ASX ANNOUNCEMENT

Monday, 3rd May 2021



New Satellite Resources see Global Mineral Resources at Morila increase to 2.43 Million Ounces

- New Mineral Resource estimates completed for Satellite Deposits (N'Tiola, Viper, Morila Pit
 5 and Koting) following intensive drilling campaigns.
- An 80% increase in Mineral Resources for the Satellites to 218,000 ounces of contained gold, with a 164% increase within the higher confidence Measured and Indicated categories to 190,000 ounces of contained gold.
- Global Mineral Resources at Morila now total 2.43 million ounces of contained gold, including 1.31 million ounces in the Measured and Indicated categories.
- The new Mineral Resources will enable finalisation of Ore Reserves and a Life of Mine Plan (LOMP), which are expected to be released in early May 2021.

Firefinch Limited (ASX: FFX) (**Firefinch** or **the Company**) is pleased to announce an upgrade to the Mineral Resources for the satellite deposits (**Satellites**) within the Morila Gold Project (**Morila** or **the Project**). The Mineral Resources have been estimated utilising all available drilling, including over 30,000 metres of Firefinch drilling completed this year (19,000 metres of drilling at N'Tiola, Viper, and Pit 5 and over 11,000 metres on the adjacent Massigui Project, principally Koting).

Mineral Resources

The updated Measured, Indicated and Inferred Mineral Resources for the satellite deposits are:

6.2 million tonnes at 1.09g/t gold for 218,000 ounces of contained gold (Table 1).

This compares to 2.5 million tonnes at 1.38g/t gold for 113,000 ounces in the prior Mineral Resource (refer ASX Announcement 24th November 2020).

This results in an increase in Morila's Global Mineral Resource (Table 4) to:

50.5 million tonnes at 1.50g/t gold for 2.43 million ounces of contained gold.

190,000 ounces of the satellite resources are now contained within the high confidence Measured and Indicated categories (5.5 million tonnes at 1.07g/t gold), enabling Ore Reserves and mining schedules to be finalised to support the re-commencement of open pit mining. The Global Measured and Indicated Resource at the Morila Project has increased to 28.4 million tonnes at 1.43g/t gold for 1.31 million ounces of contained gold (refer Table 4 and Appendix 1 below).

Firefinch's Managing Director, Dr Michael Anderson, commented:

"This is an excellent outcome. We aimed to have sufficient satellite feed available to support operations in the lead up to accessing ore from the Morila Super Pit, and we have delivered. Our investment in intensive drilling across the known deposits has paid off with this substantial increase in Satellite Resources. Importantly, we have a significant inventory of Measured and Indicated Resources on which to base our forthcoming Life of Mine Plan, the blueprint for the production ramp-up at Morila. Drilling is continuing and we are confident of adding further resources and reserves. I look forward to keeping shareholders informed of our progress."

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Table 1. Mineral Resources for the Satellite Deposits at the Morila Gold Project

Deposit	Measu	red & Indic	ated	ı	nferred			Total	
	Tonnes ('000)	Grade (g/t)	Ounces ('000)	Tonnes ('000)	Grade (g/t)	Ounces ('000)	Tonnes ('000)	Grade (g/t)	Ounces ('000)
Morila Pit 5	723	1.04	24	116	1.38	6	840	1.10	30
N'Tiola	2,416	1.05	81	10	0.73	1	2,425	1.04	81
Viper	1,519	1.04	51	25	1.41	1	1,545	1.05	52
Koting	648	1.04	22	277	0.94	8	926	1.01	30
Domba	204	1.75	11	253	1.61	13	457	1.67	25
Total	5,511	1.07	190	682	1.28	28	6,193	1.09	218

- Numbers in the above table may not appear to sum correctly due to rounding.
- A detailed breakdown of Measured and Indicated Mineral Resources is provided in Appendix 1

Comparison to Previous Resources

Tables 2 and 3 compare the updated Mineral Resources to the previous resources announced on 24th November 2020. There has been an 80% increase in the total contained ounces for the Satellites to the current 218,000 ounces of contained gold. Pleasingly, the Company has also achieved a 164% increase in the ounces within the higher confidence Measured and Indicated categories to the current 190,000 ounces of contained gold.

Table 2. Global comparison of Mineral Resources for the Satellite Deposits

Deposit	Current Model	Previous Model	Difference	Difference
	Contained Ounces ('000)	Contained Ounces ('000)	Contained Ounces ('000)	(%)
Morila Pit 5	30	-	30	+ 100%
N'Tiola	81	45	36	+ 80%
Viper	52	43	9	+ 21%
Koting	30	-	30	+ 100%
Domba	25	25	-	-
Total	218	113	105	+ 80%

Table 3. Comparison of Measured & Indicated Mineral Resources for the Satellite Deposits

Deposit	Current Model Contained Ounces ('000)	Previous Model Contained Ounces ('000)	Difference Contained Ounces ('000)	Difference Contained Ounces ('000)
Morila Pit 5	24	-	24	+ 100%
N'Tiola	81	33	48	+ 145%
Viper	51	28	23	+ 82%
Koting	22	-	22	+100%
Domba	11	11	-	-
Total	190	72	118	+ 164%

N'Tiola

The updated Mineral Resource at N'Tiola is **2.43 million tonnes at 1.04g/t gold** for 81,000 ounces of gold (refer Mineral Resources Table and Figure 1). This compares to the previous estimate of 1.13 million tonnes at 1.25g/t gold for 45,000 ounces of gold (refer ASX Announcement 24th November 2020). This includes 2.42 million tonnes at 1.05g/t gold for 81,000 ounces in the Measured and Indicated categories.



The N'Tiola Deposit is located some 25 kilometres from the Morila plant and is accessed via an existing haul road (Figure 5). 0.85 million tonnes at a grade of 1.42g/t gold were previously mined from an open pit at N'Tiola and treated by Morila in 2018-2019 for 39,000 ounces of recovered gold.

Mineral Resources for N'Tiola were estimated based on Firefinch drilling that was detailed in the ASX announcement of 22nd January 2021, and prior drilling as detailed in the ASX announcement of 24th November 2020. A long section view of the N'Tiola Mineral Resource is shown as Figure 1 and further details can be found in Appendix 1.

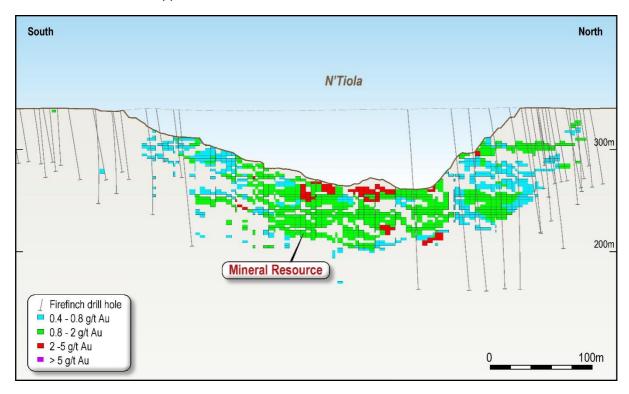


Figure 1. Long Section of the N'Tiola Deposit showing Mineral Resource.

Viper

The updated Mineral Resource at Viper is **1.55 million tonnes at 1.05g/t gold** for 52,000 ounces of gold (refer Mineral Resources Table and Figure 2), compared to the previous estimate of 0.96 million tonnes at 1.39g/t gold for 43,000 ounces of gold. This includes 1.52 million tonnes at 1.04g/t gold for 51,000 ounces in the Measured and Indicated categories.

The Viper Deposit is located some 26 kilometres from Morila, near to the N'Tiola deposit, and is accessed via an existing haul road from the plant (Figure 5). 0.81 million tonnes at a grade of 1.19g/t gold were previously mined from two open pits at Viper and treated by Morila in 2018-2019 for 31,000 ounces of recovered gold.

Mineral Resources for Viper were estimated based on Firefinch drilling as detailed in the ASX announcement of 29th March 2021 and on prior drilling as detailed in the ASX announcement of 24th November 2020.

A further programme of drilling at the Viper deposit aimed to infill between the better results of the first drilling programme and to reduce the drill spacing in those areas from 40 metres to 20 metres between sections. This drill programme has now been completed; we await results from the final assay batches. Following, we expect further drilling to test down dip of the better intersections. The Mineral Resource will be updated again following completion of that drilling programme.



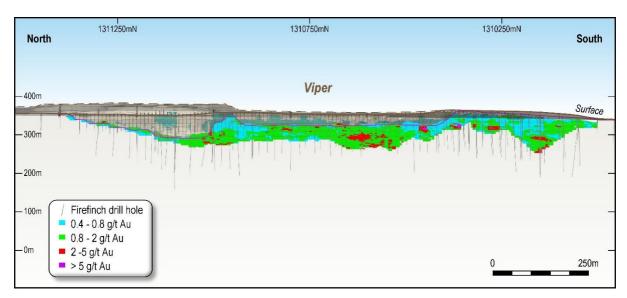


Figure 2. Long Section of the Viper Deposit showing Mineral Resource.

Koting

A maiden Mineral Resource of **0.93 million tonnes at 1.01 g/t gold for 30,000 ounces of gold** has been estimated for the Koting deposit (Figure 3). The Mineral Resource includes 0.65 million tonnes at 1.04g/t gold for 22,000 ounces in the Indicated category. This is based on Firefinch drilling detailed in ASX announcements of 20th November 2019, 5th March 2021 and 30th April 2021.

The Koting deposit is owned by Birimian Gold Mali SARL, a 100% subsidiary of Firefinch. Firefinch will negotiate a commercial arrangement to allow Koting to be mined and processed by Morila SA, the owner of the Morila mine and 80% owned by Firefinch. Koting is located some 20 kilometres from the Morila plant and is 2 kilometres from the existing haul road (Figure 5).

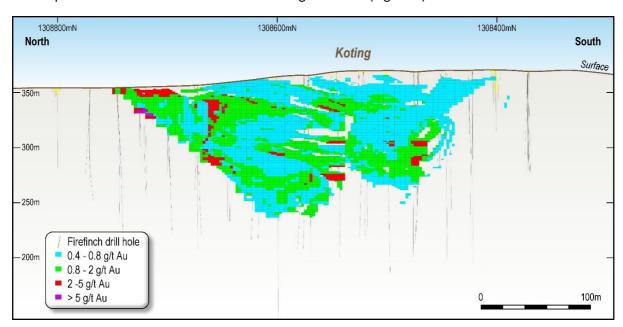


Figure 3. Long Section of the Koting Deposit showing Mineral Resource.



Morila Pit 5

The maiden Mineral Resource for Morila Pit 5 deposit is **0.84 million tonnes at 1.10g/t gold** for 30,000 ounces of gold (refer Mineral Resources Table and Figure 4). This includes 0.65 million tonnes at 1.04g/t gold for 22,000 ounces in the Indicated category. The maiden Mineral Resource for Morila Pit 5 has been estimated based on Firefinch drilling detailed in ASX Announcements of 5th March 2021 and 30th April 2021.

The Morila Pit 5 deposit is located on the western margin of the Morila Super Pit as mined, less than 1 kilometre from the Morila plant (Figure 5).

Due to its location and proximity to the surface, Morila Pit 5 is being evaluated as a stand-alone project independent of the main Morila resource.

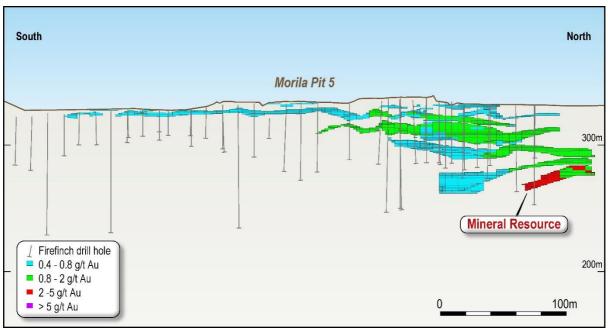


Figure 4. Long Section of the Morila Pit 5 Deposit showing Mineral Resource.

Life of Mine Plan

The completion of the Mineral Resources published in this release enables the finalisation of mining plans and Ore Reserves for each of the satellite deposits, as well as the Morila Super Pit. Based on these a detailed Life of Mine (LoM) schedule will be developed to exploit the Mineral Resources of 2.43 million ounces defined across the Morila Gold Project (refer Table 4 and Appendix 1).

Mining will progress in the following stages:

- 1. Hydraulic mining of tailings only until May 2021.
- 2. Satellite pit mining and milling a blend of tailings and ore from the Morila Pit 5, Koting, N'Tiola and Viper satellite pits to be fed to the re-commissioned mill for processing commencing May/June 2021.
- 3. Morila Superpit pre-strip provisionally planned to commence Q1 CY2022. Ore is scheduled to present Q2-Q3 CY2022.

The release of new Mineral Resources for the satellite deposits is a key step in the planning and scheduling of stage 2 in the Company's plan for the ramp-up of production at Morila to its full capacity.



Table 4. Mineral Resources for the Morila Gold Project.

Deposit	Measur	ed & Indic	ated ⁶		Inferred			Total	
	Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)
Morila Pit ¹	21.2	1.60	1,090	17.5	1.37	770	38.6	1.50	1,860
Morila NE ²				0.21	3.07	21	0.21	3.07	21
Samacline ²				3.74	2.56	308	3.74	2.56	308
Tailings ³	1.73	0.50	28				1.73	0.50	28
Morila Pit 5 ⁴	0.72	1.04	24	0.12	1.38	6	0.84	1.10	30
N'Tiola ⁴	2.42	1.05	81	0.01	0.73	1	2.43	1.04	81
Viper ⁴	1.52	1.04	51	0.02	1.41	1	1.55	1.05	52
Domba ⁵	0.20	1.75	11	0.25	1.61	13	0.46	1.67	25
Koting ⁴	0.65	1.04	22	0.28	0.94	8	0.93	1.01	30
Total	28.42	1.43	1,309	22.08	1.58	1,124	50.50	1.50	2,433

¹ The Morila Pit resource is quoted using a 0.4q/t gold cut-off grade.

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 1.

<u>Geology & Geological Interpretation</u>: The N'Tiola, Viper and Koting deposits are hosted within metasedimentary packages with alternating fine, medium and coarse-grained beds. Mineralisation is associated with shearing of these metasediments and is broadly steeply dipping parallel to shearing, with flatter structures also present. Mineralisation has been interpreted from section to section based on both geological and assay criteria, using a lower cut-off grade of 0.3g/t gold.

The Morila Pit 5 resource forms part of the Morila gold deposit, which has been previously classified as an intrusion related vein hosted gold deposit. It is hosted within a sequence of meta-greywacke and meta-volcaniclastic 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.

<u>Drilling, Sampling and Sub-sampling Techniques</u>: Mineralisation at the N'Tiola and Viper deposits has been defined by both RC and diamond drilling. Initial exploration drilling at all prospects was detailed in the ASX Announcement of 24th November 2020, with Firefinch completing infill and extensional RC drilling from December 2020 to the present. All available drilling data is used in the resource estimates.

<u>Sample Analysis</u>: 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.

² The Samacline and Morila NE resources are quoted using a 1.8g/t gold cut-off grade.

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

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

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

⁶ Detailed breakdown of Measured, Indicated and Inferred Mineral Resources are supplied in Appendix 1.

⁷ Numbers in the above table may not appear to sum correctly due to rounding.



<u>Estimation Methodology</u>: Block grades were estimated using Ordinary Kriging. Search ellipses were based on variography. The block model size used for all deposits was 2.5m by 5m (or 10m at Viper) Y by 2.5m Z corresponding to the expected selective mining unit (SMU).

Mining & Metallurgical Methods and Other Factors: The Mineral Resources are based on open pit mining with all mineralised material being processed through the existing, operational, Morila processing plant. It is assumed that mining rates, processing rates, recoveries and other mining and metallurgical parameters 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 gold price of US\$1800/oz and anticipated mining, processing and administration costs.

<u>Classification & Cut-off Grade</u>: The Mineral Resources have been classified as Indicated and Inferred. It is anticipated that the resources could achieve a higher level of classification with infill drilling and verification of the extent of historical mining. The Mineral Resources have been depleted using final pit surveys provided by the Morila survey department. The 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 0.35 – 0.48g/t gold.

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

For Enquiries

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Competent Persons Declaration

The information in this announcement that relates to Exploration Results and Mineral Resources at Morila Pit 5 and N'Tiola is based on information compiled by 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 Exploration Results and Mineral Resources at Koting and Viper is based on information compiled by Mr Simon McCracken. Mr McCracken is an employee of Firefinch Limited and a member of the Australian Institute of Geoscientists. Mr McCracken 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 McCracken consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



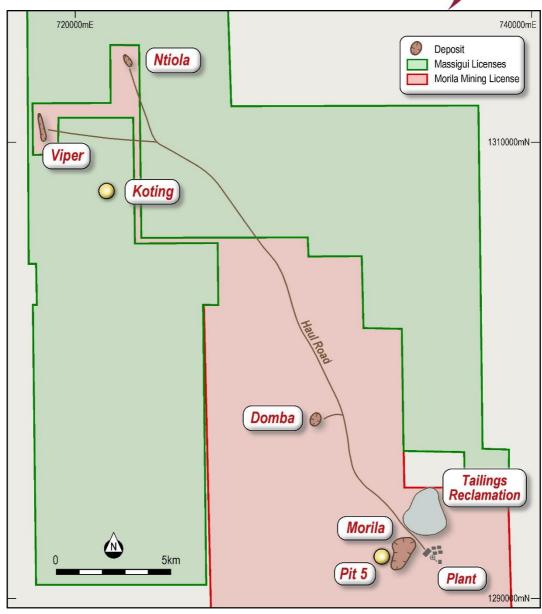


Figure 5. Location of Morila Pit 5, Koting and the other satellite deposits.



Firefinch is a Mali focussed gold miner and lithium developer. Firefinch has an 80% interest in the Morila Gold Mine and 100% of the Goulamina Lithium Project.

Morila has produced 7.5 million ounces of gold since 2000; it was one of the world's highest grade open pits some 12 to 20 years ago. Firefinch acquired the mine at a substantial discount in November 2020 with the view to increase production at the 4.5mtpa mill from a current annual production profile of 40,000 ounces of gold per annum from tailing treatment, towards a target of 70 to 90,000 ounces of gold per annum through mining of small open pits, stocks and tailings from mid 2021. In 2022, the Company plans to further increase production to target 150,000 to 200,000 ounces of gold per annum by re-commencing mining from the main Morila pit to fully exploit the 2.43 million ounces of gold in the Global Resource at Morila (refer Appendix 1 for breakdown of Measured, Indicated and Inferred). A production target of 150,000 to 200,000 ounces of gold per annum has been set by the Company. Morila's geological limits are not well understood, thus exploration is a major focus at Morila, its satellite resources and multiple targets on the 685km² of surrounding tenure.

The Goulamina Lithium Project is one of the world's largest undeveloped deposits and has the potential to be one of the lowest cost producers. All permits are in place, a Definitive Feasibility Study is complete and a Global Resource of 109 million tonnes at 1.45% Li₂O with 1.57 million tonnes of contained Li₂O has been declared comprising 8.4 million tonnes at 1.57% Li₂O in the Measured category, 56.2 million tonnes at 1.48% Li₂O in the Indicated category and 43.9 million tonnes at 1.45% Li₂O in the Inferred category. Firefinch intends to demerge Goulamina into a new ASX listed Company and is conducting a process to investigate partnering, offtake and financing options for the Project.

Firefinch is a responsible miner. We support positive social and economic change through contributing to the communities in which we operate. We seek to buy local, employ local and safeguard the environment and our people's health, safety and wellbeing.

The Company confirms that it is not aware of any new information or data that materially affects the Mineral Resources at Goulamina and Morila and the production estimates for Goulamina. The Company also confirms that all material assumptions and parameters underpinning the Mineral Resource estimates and production estimates continue to apply and have not materially changed. Please refer to ASX Announcements of 8th July 2020 and 20th October 2020 (Goulamina), 8th February 2021 (Morila Resource), 7th September 2020 (Morila Tailings), 24th November 2020, 5th March and 30th April 2020 (N'Tiola, Viper, Domba, Koting, Morila Pit 5), and 28th April 2021 (Gold Production).



APPENDIX 1: MINERAL RESOURCES FOR THE MORILA GOLD PROJECT

Deposit	M	leasured		Ir	ndicated		ı	nferred			Total	
	Tonnes (millions)	Grade (g/t)	Ounces ('000)									
Morila Pit ¹				21.2	1.60	1,090	17.5	1.37	770	38.6	1.50	1,860
Morila NE ²							0.21	3.07	21	0.21	3.07	21
Samacline ²							3.74	2.56	308	3.74	2.56	308
Tailings ³	1.73	0.50	28							1.73	0.50	28
Morila Pit 5 ⁴				0.72	1.04	24	0.12	1.38	6	0.84	1.10	30
N'Tiola ⁴				2.42	1.05	81	0.01	0.73	1	2.43	1.04	81
Viper ⁴				1.52	1.04	51	0.02	1.41	1	1.55	1.05	52
Domba ⁵				0.20	1.75	11	0.25	1.61	13	0.46	1.67	25
Koting ⁴				0.65	1.04	22	0.28	0.94	8	0.93	1.01	30
Total	1.73	0.50	28	26.69	1.49	1,281	22.08	1.58	1,124	50.50	1.50	2,433

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

 $^{^{2}}$ The Samacline and Morila NE resources are quoted using a 1.8g/t gold cut-off grade.

 $^{^{3}}$ The Tailings resource is quoted using a 0.3g/t gold cut-off grade.

 $^{^4}$ The N'Tiola, Viper, Pit 5 and Koting resources are quoted above cut-off grades based on forecast costs (0.35 – 0.48g/t).

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

⁶ Numbers in the above table may not appear to sum correctly due to rounding.



APPENDIX 2: JORC CODE, 2012 EDITION – TABLE 1 EXPLORATION RESULTS & MINERAL RESOURCES SATELLITE DEPOSITS, MORILA GOLD PROJECT, MALI

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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. 	 One metre samples were collected using Reverse Circulation (RC) drilling with 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 of between 2 and 3 kg in a prenumbered cotton sample bag. The entire sample is pulverized and a 30g charge is collected for fire assay/AAS analysis.
Drilling techniques	 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). 	 All samples in the current campaign were collected using RC drilling RC drilling using face sampling bit with a nominal 5.5" hole diameter.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 RC recoveries for the primary sample were observed and estimated qualitatively, with the sub samples weighed as a quantitative measure. The entire sample was collected from the cyclone and subsequently split by hand in a riffle splitter to maximise representivity. Drill sample recovery is considered adequate for the drilling techniques employed. RC drilling utilised booster packs to manage water ingress with most samples being dry.



Criteria	JORC Code explanation	Commentary Condition of the sample was recorded (ie
		 Where samples were wet (due to ground water there is a possibility that the assay result could be biased through loss of fine material. No relationship is known to exist between sample recovery and grade.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Chips were geologically logged in their entirety by geologists and a representative fraction collected in a chip tray. The logs are sufficiently detailed to support Mineral Resource estimation. Logged criteria included lithology, alteration, alteration intensity, weathering, grainsize and sulphides. Geological logging is qualitative in nature although percentages of sulphides are estimated along with structural measurements.
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 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 unbiassed samples. 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. Certified reference standards, Blanks, and duplicates are inserted into the sample stream as the samples are collected at a rate of 10%. Field duplicates are inserted every 20 samples Blanks (derived from unmineralized river sand) and Certified reference material standards (CRMs) are inserted alternately every 20 samples 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.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the 	 Samples were analysed for gold at the SGS Laboratory onsite at Morila, an accredited commercial laboratory. The laboratory is located on site but operated by an independent third party.

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Criteria JORC Code explanation Commentary

- parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
- 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.
- Sample preparation comprised of the following:
 - drying all samples and crushing (for core samples).
 - Pulverise entire sample to 95% passing 75 microns (all samples).
 - A 30g sub sample analysed by fire assay with AAS finish.
- QA/QC programme comprises Certified Reference Materials, replicates, duplicates, and blanks.
- Laboratory checks include
 - Every 50th sample is screened to confirm % passing 2mm and 75 microns.
 - o 1 reagent blank every 84 samples
 - 1 preparation blank every 84 samples
 - 2 weighed replicates every 84 samples
 - 1 preparation duplicate (re split) every 84 samples
 - o 3 SRMs every 84 samples
 - Certified reference standards, Blanks, and duplicates are inserted into the sample stream as the samples are collected at a rate of 10%.
- Field duplicates are inserted every 20 samples
- Blanks (derived from unmineralized river sand) and Certified reference standards (CRMs) are inserted alternately every 20 samples
- 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.

Verification of sampling and assaying

- The verification of significant intersections by either independent or alternative company personnel.
- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.
- 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.
- 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.
- QAQC reports are generated regularly to allow ongoing reviews of sample quality.
- Twinned holes were not used to verify results, infill drilling has been used to increase confidence.



Criteria	JORC Code explanation	Commentary
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Drill hole collars are located using DGPS or RTK GPS. Down hole dip and azimuth are collected using a Gyro measuring every 20 to 50m for RC drilling. Coordinates are recorded in UTM WGS84 29N Topographic control is maintained by the Morila mine survey department with a mixture of survey pickups and aerial data and is considered adequate for mine planning purposes.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	 At N'Tiola and Viper historical shallow drilling has been completed to a 10 x 10m spacing. Drilling below the mined pit is at a more variable spacing but Firefinch drilling has ensured that drilling is at 40 x 40m spacing or closer. At Koting drill holes are spaced approximately 12 metres apart on 25m spaced sections and is sufficient to establish grade continuity to determine a Mineral Resource. At Pit 5 drilling is on a 20m x 15m grid and is sufficient to establish grade continuity to determine a Mineral Resource. No sample compositing has been applied.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	 N'Tiola – mineralisation is hosted between two steeply west-dipping shear zones, with high grade zones in more shallowly dipping vein sets linking the shears. Drilling has been oriented to the east to intersect the main mineralised structures. Viper – mineralisation is hosted in mineralised zones which are interpreted to dip moderately (~65°) to the west. Drilling has been oriented to the east to intersect the main mineralised structures. Koting - Two or more mineralized zones are interpreted to dip steeply to the east. Drilling is generally oriented -60 degrees due east or -60 degrees due west. Intersection angles on the subvertical mineralised zone are between 25 and 35 degrees. Pit 5 - Mineralisation is hosted in a sequence of relatively flat lying stacked veins located from surface to 130m below surface. Drilling is generally vertical, with some holes drilled to the west. Due to the attitude of the orebody intersection angles on the mineralised zone are almost perpendicular.

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No sampling bias is known to exist though it



Criteria	JORC Code explanation	Commentary
		is not precluded.
Sample security	 The measures taken to ensure sample security. 	 Samples are delivered from the drilling site in batches for each drill holes to the SGS laboratory at Morila with appropriate paperwork to ensure the chain of custody is recorded.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	 QAQC checks of individual assay files are routinely made when the results are issued. A QAQC report for the entire program is generated and reviewed to document any laboratory drift or assay bias.



Section 2 Reporting of Exploration Results

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

Criteria	in the preceding section also apply to th JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The N'Tiola, Viper and Morila Pit 5 Deposits lies within the Morila license (PE 99/15) which is owned by Société des Mines de Morila SA, a Malian registered company with 20% held by the Malian Government. The Koting Project is entirely within the Finkola exploration tenement PR13/640 in Mali. PR13/640 is 100% held by Birimian Gold Mali SARL a 100% held subsidiary of Firefinch Limited.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Focused systematic regional exploration of the Morila area began in the mid 1980s. Most exploration was completed by Randgold, in JV with Anglogold Ashanti. Exploration in the Morila area has been extensively detailed in ASX Announcements of 31 August 2020 and 8 February 2021. Firefinch, under its former names Birimian Gold and Mali Lithium, completed substantial exploration at N'Tiola, Viper, Koting and the surrounding area (also as) including soil sampling, Auger Drilling, Aircore Drilling and RC Drilling as well as limited diamond drilling. The N'Tiola and Viper deposits which were then acquired and mined by Randgold under an option agreement (refer ASX Announcement 4 Nov 2016).
Geology	Deposit type, geological setting and style of mineralisation.	 The Morila permit is situated in the northern portion of the West African craton between the NNE trending Birimian volcanosedimentary belts of Kalana-Yanfolila and Syama. The region is underlain predominantly by Lower Proterozoic metavolcanic 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. Geology of the Morila deposit has been extensively detailed in ASX Announcements of 31 August 2020 and 8 February 2021. The Pit 5 Deposit is part of the Morila Deposit. The N'Tiola, Viper and Koting deposits are shear vein hosted orogenic style gold deposits. This style of mineralisation typically forms as veins or disseminations in altered host rock. Deposits of this type often form in proximity to linear geological structures.



Criteria	JORC Code explanation	Commentary
		 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.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	Gold and Mali Lithium). • Previous drilling completed at the Pit 5 Prospect was detailed in the ASX Announcement of 5 March 2021. Other drilling at the Morila deposit has been extensively detailed in ASX Announcements
Data aggregation methods	 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	Metal equivalent grades have not been stated.
Relationship between mineralisati on widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	 At N'Tiola, Viper and Koting mineralised lodes are interpreted to dip moderately or steeply to the WNW. Drilling is generally oriented -60 degrees due east or -60 degrees due west. Intersection angles on the mineralised zones are between 25 and 35 degrees. True widths of mineralisation are above 50% of downhole widths. At Pit 5 mineralisation is flat lying and holes were drilled vertically to ensure the lodes were intersected perpendicular to this

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Criteria	JORC Code explanation	Commentary
		orientation.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Appropriate maps and sections are provided in the text
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 All intersections from previous drilling were reported using a consistent grade and length criteria, with any barren drillholes included to ensure balanced reporting.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• The Morila Project has been in operation since 2000 with exploration activities completed prior to that. Consequently, 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.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	As detailed in the text



Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	 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. The Competent Persons have reviewed the database via import into Micromine and visual checks against the model.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	 The Competent Persons have visited Morila in 2019 and 2020 and reviewed data and other material on site as well as completing site visits to the prospects.
Geological interpretatio n	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 The geological interpretation is based on a substantial amount of drilling as well as mining resulting in a high degree of confidence. Mineralisation at N'Tiola is hosted within medium to coarse grained sediments with pyrite and minor arsenopyrite. The sedimentary package comprises steeply dipping fine, medium and coarse-grained sediments with late intrusive rocks also present. Mineralisation is parallel to foliation and controlled by a NNW-striking ductile shear zone. Higher grade zones occur as flat SW-dipping structures (& veins) linking two parallel shear zones which form the boundary of the mineralised package. Mineralisation at Viper is hosted by silica flooded, sheared greenstone facies metamorphosed psammites. Arsenopyrite and pyrite is disseminated or occurs as stringers parallel to foliation. Mineralisation discovered to date is dominantly within the oxide zone, particularly in the southern portion of the deposit. The northern part of the deposit is slightly higher grade and the depth to fresh rock is less indicating a structural dislocation between the south and north parts. Mineralisation at Koting is hosted by silica flooded, sheared greenstone facies metamorphosed greywackes and siltstones and occasional carbonaceous shales. Arsenopyrite and pyrite is disseminated throughout. Mineralisation is hosted in both oxide and fresh rock zones. Lateritisation of the oxide zone has resulted in mineralisation



Criteria	JORC Code explanation	Commentary
		 being re-mobilised into flat lying supergene blankets in the middle portion of the deposit. Mineralisation at Pit 5 is hosted within weathered and fresh flat-lying medium to coarse grained sediments with pyrite and arsenopyrite. The global architecture of the Morila mineralisation appears to be grossly domal, with the pit at the antiformal crest of the system, and the peripheral veining dipping away from the pits. Late stage intrusives are present below the pit. The Mineral Resources are based on the geological interpretation above.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 The N'Tiola resource model has dimensions of 480m in the north-south direction, 300m in plan/east-west width and extends 250m vertically from surface The Viper resource model has dimensions of 1,400m in the north-south direction, 460m in the east-west direction and extends 120m vertically from surface. The Koting resource model has dimensions of 520m in the north-south direction, 200m in the east-west direction and extends 350m vertically from surface. The Pit 5 resource model has dimensions of 320m in the north-south direction, 640m in plan/east-west width and extends 120m vertically from surface.
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. 	 The resource models were produced using GEOVIA Surpac or Micromine software based on 1m sample composites constrained by the mineralised lode interpretation. Grades were estimated into 2.5m x 5m x 2.5m blocks (or 2.5m x 10m x 2.5m at Viper) 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. Search ellipses used ranged from 20m to 80m with appropriate min/max limits on the number of samples used, with search ranges and orientations determined by geostatistics with reference to the mineralised lode interpretation. Capping was used to reduce the effect of high-grade samples (40g/t for N'Tiola, 15g/t for Viper, 15g/t for Morila Pit 5, 15g/t for Koting). Visual validation was completed and shows reasonable correlation between estimated grades and drill sample grades. The Mineral Resources were compared to



Criteria	JORC Code explanation	Commentary
	 interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	which are not published) and found to be consistent.
Moisture	 Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	 Tonnages have been estimated on a dry in situ basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	 The cut off grade for the Mineral Resource is based on open pit design in accordance with RPEEE principles. Costs used in this were the current processing and G&A costs for the Morila operation, along with mining costs sourced from multiple sources including a database of costs from similar operations, recent tenders for projects in the region and historical mining costs at Morila.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	The resource model assumes open cut mining is utilised 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 these deposits.
Metallurgica I factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 It is assumed that metallurgical recoveries will match those historically achieved by ore from these deposits through the Morila processing plant. Metallurgical testwork has been completed on composite samples and results to date are consistent with this assumption.
Environment al factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration	 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. The Pit 5 area is within the extent of the current Morila gold operation.

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Criteria	JORC Code explanation	Commentary
	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.	
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Relative density measurements were completed on core samples. The core was divided into oxide, transitional and sulphide core. Relative density determinations on core used the weight in air/weight in water method.
Classificatio n	 The basis for the classification of the Mineral Resources into varying confidence categories. 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). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The resources have been classified as Measured, Indicated and Inferred based on data quality, geological confidence and sample spacing. The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in situ mineralisation. The definition of mineralised zones is based on a good geological understanding producing a robust model of mineralised domains. This model has been confirmed by grade control, infill and extensional drilling which supports the mineralisation model. The key factors requiring additional information would be increased sample spacing to achieve improved local estimates of grade and, for N'Tiola and Viper, more precision relating to the historic mining. The resource estimate appropriately reflects the view of the Competent Person, 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.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits or review of the Mineral Resource estimate has been conducted.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a	 The lode geometry and continuity has been interpreted in detail. The data quality is good with all drill holes being logged by qualified geologists and a recognized laboratory has been used for all analyses. Further infill drilling could be used to increase confidence in local grade estimation. The Mineral Resource statement relates to

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Criteria	JORC Code explanation	Commentary
	qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	global estimates of tonnes and grade.