Au production                                | koz       | <b>250</b>           | 251      |
|  | kg        | <b>7,773</b>         | 7,806    |
| <b>Financials 45%</b>                              |           |                      |          |
| Au price received                                  | US\$/oz   | <b>1,711</b>         | 1,376    |
| Cost of sales before amortisation and depreciation | US\$m     | <b>94</b>            | 90       |
|  | US\$/oz   | <b>837</b>           | 800      |
| Capex  | US\$m     | <b>31</b>            | 28       |
|  | US\$/oz   | <b>277</b>           | 237      |
| AIC  | US\$/oz   | <b>1,314</b>         | 1,214    |

### EXPLORATION AND RESOURCE DEFINITION DRILLING

Exploration objectives :

- Near term: replace depletion from mining activity in 2020 and 2021
- Medium term: improve the business plan for 2023 to 2026 by delineating next stage ore for growing Mineral Reserves by the end of 2022 that have superior economics (return on invested capital)
- To advance exploration targets with +1-million-ounce potential to be in production by 2027 and continue on from the Esaase open pit

Exploration in 2020, which totalled 43km of drilling, focused on the following targets during the year:

- Abore, to replace depletion in 2021 and 2022. The Abore infill drilling programme was successfully completed in H1 2020 and comprised 33 boreholes for 5,663m of RC and diamond drilling (DD). The drilling programme was a success and will be utilised for the updated Mineral Resource estimation, to be completed in 2021
- Nkran Pit Cut 3 depth extensions and south extensions, to replace depletion

in 2021 and 2022. The Nkran South drilling campaign, comprising 25 holes and totalling 3,142m of RC drilling was completed in April 2020. The campaign was completed to assess extensions of mineralisation to the immediate south of the Nkran Pit. Results confirmed the presence of relatively narrow (1m to 5m) mineralised intersections. In total, 33 boreholes (4,649m) were completed for the Nkran Cut 3 infill. Mineral Resource conversion campaigns, with 15 collar locations, were abandoned because of pit bottom flooding during heavy rainfall. The drilling campaign confirms the presence of high-grade ore in and below the planned Cut 3

- Nkran Pit Cut 3 near surface mineralisation, to investigate potential near surface extensions. 26 RC holes, totalling 3,900m, were planned and completed in October 2020 to investigate potential shallow mineralisation along the perimeter of the proposed Nkran Cut 3. Results showed potential for relatively narrow erratic mineralisation to the southwest of the Cut 3 stripping volume
- Miradani Central, to investigate potential next stage ore growth. Drilling at

Miradani Central started in July 2020. 10 boreholes, totalling 1,665m, were completed. Results were mediocre, though some were encouraging and significant intersections were realised on the southwestern-most drill line and warrant further investigation when land access has been secured

- Miradani North, to increase confidence for Mineral Resource updates. 17 boreholes, totalling 3,878m, were planned for the Phase 2 drilling, stepping out to the north and south of the initial Phase 1 defined mineralisation. 12 boreholes (3,785m) were completed, with seven holes abandoned because of adverse ground conditions. Results confirmed that mineralisation is approximately confined to the initial Phase 1 defined mineralisation. An additional 51 boreholes were planned for Mineral Resource conversion and infill drilling over the Phase 1 area. By year-end, 26 holes, totalling 5,722m, were drilled and results to date indicate potential for a medium grade 100koz to 200koz deposit

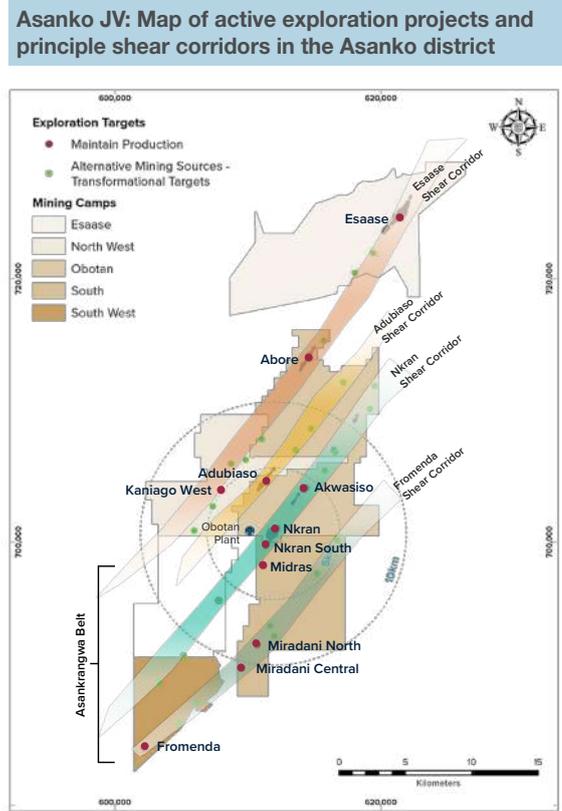
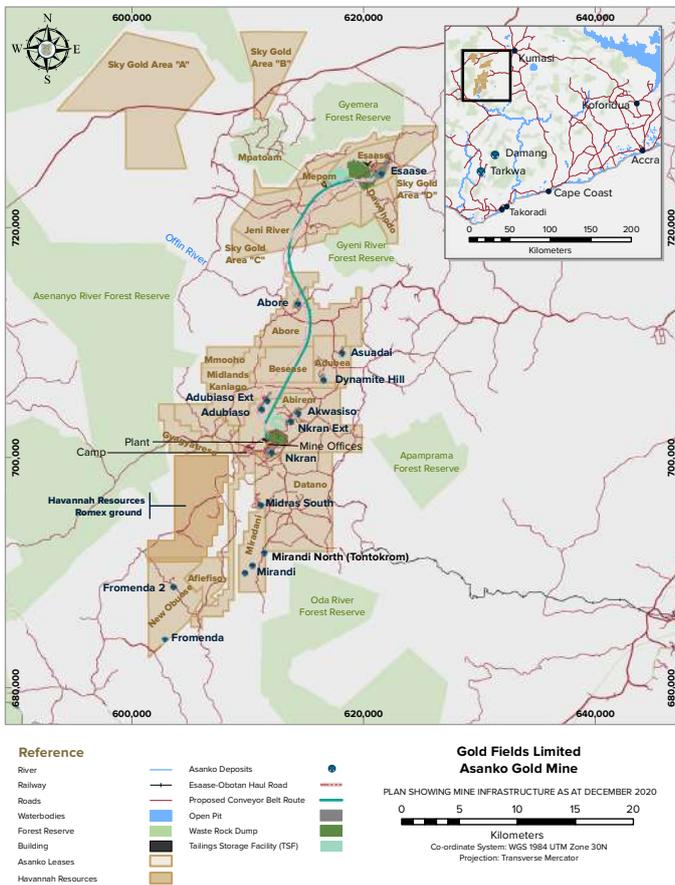
- Akwasiso Cut 3 infill drilling, to increase confidence for Mineral Resource updates. A total of 4,535m of mixed RC drilling and DD were completed in Q2 2020. This drilling campaign, designed to test the deeper mineralisation planned for the Cut 3 pushback, proved to be successful. An additional 10 boreholes, totalling 1,655m, were completed in Q4 2020 to infill the Q2 2020 programme for resource conversion. The Akwasiso Mineral Resource model will be updated in Q1 2021
- Fromenda, to investigate potential next stage ore growth. Exploration drilling at Fromenda was initiated in November

2019 and completed in February 2020. A total of 28 holes for 3,970m were planned, with 24 holes completed. 10 holes were completed in 2020 for a total of 1,545m of combined RC drilling and DD. 1,295 samples were sent to Intertek Tarkwa, with no significant intersections reported

- Esaase, infill drilling commencing late in Q4 2020 to increase confidence in the pending Mineral Resource estimates. During 2020, the borehole relogging, together with in-pit mapping, confirmed that the gold mineralisation associated with quartz veining predominates the shear associated gold. To increase the

confidence of the Mineral Resource estimate for Esaase, dynamic infill drilling was initiated, with flexible collar locations to accommodate the rapid mining face advancement at Esaase. By the end of the year, 33 boreholes totalling 4,307m were completed. The drilling will extend into 2021 and continues to be adjusted in conjunction with the mining face advancement

- Adubiaso extension drilling, comprising 1,253m of RC and DD, was planned and completed in Q2 2020. Only one hole returned significant results, with relatively narrow mineralised intersections located on the limits of the design pit



# Supplementary information



South Deep: Long-hole jumbo rig in underground workshop

## Regional and Operational Competent Persons

Internal technical reviews have been conducted by the CPs as listed, who are full-time employees of Gold Fields Limited unless otherwise stated and working for the respective operation or region. Corporate technical oversight, assurance and compliance is provided by the Group Technical Services team (see page 16).

### Americas Regions

#### Cerro Corona

**P Gómez: Vice-President Technical**

Geological Engineering, Universidad Nacional San Antonio Abad del Cusco, MBA, Adolfo Ibañez Business School CIP (No 130253). MAusIMM (330373) Diplomate in Geometallurgy Pontificia Universidad Católica del Perú. Certified in applied geostatistics by the University of Alberta.

**Industry experience:**

He has over 22 years' relevant experience and is responsible for the overall accuracy, standard, and compliance of this declaration.

**Gabriel Becerra: Technical Services Manager**

Geological Engineering, Universidad Nacional de Ingeniería, CIP (No 12337).

Master in Geomechanics (Oviedo University, Spain).

**Industry experience:**

He has 17 years' relevant experience with eight years at Cerro Corona and is responsible for the overall accuracy, standard, and compliance of this declaration.

**J Yupa: Chief Mine Planning Engineer**

Mining Engineering; MBA, Universidad Nacional San Agustín.

**Industry experience:**

He has 14 years' relevant experience and is responsible for the compliance of the LoM planning, scheduling and Mineral Reserve statement for Cerro Corona.

**Edwin Ayala: Chief Mine Geologist**

Geological engineering, Universidad Nacional Mayor de San Marcos, CIP (No 108874). Master in Sustainable Use of Mineral Resources at the UPM, Diplomate in Geometallurgy Pontificia Universidad Católica del Perú.

**Industry experience:**

He has 16 years' relevant experience and is responsible for the structural and geological interpretation at Cerro Corona.

#### Americas – Salares Norte

**A Trueman: Chief Resource Geologist – Americas region**

BSc Geology (Hons). PGeo, APEGBC (No 149753), MAusIMM (No 110730).

**Industry experience:**

He has 28 years' experience in mining, exploration, and resource evaluation on worldwide projects, and is responsible for Mineral Resource estimation and reporting.

**Dr Michael I. Brittan: President – Brittan Process Consulting, LLC**

BSc (ChemEng), MSc (ChemEng). MS (ChemEng), PhD (ChemEng), MDP (BusMgmt). MSME (No 04100876), MSAIMM (No 19049).

**Industry experience:**

He has over 53 years' experience in international mining projects and metallurgical extraction operations and is responsible for metallurgical test work and metallurgical processing and recovery evaluation and modelling.

**Carlos Guzmán Pérez: Principal Mining Engineer, NCL Ingeniería y Construcción SpA**

BSc (Eng), Mining Engineering, CMC (0119) registered with the Commission Calificadora de Competencias en Recursos y Reservas Mineras. FAusIMM (No 229036).

**Industry experience:**

He has 26 years' experience reviewing and reporting as a consultant on numerous exploration, mining operations, and projects worldwide for due diligence and regulatory requirements and is responsible for Mineral Reserve estimation and reporting.

**Esteban Hormazabal Zuñiga: Corporate Consultant (Rock Mechanics), SRK Consulting (Chile) SpA**

M.Sc. (Geophysics), Mining Civil Engineer. FAusIMM (No 304419), MSAIMM (No 709016), registered (No 0209) in the CP Public Registry for Resources and Reserves of Chile in the discipline of Mining (Geomechanics).

**Industry experience:**

He has 26 years' experience in mining, geomechanical, and hydrogeology studies and is responsible for geotechnical and hydrogeology studies.

### Australia region

**I Suckling: Vice-President Technical**  
BAppSc, WASM, FAusIMM (No 111090).

**Industry experience:**

He has 40 years of relevant mining experience and is responsible for the overall conduct and standard of technical work for the purposes of estimating and reporting Resources and Reserves from a regional perspective.

**T Strickland: Principal Geologist; Resources and Reserves**

BSc (Hons) in Economic Geology, CODES, University of Tasmania; MAusIMM (No 211953); AIG (No 6761).

**Industry experience:**

He has 17 years' relevant mining industry experience across mining, exploration and resource evaluation and is responsible for the overall accuracy, standard and compliance of Mineral Resource estimation and reporting from a regional perspective. He is the lead CP for the region.

**F Phillips: Manager Mine Engineering**

B.Eng. Hons (Mining), MAusIMM (No 1125384).

**Industry experience:**

She has 23 years' of relevant experience in the mining industry and is responsible for the overall accuracy, standard and compliance of mine planning, schedules and Mineral Reserve estimation, LoM compilation and financial evaluation from a regional perspective.

**R Radford: Regional Metallurgist**

BSc in Chemistry and Extractive Metallurgy Murdoch University WA; MAusIMM (No 211859).

**Industry experience:**

He has 22 years' relevant experience and is responsible for the completion and validation of the metallurgical comminution and extractive test work programmes, gold metal reconciliation and processing plant LoM financial estimation from a regional perspective.

## Regional and Operational Competent Persons *continued*

### Australia – Agnew

#### **P Burge: Geology Manager**

BSc (Hons); MAusIMM (No 302309); MAIG (No 6471).

#### **Industry experience:**

He has 28 years' relevant experience and is responsible for the overall accuracy, standard and compliance of this declaration.

### **N Morriss: Superintendent Mine Planning LoM**

BEng (Hons) Mining Engineering, B.Com. (Hons) Finance. MAusIMM (No 208320).

#### **Industry experience:**

He has 17 years' relevant experience in mining and is responsible for the overall accuracy, standard and compliance of mine planning, schedules and Mineral Reserve estimation, LoM compilation and financial evaluation.

### **S Gotley: Superintendent Resource Geologist**

BSc Hons (Geology), Grad. Cert. Geostatistics. MAusIMM (No 211515); AIG (No 2780).

#### **Industry experience:**

With 27 years' relevant experience, she is responsible for Mineral Resource estimation and reporting.

### Australia – Granny Smith

#### **L Grimbeek: Geology Manager**

BSc Hons (Geology), Pr Sci Nat (No 400086/92); MAusIMM (No 325556).

#### **Industry experience:**

He has 34 years' relevant experience, is the lead CP and is responsible for the overall accuracy, standard and compliance of this declaration.

### **N Morriss: Superintendent Mine Planning (LoM)**

BEng (Hons) Mining Engineering, B.Com. (Hons), Finance. MAusIMM (No 208320).

#### **Industry experience:**

He has 17 years' relevant experience in mining and is responsible for the overall accuracy, standard and compliance of mine planning, schedules and Mineral Reserve estimation, LoM compilation and financial evaluation.

### **R Tully: Superintendent: Resources Geology**

BSc (Hons). MAusIMM (No 992513); AIG (No 2716).

#### **Industry experience:**

With 18 years' relevant experience, he is responsible for Mineral Resource estimation and reporting.

### Australia – St Ives

#### **M Fitzgerald: Geology Manager**

BSc, MSc, Post Graduate Diploma in Mining (Engineering). MAusIMM (No 220122).

#### **Industry experience:**

He has 17 years relevant experience and he is responsible for the overall accuracy, standard and compliance of this declaration and is also responsible for all surface exploration and Mineral Resource development drilling with oversight of exploration geology models.

### **M Humphreys: Resources Geology Superintendent**

BSc (Hons), MSCST (Statistics), MAusIMM (No 112703).

#### **Industry experience:**

He has 24 years' mining industry experience and is responsible for the oversight and development of technical standards/auditing and validation for the site-wide Mineral Resource estimation processes and models.

### **H Guthrie: Mine Planning Superintendent**

B Eng (Mining), MAusIMM, (No 210899).

#### **Industry experience:**

He has 22 years' relevant experience and is responsible for the overall accuracy, standard and compliance of mine planning, schedules and Mineral Reserve estimation, LoM compilation and financial evaluation.

### **S Ellery: Resource Evaluation Superintendent**

BSc (Hons), MSc Geology, Grad Dip Applied Finance and Investment (SIA), MAusIMM (No 110420).

#### **Industry experience:**

He has 31 years' relevant experience and is responsible for compilation of planning assumptions and compilation of reported Mineral Resource and Mineral Reserve estimates.

### Australia – Gruyere

#### **M Tassone: Manager: Geology – Gruyere JV**

BSc (Geology) MAusIMM (No 3000317)

#### **Industry experience:**

He has 26 years' relevant experience, is the lead CP and is responsible for the overall accuracy, standard and compliance of this declaration

### **M Roux: Resources Superintendent-GFA**

BSc (Hons), Post Grad Cert (Geostatistics); MAusIMM (No 324099), Pr Sci Nat (No 400136/09).

#### **Industry experience:**

He has 20 years' relevant experience and he is responsible for the production, review and technical development of all Mineral Resource processes and models for the Gruyere JV.

### **H Guthrie: Superintendent: Mine Planning**

B Eng (Mining), MAusIMM, (No 210899)

#### **Industry experience:**

He has 22 years' relevant experience and is responsible for the overall accuracy, standard and compliance of mine planning, schedules and Mineral Reserve estimation, LoM compilation and financial evaluation.

### Australia – FSE

#### **A Trueman: Lead CP and Chief Resource Geologist**

BSc (Hons) Geology; PGeo, APEGBC (No 149753); MAusIMM (No 110730).

#### **Industry experience:**

He has geology and resource estimation experience spanning 28 years and is responsible for the overall accuracy, standard and compliance of this declaration.

### South Africa – South Deep

#### **S Dlodla: Manager: Technical Services**

M.Eng Mining Engineering, Dip Mining Engineering, BSc (Hons) Geology, BSc (Hons) Industrial Technology and Management, SACNASP (No 400282/07)

#### **Industry experience:**

He has 15 years' experience in the mining industry covering the broad mining value-chain, is the lead CP and is responsible for the overall accuracy, standard and compliance of this declaration.

**R Pillaye: Chief Geologist**

BSc (Hons) Geology. SACNASP (No 400247/08).

**Industry experience:**

He has 29 years' experience in the mining industry and is responsible for production geology at South Deep.

**T Mutobvu: Chief Resource Geologist**

BSc (Hons) Geology, MSc (Mining Engineering). SACNASP (No 400178/15).

**Industry experience:**

He has 10 years' experience in the mining industry and is responsible for resource geology and estimation at South Deep.

**A Miller: Chief Surveyor**

ND (Mine Survey). Mine Survey Certificate of Competency, PLATO (No PMS 0191).

**Industry experience:**

He has 39 years' experience in the mining industry and is responsible for surveying, reporting and historical modifying factors at South Deep.

**S Grimbeek: Mining Engineer**

BSc (Hons) Mining Engineering, PGD Mineral Economics, PGD Management, Mine Managers Certificate (metal), SAImm (No 700691).

**Industry experience:**

He has 25 years' experience and is responsible for mine design and planning.

**Ghana region**

**N Wang: Vice-President Technical Services**

Bachelor of Mining Engineering (Hons), MAusImm (No 20184), Board of Professional Engineers of Queensland RPEQ 12640.

**Industry experience:**

He has 21 years' relevant experience and is responsible for the overall conduct and standard of technical work for the purposes of estimating and reporting Resources and Reserves for the West Africa region.

**J Nyan: Regional Strategic Mine Planning Manager**

MSc (Mining Engineering), MAusImm (No 305323).

**Industry experience:**

He has 21 years' relevant experience and is jointly responsible for the overall correctness, standard and compliance of the LoM planning, scheduling, reserve statement and economic assurance for the West Africa region.

**C Dzmeku: Regional Metallurgy Lead and JV Manager, West Africa Region**

BSc Chemical Engineering, MSc Minerals Engineering, MCSM, Ghana Institute of Engineers (No 02318M).

**Industry experience:**

He has 31 years' relevant experience and is responsible for processing parameters and metallurgy for the West Africa region.

**S Robins: Regional Geology Manager**

BSc (Hons) (Geology) MSc (Eng) Mineral Resource Evaluation; MBA; MAusImm (No 222533)

**Industry experience:**

He has 24 years' experience in mine geology, mineral resource evaluation and is jointly responsible as the CP for the overall correctness, standard and compliance of the Mineral Resources statement for the West Africa region.

**Ghana – Damang**

**M.N Biddulph: Geology Manager**

BA, BSc Hons (Geology and GIS), GDE: Mining Engineering. Pr.Sci.Nat (No 400007/04).

**Industry experience:**

He has 23 years' relevant experience and is jointly responsible as the CP for the overall correctness, standard and compliance of the Mine Resource Models and the Resource Statement and the mine CPR.

**K Appau: Unit Manager – Strategic Mine Planning**

M.Sc (Mining Engineering). MAusImm (No. 316308).

**Industry experience:**

He has 13 years' relevant experience and he is responsible for the overall accuracy of mine planning, optimisation, scheduling and Mineral Reserve estimation.

**T Kwesi Abakah: Unit Manager – Geostatistics and Resource Modelling**

BSc (Hons) Geological Engineering. MAusImm (No 316516).

**Industry experience:**

He has 13 years' relevant experience and he is responsible for the compilation of the resource declaration.

**Ghana – Tarkwa**

**G Avane: Geology Manager**

MSc (Hons) (Geological Engineering). MAusImm (No 309400).

**Industry experience:**

He has over 25 years' relevant experience and is the lead CP, responsible for overall Mineral Resource Management for Tarkwa and the overall correctness, standard and compliance of this declaration.

**M Aboagye: Unit Manager – Resource Evaluation**

BSc (Hons) (Geological Engineering); MSc (Mineral Engineering). MAusImm (No 322689).

**Industry experience:**

He has 16 years' experience in the mining industry and is responsible for sampling, geology, exploration and resource estimation for Tarkwa.

**P Empeh: Unit Manager – Strategic Mine Planning**

BSc (Hons) (Mining). MAusImm (No 226250).

**Industry experience:**

He has 12 years' experience in the mining industry and he is responsible for the overall accuracy of mine planning, scheduling and Mineral Reserve estimation.

**Locality plans and Mine sections for this Supplement**

**Roslyn OSullivan: Geologist: Projects – Graphics Expert**

## CONVERSION TABLE

| Metric       | Imperial                  |
|--------------|---------------------------|
| 1 centimetre | 0.3937 inches             |
| 1 metre      | 3.28084 feet              |
| 1 kilometre  | 0.6213711922 miles        |
| 1 gram       | 0.0321507466 troy ounces  |
| 1 gram/tonne | 0.0292 ounce/tonne        |
| 1 kilogram   | 2.204622622 pounds        |
| 1 tonne      | 1.1023113109 short tonnes |
| 1 hectare    | 2.4710538147 acres        |

| Imperial      | Metric                |
|---------------|-----------------------|
| 1 inch        | 2.54 centimetres      |
| 1 foot        | 0.3047972654 metres   |
| 1 mile        | 1.609344 kilometres   |
| 1 troy ounce  | 31.1034768 grams      |
| 1 ounce/tonne | 34.286 grams/tonne    |
| 1 pound       | 0.45359237 kilograms  |
| 1 short tonne | 0.90718474 tonnes     |
| 1 acre        | 0.4046856422 hectares |

## ABBREVIATIONS

|               |   |
|---------------|---|
| <b>ADR</b>    | adsorption recovery carbon plant  |
| <b>Ag</b>     | silver  |
| <b>AGC</b>    | Advance Grade Control   |
| <b>AGL</b>    | Abosso Goldfields Limited   |
| <b>AIC</b>    | All-in cost   |
| <b>AISC</b>   | All-in sustaining cost  |
| <b>amsl</b>   | above mean sea level – and may be used for heights specified in any units |
| <b>APP</b>    | Arctic Platinum Project   |
| <b>A\$</b>    | Australian dollar   |
| <b>A\$/oz</b> | Australian dollar per ounce   |
| <b>Au</b>     | gold  |
| <b>BCM</b>    | bank cubic metres   |
| <b>BW</b>     | block width   |
| <b>CIL</b>    | Carbon in Leach   |
| <b>CIP</b>    | Carbon in Pulp  |
| <b>cm</b>     | centimetres   |
| <b>cm.g/t</b> | centimetre grams per ton  |
| <b>Co</b>     | cobalt  |
| <b>CP</b>     | Competent Person  |
| <b>Cu</b>     | copper  |
| <b>COG</b>    | cut-off grade   |
| <b>CW</b>     | channel width   |
| <b>DD</b>     | diamond drill   |
| <b>3D</b>     | three dimensional   |
| <b>DMR</b>    | Department of Mineral Resources   |

|                |   |
|----------------|---|
| <b>EIA</b>     | Environmental Impact Assessment   |
| <b>EMP</b>     | Environmental Management Plan   |
| <b>EPA</b>     | Environmental Protection Agency   |
| <b>FCF</b>     | free cash-flow  |
| <b>FNTP</b>    | Final notice to proceed   |
| <b>g</b>       | grams   |
| <b>g/t</b>     | grams per ton   |
| <b>Ga</b>      | billion years   |
| <b>GC</b>      | grade control   |
| <b>G&amp;A</b> | General and Administrative  |
| <b>GFA</b>     | Gold Fields Australia   |
| <b>GFG</b>     | Gold Fields Ghana   |
| <b>GFI</b>     | Gold Fields Limited   |
| <b>GISTM</b>   | Global Industry Standard on Tailings Management                                       |
| <b>GRB</b>     | Geotechnical Review Board   |
| <b>GTC</b>     | Grade Tonnage Curve   |
| <b>ha</b>      | hectare   |
| <b>HL</b>      | Heap Leach  |
| <b>HME</b>     | heavy mining equipment  |
| <b>HPGR</b>    | high pressure grinding roll   |
| <b>ILR</b>     | in-line leach reactor   |
| <b>JORC</b>    | Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves |
| <b>JSE</b>     | Johannesburg Securities Exchange  |
| <b>KE</b>      | kriging efficiency  |

|                        |   |
|------------------------|---|
| <b>kg</b>              | kilogram  |
| <b>kg/t</b>            | kilograms per ton                                     |
| <b>km</b>              | kilometre   |
| <b>ktpa</b>            | thousand tonnes per annum                             |
| <b>koz</b>             | thousand ounces                                       |
| <b>LDIFR</b>           | Lost Day Injury Frequency Rate                        |
| <b>LIB</b>             | Long-Incline Borehole                                 |
| <b>LNG</b>             | Liquid natural gas                                    |
| <b>LoM</b>             | life-of-mine  |
| <b>m</b>               | metre   |
| <b>m<sup>2</sup></b>   | square metre  |
| <b>Ma</b>              | million years   |
| <b>M&amp;A</b>         | Mergers and Acquisitions                              |
| <b>MCF</b>             | Mine Call Factor                                      |
| <b>m<sup>3</sup>/s</b> | cubic metres per second                               |
| <b>Mlb</b>             | million pounds  |
| <b>Mo</b>              | molybdenum  |
| <b>Moz</b>             | million ounces  |
| <b>mRL</b>             | metres relative level                                 |
| <b>Mt</b>              | million tonnes  |
| <b>Mtpa</b>            | million tonnes per annum                              |
| <b>MW</b>              | megawatt  |
| <b>NCE</b>             | notional cash expenditure                             |
| <b>Ni</b>              | nickel  |
| <b>NPV</b>             | net present value                                     |
| <b>NSR</b>             | net smelter return                                    |
| <b>oz</b>              | ounces (troy)   |
| <b>Pd</b>              | palladium   |
| <b>PGE</b>             | Platinum Group Elements                               |
| <b>2 PGE</b>           | platinum and palladium                                |
| <b>PL</b>              | Prospecting Lease                                     |
| <b>PRF</b>             | Plant Recovery  |
| <b>Pt</b>              | platinum  |
| <b>RC</b>              | reverse circulation hole                              |
| <b>R&amp;D</b>         | Research and Development                              |
| <b>RoM</b>             | run-of-mine (with reference to grade or tonnes)       |
| <b>ROP</b>             | Resource optimisation project                         |
| <b>RPEEE</b>           | Reasonable prospects for eventual economic extraction |

|                                   |   |
|-----------------------------------|---|
| <b>SAG</b>                        | Semi-Autogenous Grind   |
| <b>SAM</b>                        | sub-audio magnetics   |
| <b>SAMREC Code</b>                | South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves, 2016 edition (SAMREC Code) |
| <b>SAMVAL</b>                     | South African Mineral Asset Valuation Committee   |
| <b>SEC</b>                        | United States Securities and Exchange Commission  |
| <b>SOH</b>                        | Safety and Occupational Health  |
| <b>SOX</b>                        | Sarbanes-Oxley Act  |
| <b>SV</b>                         | sub-vertical  |
| <b>SRD</b>                        | surface rock dump   |
| <b>SW</b>                         | stoping width   |
| <b>t</b>                          | metric tonnes   |
| <b>I&amp;T</b>                    | innovation and technology   |
| <b>tpd</b>                        | tonnes per day  |
| <b>tph</b>                        | tonnes per hour   |
| <b>tpm</b>                        | tonnes per month  |
| <b>TRIFR</b>                      | total recordable injury frequency rate  |
| <b>TSF</b>                        | tailings storage facility   |
| <b>VCR</b>                        | Ventersdorp Contact Reef  |
| <b>U<sub>3</sub>O<sub>8</sub></b> | uranium oxide   |
| <b>US\$</b>                       | United States dollar  |
| <b>US\$/oz</b>                    | United States dollar per ounce  |
| <b>WAPL</b>                       | Western Areas Prospecting Limited   |
| <b>WRD</b>                        | Waste rock dumps  |
| <b>WSF</b>                        | waste storage facility  |
| <b>YOY</b>                        | year-on-year  |
| <b>ZAR</b>                        | South African rand  |
| <b>~</b>                          | circa, about or approximately   |

## GLOSSARY OF TERMS

|                                   | Definition   |
|-----------------------------------|--|
| <b>Auger drill</b>                | An auger drilled hole uses a rotating screw blade acting as a screw conveyor to remove the drilled material out of the hole.   |
| <b>Block Width</b>                | The average width at which it is estimated a block of ore will be mined.   |
| <b>Clastic</b>                    | Pertaining to a rock or sediment composed principally of broken fragments that are derived from pre-existing rocks or minerals by the processes of weathering and erosion, and have been transported some distance from their place of origin.   |
| <b>Cut-off grade</b>              | The lowest grade of mineralised rock which determines as to whether it is economic to recover its gold content by further concentration.   |
| <b>Diamond Drill</b>              | Diamond drilling uses a diamond encrusted drill bit to drill through the rock and recovers a solid core, for examination on the surface.   |
| <b>Dilution</b>                   | Low or zero grade (waste) material that is mined during the course of mining operations and thereby forms part of the Mineral Reserve.   |
| <b>Destress</b>                   | By mining a 2m slice through the package in an optimal position to ensure a de-stressed window of 50m to 60m above or below the associated stope.  |
| <b>Gold Equivalent Ounces</b>     | A quantity of metal (such as copper) converted to an amount of gold in ounces, based on accepted gold and other metal prices, i.e. the accepted total value of the metal based on its weight and value thereof divided by the accepted value of one troy ounce of gold.  |
| <b>Indicated Mineral Resource</b> | <p>An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.</p> <p>Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.</p>  |
| <b>Inferred Mineral Resource</b>  | <p>An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.</p> <p>An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve.</p>   |
| <b>Intracratonic basin</b>        | Refers to a basin on top of a craton, which is part of the earth's crust that has attained stability and has been little deformed for a prolonged period.  |
| <b>Kriging Efficiency (KE)</b>    | Provides a measure of the reliability of kriged block evaluations.   |
| <b>Lacustrine</b>                 | Produced by or formed within a lake or lake environment.   |
| <b>life-of-mine (LoM)</b>         | Number of years that an operation is planning to mine and treat Proved and Probable Reserves, based on the current mining plan. Year one of this plan is referred to as the Operational Plan.  |
| <b>Littoral</b>                   | Pertaining to the zone between the highest and lowest levels of spring tides known as the fore-beach.  |
| <b>Measured Mineral Resource</b>  | <p>A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.</p> <p>Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.</p> <p>A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Mineral Reserve or to a Probable Mineral Reserve.</p>   |
| <b>Mine Call Factor</b>           | The ratio expressed as a percentage which the specific product accounted for in "recovery plus residue" bears to the corresponding product "called for" by the mine's measuring and evaluation methods.  |
| <b>Mineral Reserve</b>            | <p>A Mineral Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource.</p> <p>It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.</p> <p>The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.</p> |
| <b>Net Smelter Return (NSR)</b>   | Is defined as the return from sales of concentrates expressed in US\$/tonne, i.e.: $NSR = (Au \text{ price} - Au \text{ selling costs}) \times Au \text{ grade} \times Au \text{ recovery} + (Cu \text{ price} - Cu \text{ selling price}) \times Cu \text{ grade} \times Cu \text{ recovery}$ .   |

|                                 |   |
|---------------------------------|---|
| <b>Mineral Resource</b>         | A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. |
| <b>Net Smelter Return (NSR)</b> | Is defined as the return from sales of concentrates expressed in US\$/tonne, i.e.: $NSR = (Au \text{ price} - Au \text{ selling costs}) \times Au \text{ grade} \times Au \text{ recovery} + (Cu \text{ price} - Cu \text{ selling price}) \times Cu \text{ grade} \times Cu \text{ recovery}$ .  |
| <b>Operational Plan</b>         | Year one of the LoM plan  |
| <b>Pay limit</b>                | The value at which it is estimated that ore can be mined at break-even.   |
| <b>Peneplain</b>                | A low, nearly featureless, gently undulating land surface of considerable area, which has been produced by the processes of long continued sub-aerial erosion.  |
| <b>Plant Recovery</b>           | The ratio, expressed as a percentage, of the mass of the specific mineral product actually recovered from ore treated at the plant to its total specific mineral content before treatment.  |
| <b>Probable Mineral Reserve</b> | A Probable Mineral Reserve is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource.<br><br>The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proved Mineral Reserve.  |
| <b>Proved Mineral Reserve</b>   | A Proved Mineral Reserve is the economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the Modifying Factors.   |
| <b>Regolith</b>                 | Is a layer of loose unconsolidated rock that lies above a layer of bedrock.   |
| <b>SK-1300</b>                  | The SEC updated disclosure rules to replace outgoing Industry Guide 7. This will be mandatory for the 31 December 2021 reporting  |
| <b>Strategic plan</b>           | The strategic plan (SP) for each asset is guided by the strategic planning framework that selects the preferred strategy for each asset based on alignment with the Group Strategic metrics (AIC/oz, NPV, FCF% margin, gold and life) and consideration for capital allocation, innovation and technology and opportunity and risk. The SP provides the framework for the subsequent Business and LoM planning phases undertaken annually.            |
| <b>tonnage discrepancy</b>      | Difference between the tonnage hoisted as ore and that accounted for by the plant measuring methods. Discrepancy is referred to as a shortfall when the calculated tonnage is less than the tonnage accounted for by the plant, or an excess when the opposite occurs.  |
| <b>Tonne(s)</b>                 | Metric ton (tonnes) = 1,000 kilograms.  |
| <b>Uraninite</b>                | A strongly radioactive, brownish-black mineral, $UO_2$ , forming the chief ore of uranium ( $U_3O_8$ ) and containing variable amounts of radium, lead, thorium and other elements as impurities.   |
| <b>Witwatersrand Basin</b>      | A sedimentary basin in South Africa that contains close to a 6,000m thick sequence of principally argillaceous and arenaceous sediments with inter-bedded conglomerates   |

## FORWARD LOOKING STATEMENTS

This Mineral Resources and Mineral Reserves Supplement to the Gold Fields Integrated Annual Report contains forward-looking statements within the meaning of section 27A of the U.S. Securities Act of 1933 (the Securities Act) and section 21E of the U.S. Securities Exchange Act of 1934 (the Exchange Act) with respect to Gold Fields' financial condition, results of operations, business strategies, operating efficiencies, competitive position, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters. Such forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believes", "estimates", "plans", "anticipates", "aims", "continues", "expects", "hopes", "may", "will", "would" or "could" or, in each case, their negative or other various or comparable terminology.

These forward-looking statements, including, among others, those relating to the future business prospects, revenues and income of Gold Fields, wherever they may occur in this IAR, are necessarily estimates reflecting the best judgement of the senior management of Gold Fields and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. As a consequence, these forward-looking statements should be considered in light of various important factors, including those set forth in this IAR. Gold Fields undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this report or to reflect the occurrence of unanticipated events.

Refer to the full forward-looking statements on [www.goldfields.com](http://www.goldfields.com).



**GOLD FIELDS**

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