

## MORILA RESOURCE INCREASED BY OVER ONE MILLION OUNCES

- **Morila Deposit's Mineral Resources increased by over a million ounces to 3.3 million ounces**
  - **1.5 million ounces (+136%) added to the higher confidence Measured and Indicated categories for an updated Measured and Indicated Resource of 2.5 million ounces**
  - **Increased confidence provides a robust basis for medium term and long term mine planning and evaluation of the Morila operations**
- **Resource update based on Firefinch's intensive 2022 drilling, with new results including**
  - **4.2 metres at 10.60 g/t gold incl. 2 metres at 20.8g/t gold**
  - **22.1 metres at 3.21g/t gold incl. 1.9 metres at 17.5g/t gold**
  - **12.7 metres at 3.36g/t gold incl. 0.9 metres at 24.5g/t gold**
- **Morila Gold Project's total Mineral Resources now in excess of 3.5 million ounces**
- **Completion of the updated Mineral Resource enables detailed mine planning to be finalised, which will enable completion of an updated business plan for Morila**

Firefinch Limited (ASX: FFX) (**Firefinch** or **the Company**) is pleased to present an update to the Mineral Resource for the Morila Gold Project (**Project**).

The Mineral Resource for the Morila Gold Deposit now stands at **66.7 million tonnes at 1.55g/t for 3.33 million ounces of gold** as detailed in Table 1.

The resource is divided into a potential open pit resource (which is defined by a pit shell derived using current parameters) and a resource potentially mineable by underground methods.

**Table 1: Mineral Resources for the Morila Gold Deposit**

Deposit	Measured & Indicated <sup>3</sup>			Inferred			Total		
	Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)
Open Pit <sup>1</sup>	54.99	1.46	2,575	3.79	0.99	121	<b>58.78</b>	<b>1.43</b>	<b>2,696</b>
Underground <sup>2</sup>				7.88	2.51	636	<b>7.88</b>	<b>2.51</b>	<b>636</b>
<b>Total Morila</b>	<b>54.99</b>	<b>1.46</b>	<b>2,575</b>	<b>11.67</b>	<b>2.02</b>	<b>756</b>	<b>66.65</b>	<b>1.55</b>	<b>3,331</b>

<sup>1</sup> The Open Pit resource is quoted using a 0.4g/t gold cut-off grade, refer to body text and Appendix 4 for details.

<sup>2</sup> The Underground resources are quoted using a 1.8g/t gold cut-off grade, refer to body text and Appendix 4 for details.

<sup>3</sup> See Appendix 1 for breakdown of Measured and Indicated resources.

As a result of this update, the Global Mineral Resources for the Project (comprising Morila and the satellite deposits) now stands at **73.5 million tonnes at 1.52g/t for 3.58 million ounces of gold** which is further detailed in Table 2.

**Table 2: Mineral Resources for the Morila Gold Project**

Deposit	Measured & Indicated <sup>6</sup>			Inferred			Total		
	Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)
<b>Morila Pit</b> <sup>1,4</sup>	54.99	1.46	2,575	3.79	0.99	121	<b>58.78</b>	<b>1.43</b>	<b>2,696</b>
<b>Morila UG</b> <sup>2</sup>				7.88	2.51	636	<b>7.88</b>	<b>2.51</b>	<b>636</b>
<b>N'Tiola</b> <sup>3,4</sup>	2.51	1.03	83	0.35	1.03	12	<b>2.90</b>	<b>1.03</b>	<b>95</b>
<b>Viper</b> <sup>3,4</sup>	1.86	1.16	72	0.69	1.12	25	<b>2.55</b>	<b>1.19</b>	<b>97</b>
<b>Domba</b> <sup>5</sup>	0.20	1.75	11	0.25	1.61	13	<b>0.46</b>	<b>1.67</b>	<b>25</b>
<b>Beledjo</b> <sup>3</sup>	0.65	1.04	22	0.28	0.94	8	<b>0.93</b>	<b>1.01</b>	<b>30</b>
<b>Total</b>	<b>60.21</b>	<b>1.43</b>	<b>2,763</b>	<b>13.24</b>	<b>1.91</b>	<b>815</b>	<b>73.45</b>	<b>1.52</b>	<b>3,579</b>

<sup>1</sup> Refer footnote 1 in Table 1.

<sup>2</sup> Refer footnote 2 in Table 1. UG = Underground.

<sup>3</sup> The N'Tiola, Viper and Beledjo resources are quoted above cut-off grades between 0.35 – 0.5g/t based on forecast costs of mining and processing, refer ASX Announcements 3<sup>rd</sup> May 2021 and 25<sup>th</sup> March 2022.

<sup>4</sup> The Morila Pit, Viper and N'Tiola resources have been depleted for mining as at 30 June 2022.

<sup>5</sup> The Domba resource is quoted using a 0.5g/t gold cut-off grade, refer ASX Announcement 24<sup>th</sup> November 2020.

<sup>6</sup> See Appendix 1 for breakdown of Measured and Indicated resources.

All material mined at the active deposits (Morila, Viper, N'Tiola) up until 30 June 2022 has been surveyed and removed from the Mineral Resource for these deposits.

The Morila Open Pit resource represents the Mineral Resource reported within a conceptual pit shell generated by pit optimisation using costs derived from long term operational costs at Morila and a gold price of US\$1800/oz as required to satisfy the Reasonable Prospects for Eventual Economic Extraction (RPEEE) criteria under the JORC Code (**RPEEE shell**).

The Morila Underground resource is the Mineral Resource below the RPEEE shell reported above a cut off of 1.8g/t gold (derived from a database of global underground mining operations utilising mining methods suited to the Morila mineralisation). The Morila Underground resource includes the material previously reported as the Samacline and Morila North East Mineral Resource<sup>1</sup> and also includes mineralisation delineated by drilling at Morila East and Morila MidWest (Figure 1).

The Company intends to complete a study into underground mining at Morila which will confirm the economics of an underground operation and determine the cut-off grades which should be used for the underground resource. Accordingly, the Underground resource is currently classed as Inferred until that study has been completed.

Cross sections and plans illustrating the Morila Gold Deposit Mineral Resource presented in Appendix 2.

<sup>1</sup> Refer ASX Announcement 8<sup>th</sup> February 2021.

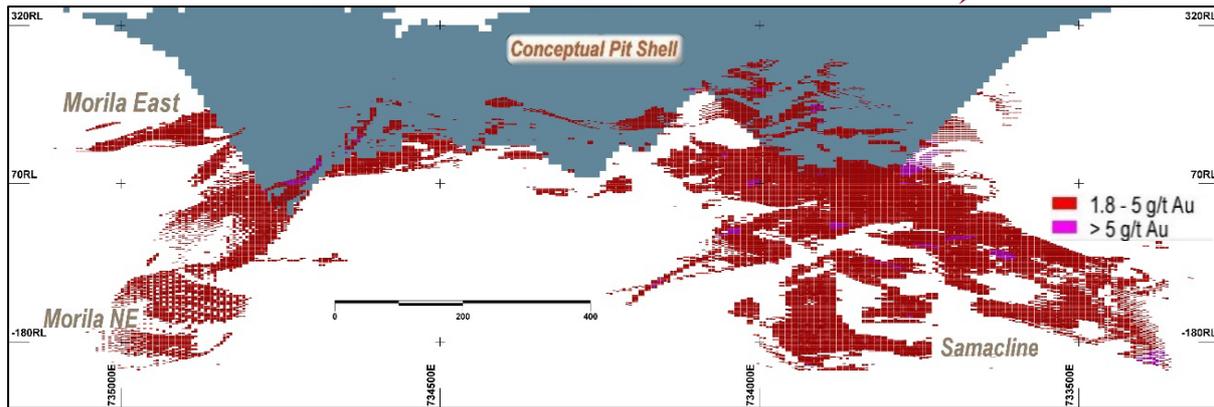


Figure 1: View looking south showing Morila Underground resource and RPEEE pit shell.

### Comparison to Previous Resource

The Mineral Resource for the Morila Deposit has been revised using almost 40,000 metres of drilling completed by Firefinch since the previous Mineral Resource was released in February 2021<sup>2</sup>.

Drilling results included in the Mineral Resource are either detailed below or have been previously released (refer ASX Announcements 18 August 2021, 22 October 2021, 21 December 2021 and 22 February 2022). Drilling and sampling methodologies used are detailed below and in Appendix 2.

Tables 2 and 3 compare the updated Mineral Resources to the previous resources announced on 8<sup>th</sup> February 2021. There has been an 52% increase in the total contained ounces for the Morila Deposit and an increase of 136% in ounces within the higher confidence Measured and Indicated categories.

Table 3. Comparison of Mineral Resources for the Morila Gold Deposit

Deposit	Current Model	Previous Model	Difference	Difference
	Contained Ounces ('000)	Contained Ounces ('000)	Contained Ounces ('000)	(%)
Open Pit <sup>1</sup>	2,696	1,858	838	+ 45%
Underground <sup>2</sup>	636	329	307	+ 93%
<b>Total</b>	<b>3,331</b>	<b>2,187</b>	<b>1,144</b>	<b>+ 52%</b>

<sup>1</sup> The Open Pit resource is quoted using a 0.4g/t gold cut-off grade, refer to body text and Appendix 4 for further details.

<sup>2</sup> The Underground resources are quoted using a 1.8g/t gold cut-off grade, refer to body text and Appendix 4 for further details.

Table 4. Comparison of Measured & Indicated Resources for the Morila Gold Deposit <sup>1</sup>

Deposit	Current Model	Previous Model	Difference	Difference
	Contained Ounces ('000)	Contained Ounces ('000)	Contained Ounces ('000)	(%)
Open Pit <sup>2</sup>	2,575	1,091	1,484	+ 136%
Underground <sup>3</sup>	0	0	0	
<b>Total</b>	<b>2,575</b>	<b>1,091</b>	<b>1,484</b>	<b>+ 136%</b>

<sup>1</sup> See Appendix 1 for breakdown of Measured and Indicated resources.

<sup>2</sup> The Open Pit resource is quoted using a 0.4g/t gold cut-off grade, refer to body text and Appendix 4 for further details.

<sup>2</sup> Refer ASX Announcement 8<sup>th</sup> February 2021.

<sup>3</sup> The Underground resources are quoted using a 1.8g/t gold cut-off grade, refer to body text and Appendix 4 for further details.

## Drilling Update

The Morila Mineral Resource includes recent drilling results from its drilling at the Morila Super Pit, namely results from the MidWest and Morila East zones of the deposit. Drilling operations have ceased at Morila however samples from the drilling programme are still being processed and assayed.

### MidWest Zone Results

Recent results from the MidWest zone are from drilling which tested the extents of mineralisation intersected in MRD0018, namely 15.0 metres at 7.61g/t gold (including 9.0 metres at 11.1g/t gold) and 2.8 metres at 23.7g/t gold from 236.4 metres (including 0.8 metres at 82.0g/t gold)<sup>3</sup>.

Drilling has now delineated mineralisation over a strike length of approximately 500 metres. All results are detailed in Appendix 3 and shown on Figure 2 below and A1 (see Appendix 2) with best results including:

- 4.2 metres at 10.60 g/t gold from 294.6 metres incl. 2 metres at 20.8g/t gold (MRD0062)
- 22.1 metres at 3.21g/t gold incl. 1.9 metres at 17.5g/t gold (MRD0064)
- 8.7 metres at 3.76 g/t gold from 241.6m incl. 2.8 metres at 10.1g/t gold (MRD0062)
- 4.4 metres at 8.15g/t gold incl. 1.0 metre at 33.3g/t gold (MRD0032)
- 6.5 metres at 3.32g/t gold from 292.2 metres (MRD0060)
- 6.0 metres at 2.67g/t gold from 207 metres and 6.0 metres at 2.32g/t gold from 237 metres (MRD0031)
- 40.6 metres at 1.02g/t gold from 262.2 metres (MRD0061)

These results are in addition to historical drill results of 7 metres at 8.95g/t gold (SAN268) and 23 metres at 2.48g/t gold (SAN263) in this area<sup>4</sup>.

Mineralisation in this “MidWest” area is interpreted to be a new, unmined lode separated from the main Morila mineralisation by some 250 metres. Mineralisation strikes NNW – SSE, the same orientation as other major mineralised structures. As shown on Figure 2 approximately 500 metres of mineralisation strike has been identified by Firefinch’s drilling.

The MidWest lode may be a continuation of, or related to, the Samacline zone. Historical drilling at Samacline returned high grade results including 5 metres at 31.5 g/t gold, 17 metres at 4.9 g/t gold and 35 metres at 3.0 g/t gold<sup>5</sup>. Future drilling will test extensions to mineralisation at Samacline and potential linkages between the Samacline zone and either / or both of the main Morila Deposit mineralisation and the MidWest zone.

<sup>3</sup> Refer ASX Announcement 22<sup>nd</sup> February 2022.

<sup>4</sup> Refer to ASX Announcement 31<sup>st</sup> August 2020.

<sup>5</sup> Refer to ASX Announcements 8<sup>th</sup> February 2021 and 31<sup>st</sup> March 2022, also Table 1.

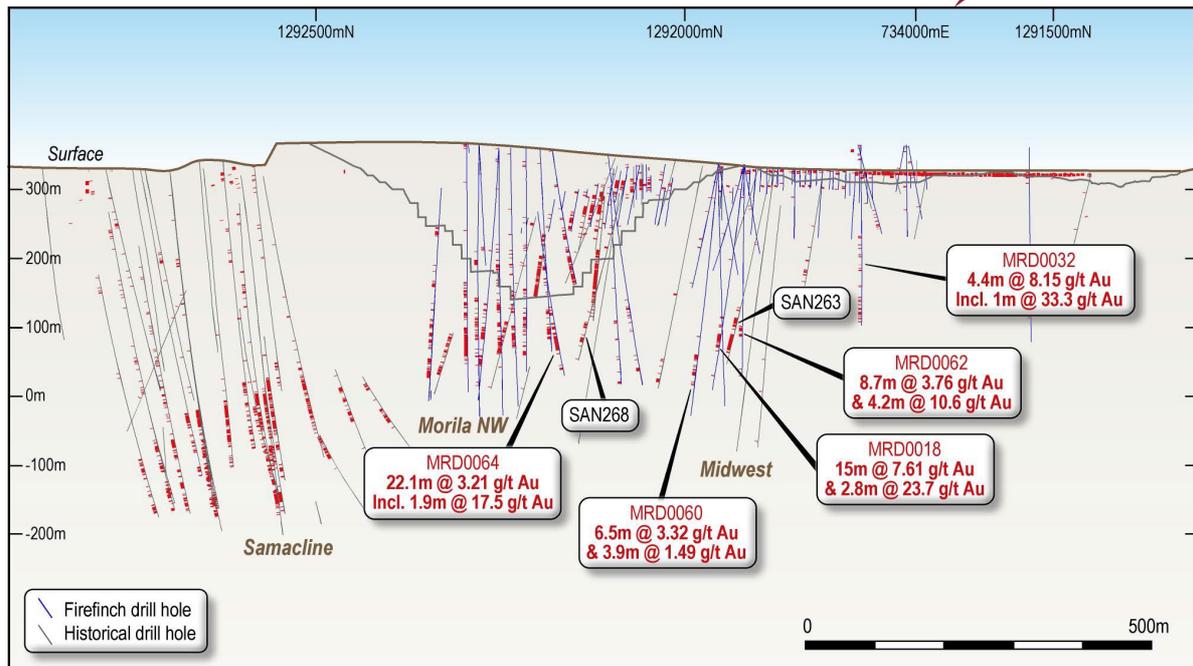


Figure 2: Long Section showing drilling results from Midwest zone.

### Morila East Zone Results

All recent results from drilling at Morila East are detailed in Appendix 3 and shown on Figure A1 (in Appendix 2) with best results including:

- 12.7 metres at 3.36g/t gold from 235.2 metres incl. 0.9 metres at 24.5g/t gold (MRD0044)
- 11 metres at 2.88g/t gold from 211 metres incl. 2 metres at 10.4g/t gold (MORC014)
- 9.2 metres at 2.77g/t gold from 165.0 metres incl. 4.4 metres at 4.23g/t gold (MRD0043)
- 6.2 metres at 2.47g/t gold from 186.0 metres and 1.1 metres at 31.0g/t gold from 386.8 metres (MRD0042)
- 4 metres at 2.36g/t gold from 6 metres (MORC014)
- 3 metres at 3.16g/t gold from 151 metres incl. 1 metre at 7.11g/t gold (MORC016)
- 8 metres at 1.55g/t gold from 195 metres (MORC019)

A number of shallow lodes were intersected in Firefinch's drilling in the Morila East area<sup>6</sup>, which were not previously defined in historical drilling. RC drilling was used to infill these intersections in combination with the follow up diamond core holes so that this mineralisation is adequately defined for mine planning purposes. Results are reported above and in Appendix 2.

<sup>6</sup> Refer to ASX Announcement 21<sup>st</sup> December 2021.

## Summary of Resource Estimation Parameters

As per ASX Listing Rule 5.8 and the 2012 JORC Code, a summary of the material information used to estimate the Mineral Resource is detailed below. Further details can be found in Appendix 2.

Geology & Geological Interpretation: The Morila Gold Deposit has been previously classified as an intrusion related vein hosted gold deposit. It is hosted within a sequence of meta-greywacke and metavolcaniclastic rocks that show a complexly folded sequence that includes a series of upright to overturned folds dissected by steep brittle faults.

Gold mineralisation is associated with variably deformed polymineralic veins, commonly with coarse arsenopyrite and occurs as free gold. Data analysis showed that there appeared to be a natural cut-off between background and anomalous mineralisation of 0.2 g/t gold. Using this natural cut-off, discrete intervals were delineated to produce geologically coherent vein models of each mineralised domain, excluding non-mineralised lithologies such as greywacke. Using this approach, the average mineralisation thickness within each domain was reasonably consistent in the exploration and advanced grade control drilling areas.

Drilling, Sampling and Sub-sampling Techniques: Mineralisation at the Morila Gold Deposit has been defined by both Reverse Circulation and diamond drilling. The deposit was initially drilled out on a 70m x 35m spacing utilising diamond core drilling, with later infill to 30m x 30m in most areas. Subsequent Reverse Circulation (RC) drilling was completed at a 20m x 20m and 10m x 10m spacing. At the time of the Mineral Resource estimate, Firefinch has completed 237 holes for 38,891 metres as shown in Figure A1 (refer Appendix 2), primarily sited around the edge of the historic pit testing extensions to the mineralisation mined in the pit. Drilling results have been released to the ASX on 18 August 2021, 22 October 2021, 21 December 2021, 22 February 2022 and in this release. All available drilling data as at 30 June 2022 was used in the resource estimates.

Sample Analysis: All samples used in the resource estimates were analysed at accredited commercial laboratories. Standard sample preparation techniques were used with a 50g sub-sample fire assayed and the bead analysed by AAS. Quality control protocols for all drilling included the use of certified reference materials, blanks and duplicates.

Estimation Methodology: Block grades were estimated using Ordinary Kriging with interpolation of 1.0 metre composite data constrained within the mineralised lode interpretations. Search ellipses were based upon grade continuity models guided by variograms generated for the mineralised composites. The estimation block model size was 10m X by 10m Y by 2.5m Z, based on the selective mining units in use during mining operations at Morila. Top cutting was required to reduce the influence of outlier values, guided by log probability plots and the coefficient of variation generated for the mineralised composites within individual lodes.

Mining & Metallurgical Methods and Other Factors: The Morila Mineral Resources are based on open pit and underground mining with all mineralised material being processed through the Morila processing plant which has been in continuous operation since 2000. It is assumed that mining rates, processing rates, recoveries and other mining and metallurgical parameters for the open pit will be similar to historical and current performance. To ensure reasonable prospects for eventual economic extraction all resources have been constrained using pit optimisation shells developed at a range of gold prices as forecast over the next 12 - 24 months along with best estimates for mining, processing and administration costs over the same period. Deposits which are being actively mined (Morila, Viper and N'tiola) were depleted for mining using pit surveys completed by the Morila survey department as at 30 June 2022. The underground mining method is anticipated to be room and pillar or another relatively larger scale method given the nature of the mineralisation.

Classification & Cut-off Grade: The Morila Mineral Resources have been classified as Measured, Indicated and Inferred. It is anticipated that the Indicated and Inferred resources could achieve a higher level of classification with infill drilling and verification of the extent of historical mining. The lower cut-off grade used was based on current costs at Morila along with the current and forecast gold price and varies for each deposit due to their differing distance from the plant. The cut off grades are between 0.4g/t gold above the RPEEE shell and 1.8g/t gold below for the RPEEE shell (potentially mineable by underground methods). The Company intends to complete a study into the viability of underground mining at Morila including a stope optimisation study. This study will detail the economics of an underground operation and consequently will determine the cut-off grades which should be used to report an underground resource.

This announcement has been approved for release to the ASX by the Board.

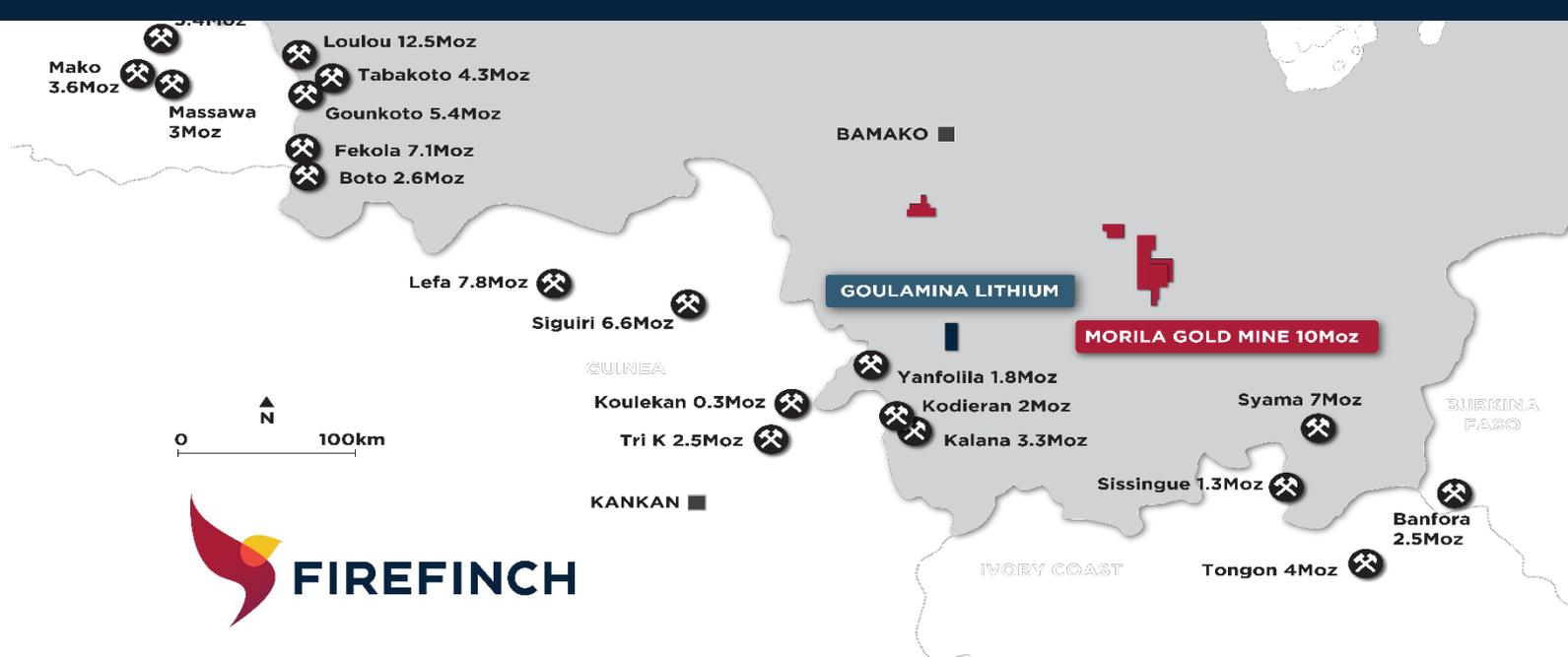
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### Forward Looking Statements

This announcement contains certain forward-looking statements with respect to Firefinch's financial condition, results of operations, and other matters that are subject to various risks and uncertainties. Actual results, performance or achievements could be significantly different from those expressed or implied by those forward-looking statements. Such forward looking statement are no guarantees of future performance and involve known and unknown risks, uncertainties, and other factors beyond the control of Firefinch that may cause actual results to differ materially from those expressed in the forward-looking statements in this announcement.



Firefinch (ASX: FFX) is a gold miner focussed on the Morila Gold Mine in Mali. Morila is one of the world’s great open pit gold mines, having produced over 7.5 million ounces of gold since 2000 at grades that were among the highest in the world, earning it the moniker “Morila the Gorilla”. With a 17.61% retained stake in Leo Lithium, Firefinch also has exposure to lithium.

Firefinch acquired the Morila Gold Project in late 2020 and set about reviving the great mine which was slated for closure by its previous owners, mining majors Barrick and AngloGold. Firefinch has invested heavily to return Morila to full production.

Morila’s current Global Resource for the Project is 3.58 million ounces of gold (Measured: 10.7 million tonnes at 1.65g/t gold for 0.6 million ounces of gold, Indicated: 49.5 million tonnes at 1.38g/t gold for 2.2 million ounces of gold and Inferred: 13.2 million tonnes at 1.91g/t gold for 0.8 million ounces of gold). However, the limits of the Morila Deposit have not been defined or closed off. Firefinch aims to materially expand resource and reserves through drilling and exploration.

Firefinch is a responsible miner and we endeavour to make a difference to our local communities on multiple levels; by providing a safe and rewarding workplace, following best environmental practices and contributing economic benefits regionally by employing and buying locally.

The Company confirms that it is not aware of any new information or data that materially affects the Mineral Resources at the Morila Gold Project. The Company also confirms that all material assumptions and parameters underpinning the Mineral Resource estimates continue to apply and have not materially changed. Please refer to ASX Announcements of 8th February 2021, 31st March 2022 and this announcement (Morila Resource, 24th November 2020, 3rd May 2021, 10th August 2021 and 25th March 2022 (N’Tiola, Viper, Domba, Beledjo, Morila Pit 5)).

**APPENDIX 1: MINERAL RESOURCES FOR THE MORILA GOLD PROJECT**

Deposit	Measured			Indicated			Inferred			Total		
	Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)
Morila Pit <sup>1</sup>	10.7	1.65	566	44.3	1.41	2,009	3.79	0.99	121	<b>58.8</b>	<b>1.43</b>	<b>2,696</b>
Morila UG <sup>2</sup>							7.88	2.51	636	<b>7.88</b>	<b>2.51</b>	<b>636</b>
N'Tiola <sup>4</sup>				2.51	1.03	83	0.35	1.03	12	<b>2.90</b>	<b>1.03</b>	<b>95</b>
Viper <sup>4</sup>				1.86	1.21	72	0.69	1.12	25	<b>2.55</b>	<b>1.19</b>	<b>97</b>
Domba <sup>5</sup>				0.20	1.75	11	0.25	1.61	13	<b>0.46</b>	<b>1.67</b>	<b>25</b>
Beledjo <sup>4</sup>				0.65	1.04	22	0.28	0.94	8	<b>0.93</b>	<b>1.01</b>	<b>30</b>
<b>Total</b>	<b>10.7</b>	<b>1.65</b>	<b>566</b>	<b>49.53</b>	<b>1.38</b>	<b>2,198</b>	<b>13.24</b>	<b>1.91</b>	<b>814</b>	<b>73.44</b>	<b>1.52</b>	<b>3,579</b>

<sup>1</sup> The Morila Open Pit resource is quoted using a 0.4g/t gold cut-off grade.

<sup>2</sup> The Morila Underground resource is quoted using a 1.8g/t gold cut-off grade.

<sup>3</sup> The Tailings resource is quoted using a 0.3g/t gold cut-off grade.

<sup>4</sup> The N'Tiola, Viper, Pit 5 and Beledjo resources are quoted above cut-off grades based on forecast costs (0.35 – 0.48g/t).

<sup>5</sup> The Domba resource is quoted using a 0.5g/t gold cut-off grade.

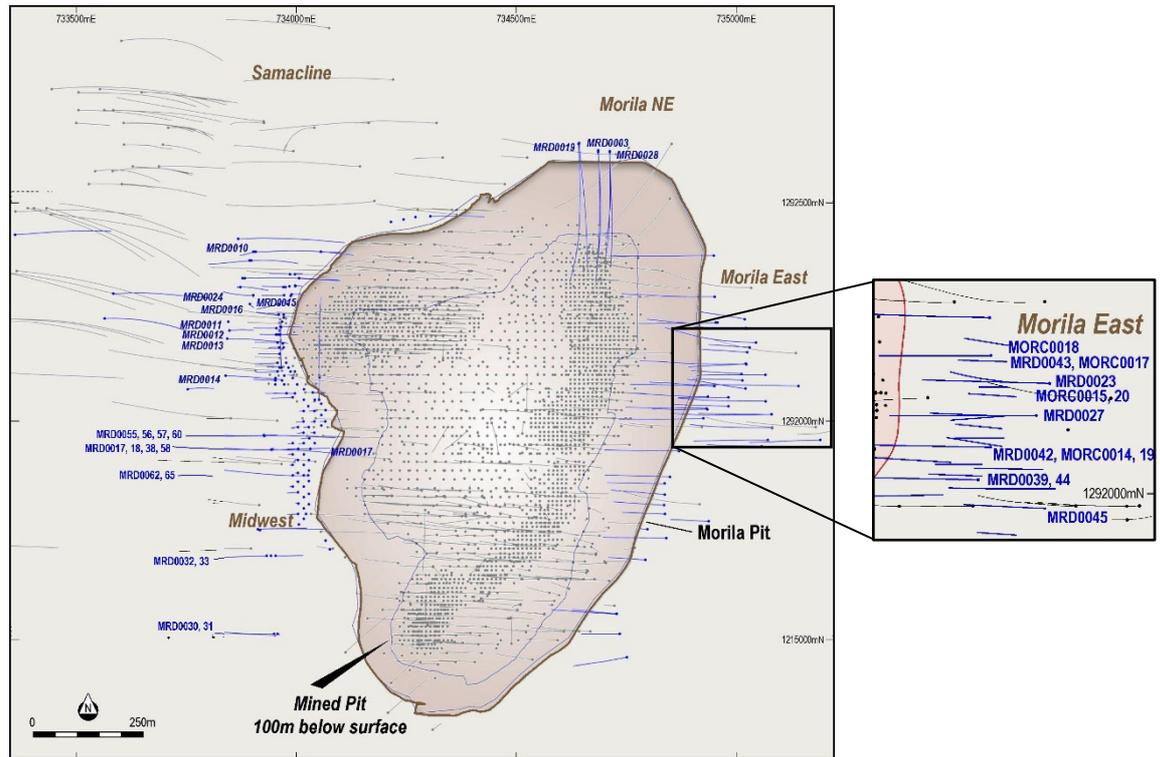
<sup>6</sup> Numbers in the above table may not appear to sum correctly due to rounding.

**Competent Persons Declaration**

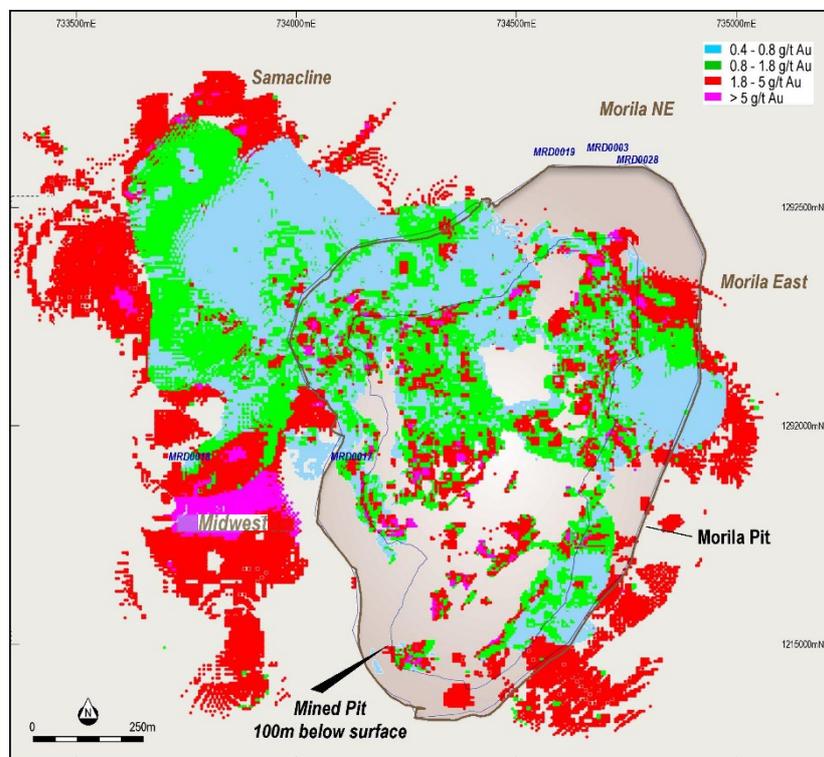
The information in this announcement that relates to Exploration Results is based on information compiled under the supervision of Mr Bill Oliver. Mr Oliver is an employee of Firefinch Limited and a member of the Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy. Mr Oliver has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('the JORC Code')". Mr Oliver consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Mineral Resources is based on information compiled by Mr Kerry Griffin. Mr Griffin is an employee of Firefinch Limited and a member of the Australian Institute of Geoscientists. Mr Griffin has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr Griffin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

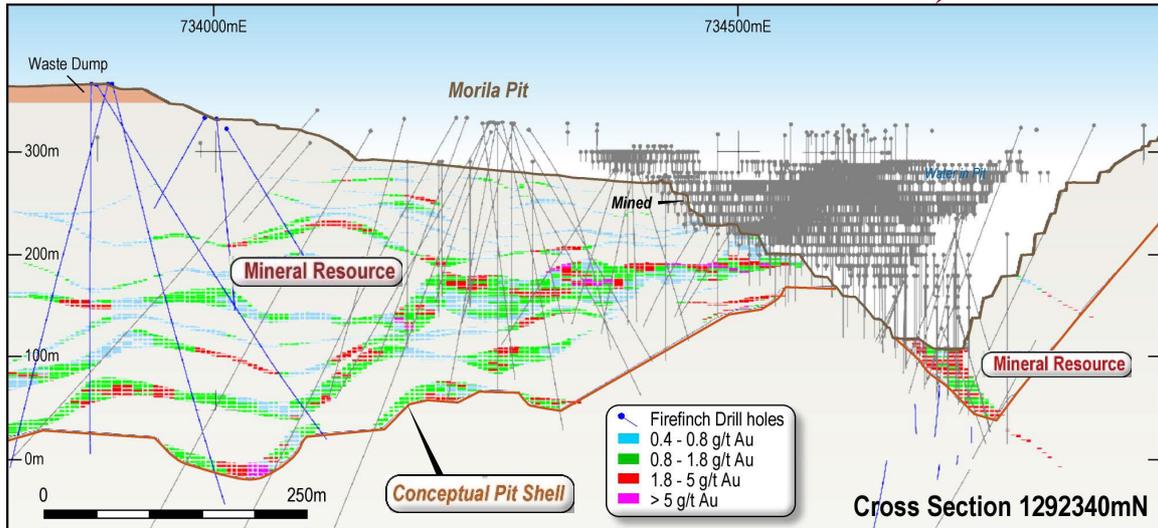
**APPENDIX 2: FIGURES ILLUSTRATING THE MORILA MINERAL RESOURCE**



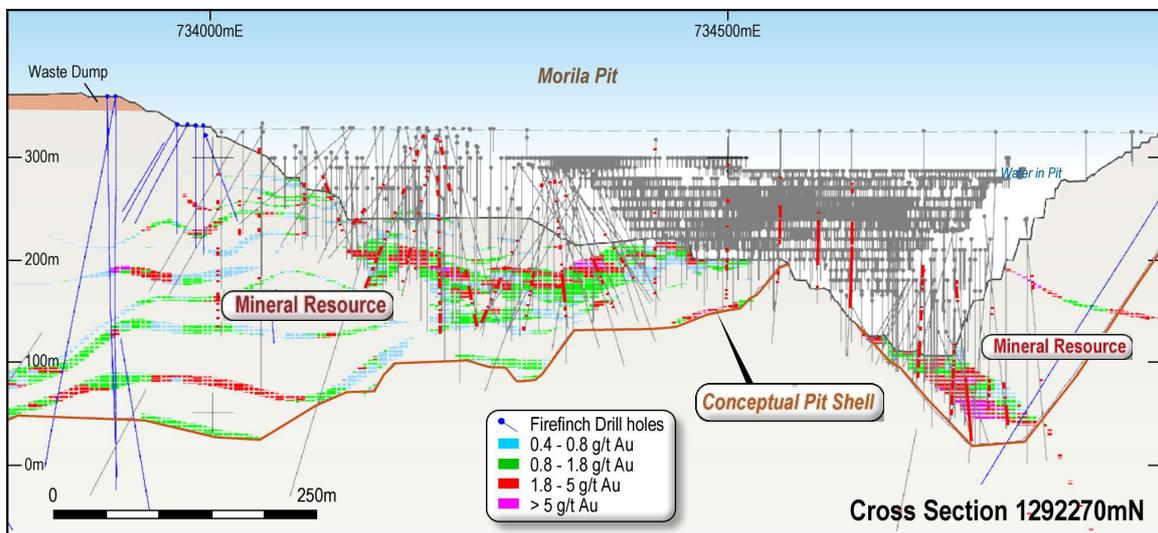
**Figure A1:** Plan of Firefinch & historical drilling at the Morila Gold Deposit with historical pit crest.



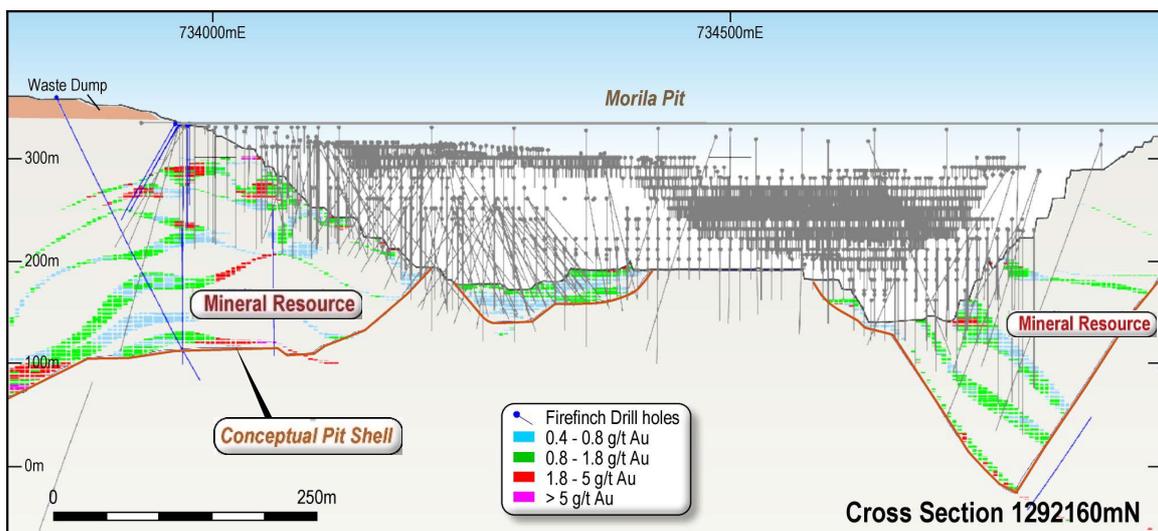
**Figure A2:** Morila Deposit Mineral Resource in plan view, with historical pit crest.



**Figure A3:** Section 1292340N showing Mineral Resource, Firefinch & historical drilling and RPEE shell.



**Figure A4:** Section 1292270N showing Mineral Resource, Firefinch & historical drilling and RPEE shell.



**Figure A5:** Section 1292160N showing Mineral Resource, Firefinch & historical drilling and RPEE shell.

**APPENDIX 3: SIGNIFICANT INTERSECTIONS FROM MORILA DRILLING**

Hole ID	Type	Easting	Northing	RL	Dip	Azimuth	Depth	From	To	Interval	Au (g/t)	
MRD0023	DD	735053	1292175	333	-60	270	420.1			NSI		
MRD0027	DD	735032	1292125	333	-60	270	450.1	192.9		14.8	1.03	
							<i>incl.</i>	192.9		3.9	2.74	
MRD0030	DD	733960	1291503	360	-90	0	280.7	35.5	42.4	6.9	0.39	
MRD0031	DD	733953	1291503	361	-65	270	318.1	207.0	213.0	6.0	2.67	
								237.0	243.0	6.0	2.32	
MRD0032	DD	733920	1291743	364	-90	0	260.6	177.3	181.7	4.4	8.15	
							<i>incl.</i>	177.3	178.3	1.0	33.3	
								234.9	237.5	2.6	6.74	
MRD0033	DD	733915	1291745	363	-50	90	170.1	55.3	59.8	4.5	0.45	
								149.9	153.7	3.8	0.69	
MRD0034	DD	733945	1291683	364	-90	0	132.6	39.4	41.6	2.2	0.70	
MRD0035	DD	733935	1291683	362	-60	270	237.0	47.0	48.0	1.0	1.18	
								166.0	167.1	1.1	2.73	
MRD0036	DD	733956	1291684	362	-60	90	123.0	44.1	47.1	3.0	0.71	
MRD0039	DD	734943	1292050	327	-57	270	351.3	281.4	284.1	2.7	1.31	
								301.0	312.7	11.7	1.76	
							<i>incl.</i>	301.0	305.4	4.4	3.92	
MRD0042	DD	734958	1292075	327	-70	270		165.0	174.2	9.2	2.77	
								186.0	192.2	6.2	2.47	
								386.8	387.9	1.1	31.0	
MRD0043	DD	734965	1292220	325	-70	270	501.0	165.0	174.2	9.2	2.77	
							<i>incl.</i>			4.4	4.23	
								387.2	403.3	16.1	1.19	
MRD0044	DD	734942	1292021	328	-70	270	351.4	235.2	247.9	12.7	3.36	
							<i>incl.</i>			0.9	24.5	
								294.5	309.5	15.0	0.99	
MRD0045	DD	735089	1292009	330			383.6	231.8	233.6	1.8	3.22	
MRD0055	DD	733784	1292117	338	-55	270	391.3	345.0	346.2	1.2	11.3	
MRD0056	DD	733784	1292117	338	-63	090	342.2	290.9	291.9	1.0	0.93	
MRD0060	DD	733784	1292117	338	-72	270	384.6	53.0	54.0	1.0	1.35	
								342.2	292.2	298.7	6.5	3.32
							<i>incl.</i>	295.0	298.7	3.7	4.82	
								314.6	322.5	7.9	0.93	
							<i>incl.</i>	318.6	322.5	3.9	1.49	
MRD0061	DD	733885	1292025	327	-55	270	384.0	229.8	234.8	5.0	1.08	
								262.2	302.8	40.6	1.02	
MRD0062	DD	733543	1292025	363	-70	090	393.3	241.6	250.3	8.7	3.76	
							<i>incl.</i>	244.5	247.3	2.8	10.1	
								294.6	298.8	4.2	10.6	
							<i>incl.</i>	294.6	296.6	2.0	20.8	

Hole ID	Type	Easting	Northing	RL	Dip	Azimuth	Depth	From	To	Interval	Au (g/t)	
<b>MRD0063</b>	DD	733609	1292224	365	-80	090	351.5	210.1	211.0	0.9	1.25	
								257.6	261.9	4.3	2.14	
								<i>Incl</i>	258.7	259.7	1.0	7.55
									347.5	350.4	3.7	1.60
<b>MRD0064</b>	DD	733553	1292325	364	-70	090	355.8	257.9	261.6	3.7	2.66	
								288.8	290.8	2.0	3.47	
									293.8	315.9	22.1	3.21
								<i>incl</i>	306.8	308.7	1.9	17.5
<b>MORC014</b>	RC	735029	1292068	332	-52	270	222	6	10	4	2.36	
								113	135	22	0.61	
								211	222	11	2.88	
								<i>incl</i>		2	10.4	
<b>MORC015</b>		735039	1292164	337	-55	270	182			NSI		
<b>MORC016</b>	RC	735030	1292126	329	-54	270	227	151	154	3	3.16	
								<i>incl</i>		1	7.11	
									165	187	22	0.48
<b>MORC017</b>		735030	1292208	325	-53	270	204			NSI		
<b>MORC018</b>		735027	1292229	327	-56	270	204			NSI		
<b>MORC019</b>	RC	735022	1292088	325	-55	270	222	31	40	9	0.91	
									115	122	7	0.96
									195	203	8	1.55
<b>MORC020</b>	RC	735033	1292152	325	-57	270	222	138	139	1	5.15	
									175	178	3	0.94

*Notes:*

- intersections shown are all intersections > 1m in length (downhole) at > 2g/t Au
- results in this release were derived using the fire assay technique. Analysis by the more accurate screen fire assay technique is in progress for higher grade samples.
- for further information as prescribed by the JORC Code refer to Appendix 4.

**APPENDIX 4: JORC CODE, 2012 EDITION – TABLE 1**  
**EXPLORATION RESULTS & MINERAL RESOURCES, MORILA GOLD PROJECT, MALI**

**Section 1 Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were collected using diamond core (DD) drilling and reverse circulation (RC) drilling.</li> <li>For DD drilling half core samples were collected an approximately 1 metre intervals with the entire sample crushed and pulverised at an external laboratory prior to sub sampling for assay. The core size for the mineralised intervals was NQ2 (50.6mm diameter).</li> <li>For RC drilling samples were on one metre intervals using a ~140mm bit. The entire sample is collected from the cyclone on the rig in plastic bags and then split by hand using a riffle splitter to collect a sample for analysis of between 2 and 3 kg in a prenumbered cotton sample bag.</li> <li>At the laboratory the entire sample is pulverized and a 30g charge is collected for fire assay/AAS analysis.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling has been completed using conventional wireline diamond drilling techniques.</li> <li>HQ drilling (63.5mm diameter) was undertaken in the weathered profile.</li> <li>Once competent rock was encountered NQ2 (50.6mm) diameter drilling was used to continue the holes.</li> <li>RC drilling used a face sampling bit with a nominal 5.5" hole diameter.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Core recoveries were measured run by run and average 99.7% over the hole, with recoveries of 100% in the interval reported.</li> <li>Standard techniques are used to ensure all core is recovered from drilling.</li> <li>RC recoveries for the primary sample were observed and estimated qualitatively, with the sub samples weighed as a quantitative measure.</li> <li>The entire RC sample was collected from the cyclone and subsequently split by hand in a riffle splitter to maximise representivity.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>No relationship exists between sample recovery and grade in the results reported.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Drill core and RC chips have been geologically logged in their entirety by geologists. The logs are sufficiently detailed to support Mineral Resource estimation. Logged criteria included lithology, alteration, alteration intensity, weathering, grainsize and sulphides.</li> <li>Geological logging is qualitative in nature although percentages of sulphides and veins are estimated along with structural measurements.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>For core drilling, core was split into halves using a diamond saw, unless soft, in which case a chisel was used. The core was sampled at approximately 1m intervals (taking care to observe contacts and other geological features) then placed in a cloth bag and submitted to an external laboratory.</li> <li>RC samples are either split using a cone or riffle splitter mounted on the rig or split by hand using a stand-alone riffle splitter. These techniques are appropriate for collecting statistically unbiased samples.</li> <li>Samples are weighed to ensure a sample weight of between 2 and 3 kg. Samples of between 2 and 3 kg are considered appropriate for determination of contained gold using the fire assay technique.</li> <li>All techniques were appropriate for collecting statistically unbiased samples.</li> <li>Certified reference standards, Blanks, and duplicates are inserted into the sample stream as the samples are collected at a rate of 10%.</li> <li>Field duplicates are inserted every 20 samples.</li> <li>Blanks (derived from unmineralized river sand) and Certified reference material standards (CRMs) are inserted alternately every 20 samples.</li> <li>Both duplicates (two aliquots of 50g from the same 200g sub sample) and replicates (two samples from the same raw sample) were used to test the laboratory precision (repeatability) and the homogeneity of the sample respectively.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors</li> </ul>	<ul style="list-style-type: none"> <li>DD samples were analysed for gold at the laboratory at Morila. The laboratory is located on site but is operated by MSALABS, an independent third party.</li> <li>Sample preparation comprised of the following: <ul style="list-style-type: none"> <li>drying all samples and crushing (for core samples).</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>applied and their derivation, etc.</i></p> <ul style="list-style-type: none"> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>○ Pulverise entire sample to 95% passing 75 microns (all samples).</li> <li>○ A 30g sub sample analysed by fire assay with AAS finish.</li> <li>• QA/QC programme comprises Certified Reference Materials, replicates, duplicates, and blanks.</li> <li>• Laboratory checks include <ul style="list-style-type: none"> <li>○ Every 50th sample is screened to confirm % passing 2mm and 75 microns.</li> <li>○ 1 reagent blank every 84 samples</li> <li>○ 1 preparation blank every 84 samples</li> <li>○ 2 weighed replicates every 84 samples</li> <li>○ 1 preparation duplicate (re split) every 84 samples</li> <li>○ 3 SRMs every 84 samples</li> <li>○ Certified reference standards, Blanks, and duplicates are inserted into the sample stream as the samples are collected at a rate of 10%.</li> </ul> </li> <li>• Field duplicates are inserted every 20 samples.</li> <li>• Blanks (derived from unmineralized river sand) and Certified reference standards (CRMs) are inserted alternately every 20 samples.</li> <li>• Replication (two samples from the same raw sample) and duplication (two aliquots from the same sub-sample) tests were also carried out by the laboratory.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Firefinch drill hole data was compiled and digitally captured by Company geologists at the drill rig. Drilling and sampling procedures have been developed to ensure consistent sampling practices are used by site personnel.</li> <li>• All drilling and exploration data are stored in the company database which is hosted by an independent geological database consultant. The compiled digital data is verified and validated by the consultant before loading into the database.</li> <li>• QAQC reports are generated regularly to allow ongoing reviews of sample quality.</li> <li>• Twinned holes were not used to verify results, infill drilling has been used to increase confidence.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole collars are located using DGPS or RTK GPS.</li> <li>• Down hole dip and azimuth are collected using a Gyro measuring every 20 to 50m for RC drilling.</li> <li>• Coordinates are recorded in UTM WGS84 29N and Morila PT58 grid.</li> <li>• Topographic control is maintained by the</li> </ul>

Criteria	JORC Code explanation	Commentary
		Morila mine survey department with a mixture of survey pickups and aerial data and is considered adequate for mine planning purposes.
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling data is at sufficient spacing to establish grade and geological continuity and define a Mineral Resource.</li> <li>• No sample compositing has been applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Mineralisation at Morila is hosted in a sequence of relatively flat lying stacked veins located 70 - 700m below surface. Drilling is generally vertical or steeply dipping, resulting in intersection angles on the mineralised zone being almost perpendicular.</li> <li>• The relationship between drilling orientation and structural orientation is not thought to have introduced a sampling bias.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples are delivered from the drilling site in batches for each drill hole to the laboratory with appropriate paperwork to ensure the chain of custody is recorded.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• QAQC checks of individual assay files are routinely made when the results are issued.</li> <li>• A QAQC report for the entire program is generated and reviewed to document any laboratory drift or assay bias.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Morila, N'Tiola and Viper Deposits lie within the Morila license (PE 99/15) which is owned by Société des Mines de Morila SA, a Malian registered company with 80% held by Firefinch and 20% held by the Malian Government.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Focused systematic regional exploration of the Morila area began in the mid 1980s. Soil anomalies were followed up in the early 1990s by BHP through limited diamond drilling which intersected ore grade mineralisation.</li> <li>Subsequent acquisition of the permit by Randgold Resources Ltd. in the late 1990s resulted in renewed exploration activity. Trenching was carried out across the oxide outcrop of the orebody with the "Discovery Trench" intersecting 8.90 g/t over 209 metres. This was followed by the completion of 178 diamond holes to define a maiden Mineral Resource.</li> <li>Based on a positive feasibility study, construction was initiated in mid 1999. Commissioning of the plant began on the 4th October 2000 and first gold was poured on 16th October 2000.</li> <li>Anglogold Ashanti became a JV partner in the project at the construction phase and was the manager of the operation until February 2008, when Randgold resumed operational responsibility for the project. Randgold was acquired by Barrick Gold in a US\$6.5 billion transaction which completed in January 2019.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Morila permit is situated in the northern portion of the West African craton between the NNE trending Birimian volcano-sedimentary belts of Kalana-Yanfolila and Syama. The region is underlain predominantly by Lower Proterozoic meta-volcanic and meta-sedimentary sequences (Birimian) and large areas of granitoids. The whole package of rocks has been deformed by the Eburnean Orogeny. The permit area locates along a contact between Birimian metasediments and the Eburnean granitoids.</li> <li>The Morila orebody is developed within upper greenschist to amphibolite facies of pelitic and psammitic rocks. Their mineralogy is</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>dominated by biotite (30%), plagioclase (30%) and quartz (30%).</p> <ul style="list-style-type: none"> <li>• The package has been intruded to the southwest by a tonalite body similar in composition to the Morila sediments. The sediments have been locally metasomatised by the tonalite to produce a feldspar porphyroblastic texture.</li> <li>• Arsenopyrite is generally associated with mineralisation and is by far the most dominant sulphide (80%) followed by lesser amounts of pyrrhotite (15%) and pyrite (5%) The pyrrhotite is ubiquitous throughout the metasediments and occurs as irregular grains which often contain inclusions of chalcopyrite. It is not uncommon for visible gold to be present.</li> <li>• Gold mineralisation is predominantly associated with coarse arsenopyrite, occurring as individual grains on arsenopyrite grain boundaries or as intergrowths or as free gold in a silicate mineral matrix in the proximity of arsenopyrite grains. A small percentage of the gold occurs as inclusions within the sulphides and occasionally the gold is locked within silicate minerals (&lt;5%).</li> <li>• Mineralisation is hosted in a sequence of relatively flat lying stacked veins located 70 - 130m below surface. Mineralisation does steepen due to shearing and faulting in certain places.</li> <li>• Various theories have been derived for the genesis of mineralisation at Morila and several internal and academic studies have been completed and published. Most agree that the key factors influencing the location of mineralisation are competency contrasts in the host sediments (fine grained vs coarse grained), fluid and heat from proximal granitoids, and proximity to regional structures.</li> <li>• Surficial geology within the project area typically consists of indurated gravels forming plateau, and broad depositional plains consisting of colluvium and alluvial to approximately 5m vertical depth. Lateritic weathering is common within the project area. The depth to fresh rock is typically 35m vertical.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>All drill hole information from Firefinch and historical drilling has been extensively detailed in Appendix 2 and previous ASX Announcements.</li> <li>The Company confirms that there are no material changes to any of the information previously released.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>All intersections have been weighted based on sample intervals, which are approximately 1m in length.</li> <li>Top cuts have not been used.</li> <li>Metal equivalent grades have not been stated.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. ‘down hole length, true width not known’).</li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation is relatively flat lying with drilling being generally vertical, with some holes oriented -70 degrees to the west. Due to the attitude of the orebody intersection angles on the mineralised zone are at a high angle and almost perpendicular but further data will be required to determine true width.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate maps and sections are provided in the text</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All drillhole intersections have been reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>The Morila Project has been in operation since 2000 with exploration activities completed prior to that. As a consequence there is a large quantity of data including exploration data (geochemical and geophysical surveys, trenching, drilling), production data (grade control drilling, mining and processing), as well as associated data such as environmental and geotechnical, which is used in the exploration and development of the project. None of this information is meaningful or material for the current release.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>As detailed in the text</li> </ul>

### Section 3. Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>All drilling and exploration data are stored in an SQL database hosted by an independent geological database consultant. Logging and sampling data are collected using datasheets and validated on completion of logging then on import into the database. Data was subsequently validated upon import into the modelling software.</li> <li>The Competent Persons have reviewed the database via import into Micromine &amp; Surpac and visual checks against the model and other data provided.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person has visited Morila and reviewed available material including drill data, sections, assay records and core, as well as completing site and plant tours.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> </ul>	<ul style="list-style-type: none"> <li>The Morila deposit is an extensively studied body of mineralisation which has been drilled to a relatively close spacing in and around the open pit limits; as a consequence, the geological interpretation of the mineralisation envelope has a relatively high degree of confidence.</li> <li>The distribution of high grades within the mineralisation envelope is well mapped but is less well understood, despite various studies.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>This is unlikely to materially affect the Mineral Resource estimate and is more of interest in targeting extensions to or repetitions of mineralisation.</p> <ul style="list-style-type: none"> <li>The open pit clearly shows the complex structural controls on the mineralisation mined to date. The global architecture appears to be grossly domal, with the pit at the antiformal crest of the system, and the peripheral veining dipping away from the pits.</li> <li>Data analysis showed that there appears to be a natural cut-off between background and anomalous mineralisation of 0.2 g/t gold. Using this natural cut-off discrete intervals were delineated to produce geologically coherent vein models of each mineralised domain, with non mineralised lithologies such as greywacke and tonalite excluded. Using this method, the average interpreted mineralisation thickness is reasonably consistent.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>The lateral dimensions of the Morila Mineral Resource are 1,800m north, 2,100m east, with a distinct northwest extension from the current pit due to the interpreted Samacline lodes. The resource extends from near surface adjacent to the pit to 700m below surface in the Samacline region. The dimensions of the mined pit are approximately 1,300m x 800m and averages 170m deep.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> </ul>	<ul style="list-style-type: none"> <li>The resource models were produced using GEOVIA Surpac software based on 1m sample composites constrained by the mineralised lode wireframes produced using Leapfrog Software. Grades were estimated into 10m x 10m x 2.5m using Ordinary Kriging techniques inside wireframes generated from geological interpretation. This block size is consistent with the selective mining unit previously used at these deposits and likely to be used again.</li> <li>Mineralisation zones were modelled as hard boundaries with search ranges and orientations determined for larger, well informed lodes with the aid of kriging neighbourhood analysis.</li> <li>Grades were estimated into 10m by 10m by 2.5m blocks per estimation zone using top-cut ordinary kriging inside wireframes generated using Leapfrog Software. Primary search volumes ranged from 45m to 410m in the mineralised plane, with dynamic anisotropy ellipsoidal searches used. The same approach</li> </ul>

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	<ul style="list-style-type: none"> <li>• Any assumptions behind modelling of selective mining units.</li> <li>• Any assumptions about correlation between variables.</li> <li>• Description of how the geological interpretation was used to control the resource estimates.</li> <li>• Discussion of basis for using or not using grade cutting or capping.</li> <li>• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<p>was applied to the remaining areas even though data spacing widens rapidly. Four expanding search passes were applied to ensure all mineralised volumes were informed with a grade estimate.</p> <ul style="list-style-type: none"> <li>• Top-cuts were assigned by lode using combined analysis of the log probability curves and estimates of the coefficient of variation (CV) by lode. Top-cuts varied between 5 and 100 g/t gold. Some lodes did not require top-cutting.</li> <li>• Deleterious elements such as organic carbon are not present at the Morila Deposit.</li> <li>• Small quantities of silver are recovered as by-products in the refining process; however, these are not significant enough to warrant inclusion in the resource nor is there sufficient assay data to inform such an estimate.</li> <li>• Previous resource estimates have been completed for the Morila deposit and interpretation and conclusions from these estimates have been incorporated for the current resource estimate, in particular the February 2021 MRE.</li> <li>• Previous resource estimates were reconciled with grade control and production records on a regular basis. As further resource and grade control drilling is completed on the current model delineation of domains will become practical which will enable future models to be reconciled in more detail.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>• Tonnages have been estimated on a dry in situ basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>• The cut off grade for the potential open pitable resource is based on open pit optimisation of the Mineral Resource in accordance with RPEEE principles. Costs used in this were derived from the long term mining, processing and G&amp;A costs for the Morila operation. A revenue factor of 1 was used based on a gold price of US\$1800/oz.</li> <li>• For the potential underground resources an order of magnitude estimate of likely operating costs was generated and compared with similar operations globally to arrive at the cut off grade. The Company intends to complete a detailed economic study which can then be used to refine the cut off grade for future resources.</li> </ul>

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<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>The resource model assumes that open cut mining is the extraction technique, with a similar level of mining selectivity achieved as in previous mining. It is assumed that grade control techniques and procedures will mirror those which were successful during previous mining operations at Morila.</li> <li>Parameters for the underground resources were evaluated on the basis of appropriate stope dimensions and associated dilution. The underground resources will require further mine design work to confirm the appropriate underground mining method and consequently refine the cut off grade and other parameters for these resources.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical recoveries have been assumed to be the same as the current processing plant recoveries.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No assumptions have been made regarding environmental factors. The Company will work to mitigate environmental impact as a result of any future mining or mineral processing.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that</li> </ul>	<ul style="list-style-type: none"> <li>Relative density measurements were completed on 4,161 samples of core taken at 5m downhole intervals for oxides and 10m intervals for sulphides. The core was divided into oxide, transitional and sulphide core. Relative density determinations on core used the weight in air/weight in water method.</li> <li>In-situ bulk density tests were carried out on</li> </ul>

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	<p><i>adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></p> <ul style="list-style-type: none"> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<p>each ore blast from 2002 onwards. The water displacement method was used.</p>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The resource for the Morila Deposit was classed as Measured, Indicated and Inferred based on data quality, geological confidence and sample spacing.</li> <li>• Measured Resources are assigned in areas of very good geological understanding, where the blocks estimated fall within 1/3 of the variogram range and within the first variogram structure, are estimated with a minimum of six drillholes and have a slope of regression greater than 0.80, kriging efficiency of 0.50 or better and kriging variation of less than 0.30.</li> <li>• Indicated Resources are assigned in areas of good geological understanding, where the blocks estimated fall within 2/3 of the variogram range, are estimated with a minimum of four drillholes and have a slope of regression greater than 0.40.</li> <li>• Inferred Resources are assigned in areas of reasonable geological understanding, where the blocks estimated fall within 1 variogram range and are estimated with a minimum of two drillholes.</li> <li>• The resource estimate appropriately reflects the view of the Competent Persons, that the data quality and validation criteria, as well as the resource methodology and check procedures, are reliable and consistent with criteria as defined by the JORC Code.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No audits or review of the Mineral Resource estimate has been conducted.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates,</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource statement relates to global estimates of tonnes and grade. Local accuracy is dependent on local data spacing. Drill spacing is good around the pit limits but inadequate for local grade estimation elsewhere.</li> </ul>

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	<p><i>and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <ul style="list-style-type: none"> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	