

# Viper Produces Further High-Grade Gold Results as Mining Operations Commence

- Continued high-grade results from infill and extensional RC drilling at Viper include:
  - > 9 metres at 15.1g/t gold from 40 metres, including 1m at 98.7g/t (VIPRC141);
  - 5 metres at 11.7g/t gold from 108 metres (VIPRC155);
  - > 18 metres at 2.96g/t gold from 54 metres, including 3m at 10.6g/t (VIPRC146);
  - 2 metres at 12.5g/t gold from 70 metres (VIPRC156); and
  - ➤ 4 metres at 6.36g/t gold from 81 metres (VIPRC142).
- Mining operations have commenced at Viper following fast track of pre-mining activities including grade control drilling, site clearing and topsoil removal.
- Initial mining at Viper to provide oxide feed to the Morila plant, increasing the ore types available for blending and processing.
- Two mining contractors initially engaged at Viper to increase mining capacity.
- The Viper Mineral Resource Estimate will be updated following completion of current drilling. An increase in classification, tonnage and grade is anticipated.

Firefinch Limited (ASX: FFX) (**Firefinch** or **the Company**) is pleased to announce that further high-grade results have been returned from the Company's ongoing drilling at the Viper Deposit (**Viper**), part of Firefinch's 80% owned Morila Gold Project, as surface mining operations commence.

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

"We continue to generate excellent results from drilling the Viper system, which have enabled better definition of the deposit's higher-grade zones. Clearly these zones are key to mining and the next step is the commencement of mining operations in the southern part of the deposit. Importantly, Viper will add oxide ore to complement the Morila Pit 5 mining operations. Plans are in place to expedite mining and haulage of this ore to be part of the plant feed from mid-September and increase near-term gold production. The fast-tracking of Viper is another example of the effort our on-site team has put in to delivering the ramp-up plan at Morila."

#### **Background**

The Viper deposit is located approximately 27 kilometres north-west of Morila and is accessed by an established haul road (**Figure 4**). Initial drilling was completed by Randgold (2000-2009) and then by Firefinch (2013-2015) under its previous name Birimian Gold SARL. In 2016 the Morila mine, then operated by Randgold, acquired the Viper and N'tiola deposits from Firefinch. Morila completed infill and grade control drilling prior to mining in 2018-2019 of 0.81 million tonnes at 1.19 g/t gold to produce 31,000 ounces of gold. Firefinch retains a 4% royalty, at current gold prices, at Viper and N'tiola.

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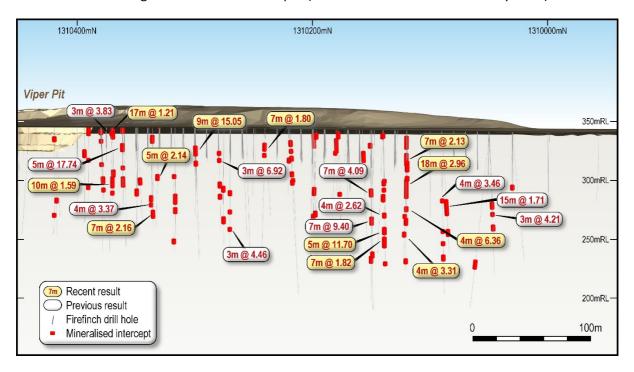


The Mineral Resources at Viper were updated in May 2021 based on drilling by Firefinch to:

I	ndicated		Inferred			Total			
Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)	Tonnes (millions)	Grade (g/t)	Ounces ('000)	
1.52	1.04	51	0.02	1.41	1	1.55	1.05	52	

Refer Appendix 1 and ASX Announcement 3<sup>rd</sup> May 2021 for further details

Based on these Mineral Resources a Probable Ore Reserve of 1.30 million tonnes at 1.46g/t for 43,000 contained ounces of gold was declared for Viper (refer ASX Announcement 5<sup>th</sup> May 2021).



**Figure 1.** Long Section showing recent drilling results at Viper.

#### **Drilling Results**

The resource definition drilling programme at the southern end of the Viper Deposit is testing extensions to mineralisation along strike and down dip of results previously published (refer ASX Announcements 29<sup>th</sup> March 2021 and 10<sup>th</sup> June 2021). Drilling in this area was brought forward to ensure it did not interact with expedited mining activities.

The latest batch of assay results from this programme are included in Appendix 1 and are shown on Figures 1 and 3, with better results including:

- > 9 metres at 15.1g/t gold from 40 metres (VIPRC141) including 1m at 98.7g/t;
- > 5 metres at 11.7g/t gold from 108 metres (VIPRC155);
- ➤ 18 metres at 2.96g/t gold from 54 metres (VIPRC146) including 3m at 10.6g/t;
- 2 metres at 12.5g/t gold from 70 metres (VIPRC156);
- 4 metres at 6.36g/t gold from 81 metres (VIPRC146);
- 7 metres at 2.13g/t gold from 27 metres (VIPRC144) including 1m at 10.6g/t;



- 4 metres at 3.31g/t gold from 107 metres (VIPRC147);
- > 10 metres at 1.59g/t gold from 68 metres (VIPRC159);
- 8 metres at 1.31g/t gold from 97 metres (VIPRC157); and
- > 5 metres at 2.14g/t gold from 63 metres (VIPRC142).

#### **Discussion of Results**

Results from the southern portion of the Viper Deposit clearly show the presence of discrete high-grade zones within the mineralised system as intersected in VIPRC141, VIPRC146, VIPRC155 and VIPRC156. The shallow infill grade control programme has demonstrated the intensity of drilling required to delineate these zones, and geological modelling is being refined using the enlarged dataset aiming to determine potential structural controls on these high-grade zones. The modelled high-grade trends will be verified and refined by ongoing drilling along the Viper system.

#### **Commencement of Mining**

Open pit mining operations have commenced at the southern end of the Viper pit design, targeting mineralisation which was not mined by previous Morila operations. This material is entirely contained within the Ore Reserve design and is classified as an Indicated Mineral Resource (refer above and ASX Announcement 5 May 2021). Grade control drilling has been completed prior to the commencement of mining and results will be used to update the Mineral Resource and Ore Reserve when resource definition drilling has been completed.

The commencement of mining operations comes after an expedited schedule of pre-mining activities including grade control drilling, site clearing and topsoil stockpiling, and the upgrade of access tracks. The Company's partnership with Malian owned and operated contractor EGTF has enabled these initial mining works to be completed as a standalone project prior to the mobilisation of the Mota Engil – InterMine (ME-IM) Joint Venture (JV), who have been awarded the contract to mine the Viper and N'Tiola satellite pits as well as stage 1 of the Morila Super Pit (refer ASX Announcement 15<sup>th</sup> June 2021). Mobilising both EGTF and ME-IM at Viper allows for accelerated material movement and a positive contribution to the near-term mining schedule.



Commencement of Mining Operations at Viper



ME-IM is a JV between global mining services provider Mota Engil and locally owned and operated Malian owned and operated mining contractor InterMine. Firefinch continues with its local first policy and continues to ensure economic benefits are shared locally, regionally and nationally. The JV is mobilising its satellite pit mining fleet with equipment already onsite. ME-IM anticipates its full fleet mobilising on schedule during August and September.





First Mota Engil – Intermin equipment arrives on site at Morila

#### **Next Steps**

As mining commences in the southern portion of Viper, drilling will be focussed on other areas within the 1,600-metre-long mineralised system. The intent is to follow up high-grade intersections in previous drilling and delineating deeper high-grade zones within the Viper system to feed into the ongoing geological interpretation and updates to the Mineral Resource and optimised pit design.

The Viper Mineral Resource Estimate is being updated to incorporate new drilling results to inform mining activities and will be finalised and published once the resource drilling has been completed. An increase in the classification, tonnage and grade is anticipated.



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

For Enquiries

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This announcement contains certain forward-looking statements with respect to Firefinch's financial condition, results of operations, production targets 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.

#### **Competent Persons Declaration**

The information in this announcement that relates to Exploration Results and Mineral Resources at the Viper Deposit 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.



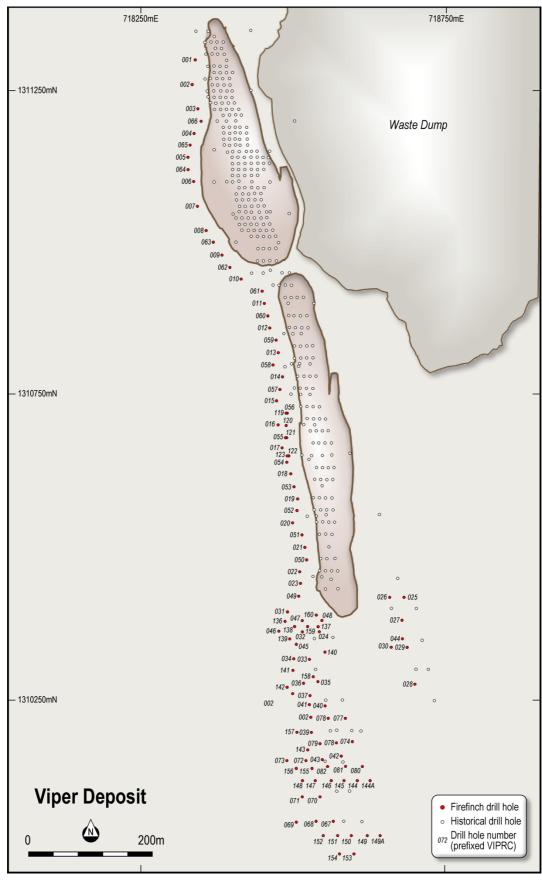


Figure 2. Plan showing Firefinch and historical drilling at Viper.



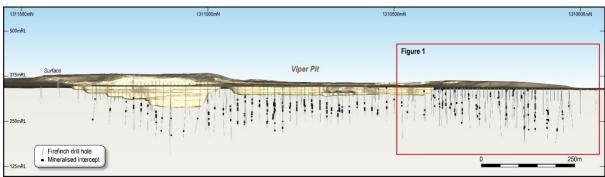


Figure 3. Long Section of the Viper Deposit.

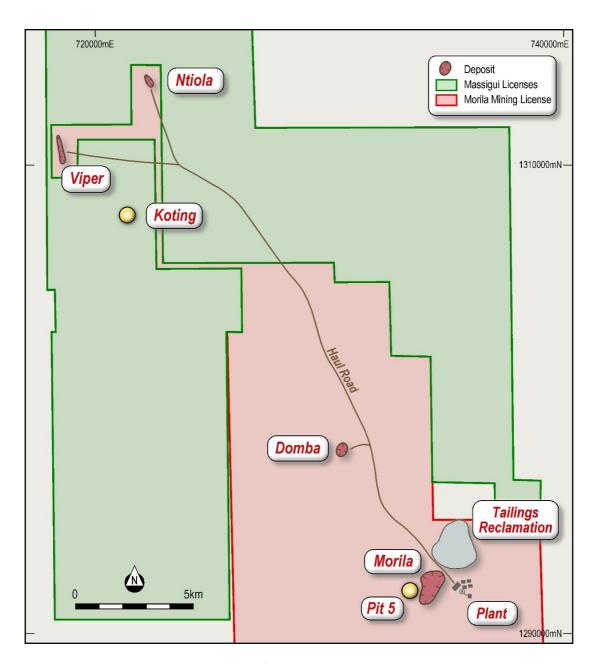


Figure 4. Plan showing location of Viper Deposit within the Morila Gold Project.



Table 1. Mineral Resources for the Morila Gold Project.

Deposit	Measure	ed & Indio	ated <sup>6</sup>	I	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 <sup>1</sup>	21.2	1.60	1,090	17.5	1.37	770	38.6	1.50	1,860
Morila NE <sup>2</sup>				0.21	3.07	21	0.21	3.07	21
Samacline <sup>2</sup>				3.74	2.56	308	3.74	2.56	308
Tailings <sup>3</sup>	1.73	0.50	28				1.73	0.50	28
Morila Pit 5 <sup>4</sup>	0.72	1.04	24	0.12	1.38	6	0.84	1.10	30
N'Tiola <sup>4</sup>	2.42	1.05	81	0.01	0.73	1	2.43	1.04	81
Viper <sup>4</sup>	1.52	1.04	51	0.02	1.41	1	1.55	1.05	52
Domba <sup>5</sup>	0.20	1.75	11	0.25	1.61	13	0.46	1.67	25
Koting <sup>4</sup>	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

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

 $<sup>^{2}</sup>$  The Samacline and Morila NE resources are 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>&</sup>lt;sup>4</sup> The N'Tiola, Viper, Pit 5 and Koting resources are quoted above cut-off grades based on forecast costs (0.35 – 0.48g/t).

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

<sup>&</sup>lt;sup>6</sup> Detailed breakdown of Measured, Indicated and Inferred Mineral Resources are supplied in the ASX Announcement of 3<sup>rd</sup> May 2021.

<sup>&</sup>lt;sup>7</sup> Numbers in the above table may not appear to sum correctly due to rounding.



Firefinch (ASX: FFX) is a Mali focussed gold miner and lithium developer. Firefinch has an 80% interest in the Morila Gold Mine (**Morila**) and it currently owns 100% of the Goulamina-Lithium Project (**Goulamina**).

The Morila Gold Mine is one the world's great open pit gold mines, having produced over 7.5Moz of gold since 2000 at grades that were among the highest in the world, earning it the moniker "Morila the Gorilla". Firefinch acquired Morila for just US\$28.9m in late 2020 with the strategic intent to rapidly increase production; initially targeting 70-90kozpa of gold from a combination of satellite pits, stocks and tailings, and thereafter growing production to 150-200kozpa of gold by mining the Morila Superpit. Morila's current Global Resource is 2.43 million ounces of gold (Measured: 1.73Mt at 0.5g/t gold for 0.03Moz, Indicated: 26.7Mt at 1.49g/t gold for 1.28Moz and Inferred: 22.1Mt at 1.58g/t gold for 1.12Moz). However, Morila's geological limits have not been tested. Exploration is therefore a major focus at the existing deposits and multiple targets on the 685km² of surrounding tenure.

Goulamina is one of the world's largest undeveloped deposits. In partnership with Ganfeng, Firefinch will bring the project into production. A 50/50 incorporated joint venture has been established, with Ganfeng contributing US\$194 million in development funding, comprising US\$130 million in equity funding and US\$40-64 million in debt funding. All permits are in place and the Definitive Feasibility Study confirmed Goulamina as a long life, large scale and low-cost open pit project expected to produce 436ktpa of spodumene concentrate at an average cash cost of US\$281/t. An initial mine life of 23 years is underpinned by a high grade, low impurity Ore Reserve of 52Mt at 1.51% Li<sub>2</sub>O for 0.79Mt contained Li<sub>2</sub>O comprising 8.1 million tonnes of Proven Ore Reserves at 1.55% Li<sub>2</sub>O and 44.0 million tonnes of Probable Ore Reserves at 1.50% Li<sub>2</sub>O. Goulamina has a Mineral Resource of 109Mt at 1.45% Li<sub>2</sub>O for 1.57Mt contained Li<sub>2</sub>O comprising 8.4 million tonnes at 1.57% Li<sub>2</sub>O in the Measured category, 56.2 million tonnes at 1.48% Li<sub>2</sub>O in the Indicated category and 43.9 million tonnes at 1.45% Li<sub>2</sub>O in the Inferred category. The Company is in the process of demerging Goulamina into a new ASX listed entity.

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 back local socio-economic initiatives, whilst operating in a manner that safeguards the environment and places our team's safety and wellbeing as our first priority.

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 and 28th April 2021 (Morila Tailings), 24th November 2020 and 3rd May 2021 (N'Tiola, Viper, Domba, Koting, Morila Pit 5), and 5th May 2021, 6<sup>th</sup> July 2021 and 29<sup>th</sup> July 2021 (Morila Gold Production, Ore Reserves and Production Targets).

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## APPENDIX 1: SIGNIFICANT INTERSECTIONS (>0.4g/t gold) FROM THE VIPER DEPOSIT

Hole ID	Туре	Easting	Northing	RL	Dip	Azimuth	Depth	From	То	Interval	Grade (g/t)
VIPRC119	RC	718487	1310720	352	-70	94	100	57	58	1	1.76
								60	66	6	9.69
							incl.	60	61	1	15.90
							incl.	62	63	1	13.30
							incl.	64	65	1	13.80
								67	70	3	2.73
								77	79	2	0.84
								80	81	1	0.57
VIPRC120	RC	718487	1310700	352	-57	93	108	43	44	1	0.41
								51	52	1	36.50
								54	63	9	6.78
							incl.	57	58	1	36.90
								64	66	2	0.82
								69	74	5	1.26
								75	80	5	0.76
								81	82	1	0.66
								94	95	1	1.54
VIPRC121	RC	718486	1310680	352	-71	91	120	18	19	1	3.81
								72	73	1	0.81
								74	80	6	11.34
							incl.	75	77	2	29.15
								81	82	1	0.68
								89	93	4	1.00
								115	116	1	0.52
VIPRC122	RC	718491	1310650	351	-55	95	102	27	28	1	1.06
VII IKCILL	- Ite	710-131	1310030	331			102	63	67	4	1.24
								68	69	1	0.64
								74	77	3	1.16
								78	79	1	0.83
								80	84	4	0.78
								86	88	2	0.60
VIPRC123	RC	718489	1310650	351	-69	90	120	64	65	1	0.80
VIFICIZS	INC	710403	1310030	331	-05	30	120	69	70	1	0.61
								73	77	4	1.63
								83	90	7	0.87
								91	93	2	0.58
VIPRC136	RC	718485	1210200	360	60	90	120	4	<u>95</u>	4	2.42
VIPRCISO	RC	/18485	1310380	300	-60	90	138				
								28	29	1	0.51
								40	41	1	0.90
								61	62	1	0.61
								85	86	1	0.49
\(\(\mathrea{\partial}\)	D.C.	710540	1210270	262	63	02	00	130	131	1	0.41
VIPRC137	RC	718540	1310370	362	-62	92	90	13	22	9	1.54
								23	30	7	0.91
								60	62	2	1.83
								63	65	2	0.60
		740-0:	40465=5	2.55			400	77	78	1	0.41
VIPRC138	RC	718501	1310370	363	-62	88	138	17	18	1	2.02
								23	24	1	0.41
								25	28	3	3.83

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											Grade
Hole ID	Type	Easting	Northing	RL	Dip	Azimuth	Depth	From	То	Interval	(g/t)
VIPRC139	RC	718493	1310350	364	-61	91	120	4	5	1	0.73
								56	57	1	2.62
								64	65	1	0.44
								69	71	2	0.71
								75	76	1	0.48
								81	84	3	1.15
								85	87	2	1.27
								97	98	1	0.43
VIPRC140	RC	718550	1310330	360	-60	90	114	9	11	2	0.56
								15	16	1	0.61
								22	23	1	0.47
								43	44	1	0.71
								51	52	1	0.68
								63	65	2	4.03
1//22/14		710100	121222	2.52			450	66	68	2	1.17
VIPRC141	RC	718498	1310300	363	-60	90	150	40	41	11	1.45
								42	46	4	32.98
							incl.	42	44	2	64.10
								47	49	2	0.87
								55 57	56	1	0.81
								78	59 79	2 1	1.44 0.62
								86	88	2	0.62
								90	92	2	1.71
								97	98	1	0.43
								108	109	1	0.45
VIPRC142	RC	718488	1310270	362	-59	90	140	40	42	2	1.81
VIPKC142	NC	/10400	1310270	302	-33	90	140	77	78	1	0.56
								82	84	2	0.80
								85	86	1	0.52
								92	93	1	0.95
								101	104	3	0.94
								118	120	2	6.51
							incl.	118	119	1	10.60
VIPRC143	RC	718522	1310170	356	-60	90	140	8	9	1	0.81
								13	14	1	1.64
								55	56	1	0.76
								80	81	1	0.45
								93	94	1	0.45
								101	102	1	2.37
								112	113	1	1.27
								121	122	1	2.19
VIPRC144	RC	718602	1310120	346	-60	90	60	10	15	5	1.07
								16	21	5	0.60
								27	29	2	1.10
								31	34	3	4.07
							incl.	32	33	1	10.60
VIPRC144A	RC	718625	1310120	345	-60	90	60			NSI	
VIPRC145	RC	718581	1310120	347	-60	90	70	36	42	6	0.75
						-		50	52	2	0.75
								62	64	2	1.15

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Mathematical   Math												
VIPRCIASE   RC	Hole ID	Туре	Easting	Northing	RL	Dip	Azimuth	Depth	From	То	Interval	
	VIPRC146	RC	718560	1310120	348	-60	90	96	20	21	1	
									36	37	1	0.85
									38	39	1	1.01
									42	43	1	0.41
									49	50	1	1.16
Mathematical Reservation   Mathematical Reserv									51	53	2	0.42
									54	62	8	5.23
Mathematical Color								incl.	55	56	1	15.70
VIPRC147									63	67	4	1.64
VIPRC147									68	71	3	1.25
VIPRC147         RC         718534         1310120         350         -60         90         132         46         47         1         0.42           RC         78534         1310120         350         -60         90         132         46         47         1         0.62           L         1         1         0.67         90         91         1         0.67           L         1         1         1         0.77         109         2         6.06           VIPRC148         RC         718513         1310120         353         -60         90         150         94         95         1         0.73           VIPRC148         RC         718513         1310120         353         -60         90         150         94         95         1         0.73           VIPRC148         RC         718619         1310030         343         -60         90         60         1         2         1         0.41           VIPRC149         RC         718619         1310030         343         -60         90         50         54         55         1         0.83           VIPRC150         R									81	85	4	6.36
The color of the									82	83	1	17.30
Part	VIPRC147	RC	718534	1310120	350	-60	90	132	46	47	1	0.42
Part									78	80	2	0.88
MIRCIAS   RC   718513   1310120   353   -60   90   100   94   95   1   0.73   0.73   0.75									90	91	1	0.67
Mathematical   Math									92			
VIPRC148									107	109		6.06
VIPRC148         RC         718513         1310120         353         -60         90         150         94         95         1         0.73           L         F         F         F         F         99         100         1         2.16           L         F         F         F         F         F         101         104         3         0.64           L         F         F         F         F         F         F         130         142         3         1.14           VIPRC149         RC         718619         1310030         343         -60         90         60         1         2         1         0.41           VIPRC149A         RC         718593         1310030         343         -60         90         50												
Part	VIPRC148	RC	718513	1310120	353	-60	90	150				
Mathematical Content of Content												
Name												
VIPRC149												
VIPRC149         RC         718619         1310030         343         -60         90         60         1         2         1         0.73           VIPRC149A         RC         718640         1310030         343         -60         90         50         TSI         TSI           VIPRC150         RC         718593         1310030         343         -60         90         70         54         55         1         0.83           VIPRC150         RC         718571         1310030         343         -60         90         90         79         80         1         1.13           VIPRC151         RC         718571         1310030         343         -60         90         90         79         80         1         1.13           VIPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.45           VIPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.64           VIPRC152         RC         718547         1310000         342         -60 </td <td></td>												
VIPRC149A         RC         718640         1310030         343         -60         90         50         NSI           VIPRC150         RC         718593         1310030         343         -60         90         70         54         55         1         0.83           VIPRC150         RC         718593         1310030         343         -60         90         70         54         55         1         0.83           VIPRC151         RC         718571         1310030         343         -60         90         90         79         80         1         1.13           VIPRC151         RC         718571         1310030         344         -60         90         90         79         80         1         1.13           VIPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.64           VIPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.64           VIPRC153         RC         718597         1310000         342         -60         90 </td <td>VIPRC149</td> <td>RC</td> <td>718619</td> <td>1310030</td> <td>343</td> <td>-60</td> <td>90</td> <td>60</td> <td></td> <td></td> <td></td> <td></td>	VIPRC149	RC	718619	1310030	343	-60	90	60				
ViPRC149A         RC         718640         1310030         343         -60         90         50         NSI           ViPRC150         RC         718593         1310030         343         -60         90         70         54         55         1         0.83           ViPRC151         RC         718571         1310030         343         -60         90         90         79         80         1         1.13           ViPRC151         RC         718571         1310030         343         -60         90         90         79         80         1         1.13           ViPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.45           ViPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.64           ViPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.43           ViPRC153         RC         718579         1310000         342         -60         90<												
VIPRC150         RC         718593         1310030         343         -60         90         70         54         55         1         0.83           VIPRC151         RC         718571         1310030         343         -60         90         90         79         80         1         1.13           VIPRC151         RC         718571         1310030         343         -60         90         90         79         80         1         1.13           VIPRC152         RC         718547         1310030         344         -60         90         90         79         80         1         1.13           VIPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.64           L         L         L         L         L         L         L         101         102         1         4.32           L         L         L         L         L         L         L         101         102         1         0.64           L         L         L         L         L         L         L         101         102	VIPRC149A	RC	718640	1310030	343	-60	90	50				
Second   S									54	55		0.83
VIPRC151         RC         718571         1310030         343         -60         90         90         79         80         1         1.13           VIPRC151         RC         718571         1310030         343         -60         90         90         79         80         1         1.13           VIPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.64           VIPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.64           L         L         L         L         L         L         101         102         1         4.32           L         L         L         L         L         L         101         102         1         0.64           L         L         L         L         L         L         101         110         111         1         0.42           L         L         L         L         L         L         L         110         111         1         0.53           VIPRC153<												
VIPRC151         RC         718571         1310030         343         -60         90         90         79         80         1         1.13           VIPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.64           VIPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.64           VIPRC152         RC         718547         1310030         344         -60         90         126         22         23         1         0.64           L         L         L         L         L         L         101         102         1         4.32           L         L         L         L         L         L         101         110         111         1         0.42           L         L         L         L         L         L         L         116         117         1         0.56           L         L         718597         1310000         342         -60         90         80         28         29         1									61			
New Color   New	VIPRC151	RC	718571	1310030	343	-60	90	90	79	80	1	1.13
New Color   New									81	82	1	
101   102   1   4.32										85		
108   109   1   0.81	VIPRC152	RC	718547	1310030	344	-60	90	126	22	23	1	0.64
108   109   1   0.81									101			
110												
116												
VIPRC153         RC         718597         1310000         342         -60         90         60         55         56         1         2.32           VIPRC154         RC         718573         1310000         342         -60         90         80         28         29         1         0.94           L         FC         718573         1310000         342         -60         90         80         28         29         1         0.94           L         FC         718573         1310000         342         -60         90         80         28         29         1         0.53           VIPRC155         RC         718529         1310140         352         -60         90         150         78         80         2         0.65           VIPRC155         RC         718529         1310140         352         -60         90         150         78         80         2         0.65           VIPRC155         RC         718529         1310140         352         -60         90         150         78         80         2         0.65           VIPRC155         RC         718529         1310140												
VIPRC153         RC         718597         1310000         342         -60         90         60         55         56         1         2.32           VIPRC154         RC         718573         1310000         342         -60         90         80         28         29         1         0.94           L         F         72         73         1         0.53         1         0.53           L         F         75         76         1         1.43         1         1.43           VIPRC155         RC         718529         1310140         352         -60         90         150         78         80         2         0.65           VIPRC155         RC         718529         1310140         352         -60         90         150         78         80         2         0.65           VIPRC155         RC         718529         1310140         352         -60         90         150         78         80         2         0.65           VIPRC155         RC         718529         1310140         352         -60         90         150         78         80         2         0.65 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>												
VIPRC154         RC         718573         1310000         342         -60         90         80         28         29         1         0.94           1         72         73         1         0.53           2         75         76         1         1.43           3         78         80         2         0.55           4         718529         1310140         352         -60         90         150         78         80         2         0.65           2         718529         1310140         352         -60         90         150         78         80         2         0.65           3         10         10         10         11         5         11.07         11.07           4         10 <td>VIPRC153</td> <td>RC</td> <td>718597</td> <td>1310000</td> <td>342</td> <td>-60</td> <td>90</td> <td>60</td> <td></td> <td></td> <td></td> <td></td>	VIPRC153	RC	718597	1310000	342	-60	90	60				
T2 T3 1 0.53   T5 T6 1 1.43   T7 T8	VIPRC154											
T5 76 1 1.43   T8 80 2 0.55												
VIPRC155         RC         718529         1310140         352         -60         90         150         78         80         2         0.65           82         84         2         0.66           108         113         5         11.07           110         108         109         1         33.20           111         112         1         12.70           116         118         2         2.18												
VIPRC155         RC         718529         1310140         352         -60         90         150         78         80         2         0.65           82         84         2         0.66           108         113         5         11.07           110         108         109         1         33.20           111         112         1         12.70           116         118         2         2.18												
82     84     2     0.66       108     113     5     11.07       incl.     108     109     1     33.20       111     112     1     12.70       116     118     2     2.18	VIPRC155	RC	718529	1310140	352	-60	90	150				
incl.     108     109     1     33.20       111     112     1     12.70       116     118     2     2.18	_								82	84	2	0.66
incl.     108     109     1     33.20       111     112     1     12.70       116     118     2     2.18									108	113	5	11.07
111     112     1     12.70       116     118     2     2.18								incl.				
									111	112	1	12.70
									116	118	2	2.18
									119	123	4	

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											Grade
Hole ID	Туре	Easting	Northing	RL	Dip	Azimuth	Depth	From	То	Interval	(g/t)
VIPRC156	RC	718503	1310140	355	-60	90	150	70	72	2	12.53
							incl.	71	72	1	23.90
								96	98	2	3.56
								103	105	2	0.65
								112	113	1	0.64
								118	120	2	0.92
								126	129	3	1.11
								137	138	1	2.67
	RC							142	143	1	0.52
								144	145	1	0.48
VIPRC157	RC	718504	1310200	358	-60	90	145	31	32	1	0.50
								84	85	1	0.52
								97	98	1	0.54
			·					100	101	1	0.73
								103	105	2	4.29
	RC							118	119	1	1.63
VIPRC158	RC	718531	1310290	359	-60	90	126	37	38	1	1.31
								45	48	3	1.65
								50	52	2	0.70
								67	68	1	0.60
								69	71	2	0.66
								76	78	2	0.48
								80	83	3	1.50
								84	85	1	0.49
								88	89	1	0.42
VIPRC159	RC	718521	1310370	363	-60	90	90	6	7	1	0.51
								13	16	3	1.24
								17	18	1	0.42
								21	22	1	1.68
								24	26	2	0.48
								27	28	1	4.89
								55	57	2	1.32
								68	70	2	1.97
								71	73	2	3.50
								74	76	2	0.61
								77	78	1	2.75
								82	85	3	1.13
VIPRC160	RC	718536	1310390	362	-60	90	102	26	27	1	0.59
								29	30	1	0.42
								31	32	1	0.51
								36	38	2	0.43
								44	46	2	0.51
								51	52	1	2.22
								57	58	1	0.55
								68	69	1	0.47
								76	79	3	0.87
								100	101	1	0.64

<sup>\* -</sup> denotes mineralisation at end of hole



# APPENDIX 2: JORC CODE, 2012 EDITION – TABLE 1 EXPLORATION RESULTS, MINERAL RESOURCES & ORE RESERVES, VIPER DEPOSIT, 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	<ul> <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>	
Drilling techniques	<ul> <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> <li>All samples in the current campaign were collected using RC drilling RC drilling using face sampling bit with a nominal 5.5" hole diameter.</li> </ul>
Drill sample recovery	<ul> <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>	



Criteria	JORC Code explanation	Commentary
		<ul> <li>Where samples were wet (due to ground water there is a possibility that the assay result could be biased through loss of fine material.</li> <li>No relationship is known to exist between sample recovery and grade.</li> </ul>
Logging	<ul> <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> <li>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.</li> <li>Geological logging is qualitative in nature although percentages of sulphides are estimated along with structural measurements.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <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> <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 unbiassed 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>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</li> <li>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>
Quality of assay data and laboratory tests	<ul> <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</li> </ul>	<ul> <li>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.</li> <li>Sample preparation comprised of the following:</li> </ul>



#### Criteria **JORC Code explanation Commentary** model, reading times, calibrations factors drying all samples and crushing (for core applied and their derivation, etc. samples). Nature of quality control procedures Pulverise entire sample to 95% passing 75 adopted (e.g. standards, blanks, microns (all samples). duplicates, external laboratory checks) and A 30g sub sample analysed by fire assay whether acceptable levels of accuracy (i.e. with AAS finish. lack of bias) and precision have been established. QA/QC programme comprises Certified Reference Materials, replicates, duplicates, and blanks. Laboratory checks include o 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 o 2 weighed replicates every 84 samples o 1 preparation duplicate (re split) every 84 samples o 3 SRMs every 84 samples o 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 The verification of significant intersections Firefinch drill hole data was compiled and by either independent or alternative of sampling digitally captured by Company geologists at company personnel. and assaying the drill rig. Drilling and sampling The use of twinned holes. procedures have been developed to ensure Documentation of primary data, data entry consistent sampling practices are used by procedures, data verification, data storage site personnel. (physical and electronic) protocols. All drilling and exploration data are stored in Discuss any adjustment to assay data. 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. Location of Accuracy and quality of surveys used to Drill hole collars are located using DGPS or locate drill holes (collar and down-hole data points RTK GPS. surveys), trenches, mine workings and

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Criteria	JORC Code explanation	Commentary
	<ul> <li>other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <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</li> <li>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.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill holes are on 20m spaced sections and test between 30 and 60 metres down dip of historical drilling at Viper.</li> <li>The spacing is sufficient to establish grade continuity and will be incorporated into an updated Mineral Resource once all results received.</li> <li>No sample compositing has been applied.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Six mineralized zones are interpreted to dip moderately to steeply to the west. Drilling is generally oriented -60 degrees due east to intersect the zone as close to perpendicular as practicable.</li> <li>No sampling bias is known to exist though it is not precluded.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>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.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <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		ORC Code explanation		ommentary
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 Viper Deposit 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.
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 including soil sampling, Auger Drilling, Air-core 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. Surficial geology within the project area typically consists of indurated gravels



Criteria	JORC Code explanation	Commentary
		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	<ul> <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> <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> <li>phase of drilling are reported in Appendix 1.</li> <li>Previous drilling completed at the Viper Deposit has been detailed in the ASX Announcements of 29<sup>th</sup> March 2021 and 10<sup>th</sup> June 2021.</li> <li>The Company confirms that there are no material changes to any of the information previously released.</li> </ul>
Data aggregation methods	<ul> <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> <li>has been applied to all samples.</li> <li>Top cuts have not been used</li> <li>Metal equivalent grades have not been stated.</li> </ul>
Relationship between mineralisati on widths and intercept lengths	<ul> <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>	interpreted to strike N-S and dip moderately to the West. Drilling is generally oriented -60 degrees due east. Intersection angles on the mineralised zones are between perpendicular and 60 degrees.
Diagrams	<ul> <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>	in the text



Criteria	JORC Code explanation	Commentary						
Balanced reporting	<ul> <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> <li>This report details all intercepts in the drilling completed at the Viper Deposit.</li> </ul>						
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. 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.						
Further work	<ul> <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>	As detailed in the text						

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