

## ARROW MINERALS

ASX Announcement
03 October 2023

**ASX SYMBOL: AMD** 



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# SCOUT DIAMOND DRILLING CONFIRMS HIGH-GRADE IRON POTENTIAL

### **Highlights**

- Scout drilling intersected zones of enriched high-grade haematite in similar geological domains to known Simandou Range iron ore deposits.
- Importantly, the Dalabatini Target, where a high-grade intercept includes:
  - 12m @ 60.1% Fe (DALDDH003)

displays similarities in orientation, geology and geochemistry to SIMFER Rio Tinto's Pic de Fon deposit located ~100km south.

• Preparations underway to resume diamond drilling at Arrow's four high prioritiy targets following cessation of the wet season.

Arrow Minerals Limited (ASX: AMD) (**Arrow**, or the **Company**) is pleased to announce results from a 16-hole scout diamond drilling program conducted over the Simandou North Iron Project. Five holes were drilled at the Dalabatini Target and eleven holes at Kowouleni Target for a total of 826m (*Figure 1.*). The drilling tested two high priority zones defined by surface geochemistry, geology and airborne geophysics.

Drilling intersected lithologies consistent with those hosting known iron ore deposits elsewhere in the Simandou Range and analytical results confirmed thick near surface zones of significant high-grade iron at the Dalabatini Target. Two drillholes, DALDDH001 and DALDDH003 intersected **12m at 55.0% Fe** from 2m and **12m at 60.1% Fe** also from 2m respectively. Additional thick zones of elevated iron (>40%) were intersected consistently throughout the Kowouleni Target area.

Arrow Managing Director, Hugh Bresser comments "The identification of high-grade iron rich zones of substantial thickness extending from surface at the Dalabatini Target is an outstanding result. With the added understanding gained from drilling and when comparing our results to the published information relating to Pic de Fon we are excited to recommence our exploration program when the wet season ends."

Arrow currently holds a 33.3% beneficial interest in the Simandou North Iron Project, and is earning a 60.5% controlling interest in the project as it advances toward 100% ownership (AMD ASX announcement 30 August 2023).

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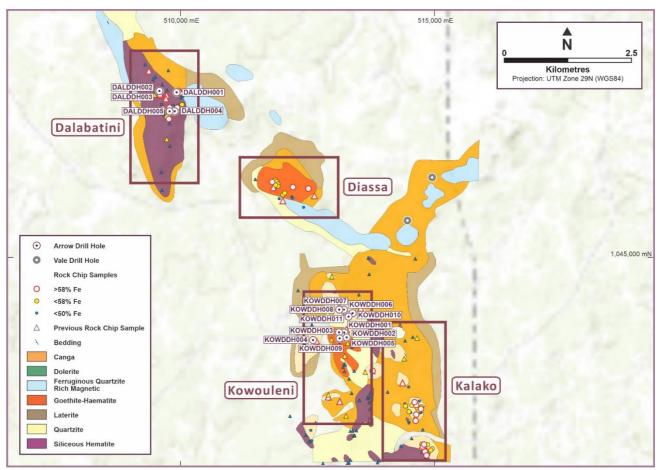


Figure 1. Simandou North Iron Project geological map showing the four distinct target areas, Dalabatini, Diassa, Kowouleni and Kalako and drillhole collar locations for the sixteen diamond drillhole locations completed by Arrow as part of the first pass scout drilling program.

#### **SCOUT DRILLING PROGRAM**

#### **Dalabatini Target**

The Dalabatini Target consists of an identified prominent iron-rich ridge that extends for 3,000m in a north-south direction and is approximately 500m wide (*Photo 1*.). Geological mapping conducted over the Dalabatini Target identified an extensive iron stone formation interpreted to be siliceous haematite forming the ridge with a large expanse of canga extending for 1,000m to the north-east. Geochemical rock chips include numerous high grade iron assay results with eight rock chip samples above 60% Fe over a 900m central zone.

Five (5) scout diamond drill holes were completed at the Dalabatini Target for a total of 206m (*Figure 1*). DALDDH001, 002 and 003 intersected iron rich lithologies near surface before the holes ended in lower grade iron bearing magnetite Banded Iron Formation (**BIF**). The best zone of iron-rich haematite was reported from DALDDH003, comprising **12m at 60.1% Fe** from 2m (*Figure 2*) and DALDDH001 located 400m to the east assayed **12m at 55.0% Fe** from 2m.

A further 400m south, DALDDH004 and 005 tested beneath a zone of extensive iron laterite development. These holes penetrated directly into structurally deformed laminated magnetite BIF, but failed to intersect the synform structures that provide the fluid conduits for the creation of the main haematite rich zones.

Information obtained from the geological, geochemical and geophysical data collected as part of this phase of the exploration program highlighted the potential extensions of the high-grade iron zones

intersected in DALDDH001 and DALDDH003 and probable locations of the synform structures elsewhere along the Dalabatini ridge line. This will form the next phase of drilling at the Dalabatini Target to commence once the wet season in Guinea has finished.



Photo 1. Dalabatini target taken from Diassa hill. Topographic relief highlights the 3,000m extent of the resistant iron ridge.

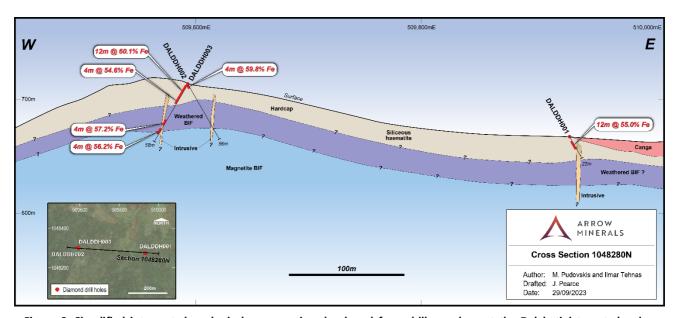


Figure 2. Simplified interpreted geological cross section developed from drill core logs at the Dalabatini target showing significant iron intercepts and BIF distribution.

#### Dalabatini Target Comparison with Pic de Fon Deposit (Rio Tinto SIMFER)

Pic de Fon is an iron oxide deposit that forms part of the 2.8Bt at 65.8% Fe Mineral Resource Estimate reported by Rio Tinto Simfer (SIMFER S.A.)<sup>1</sup>. Pic de Fon is located within the southern portion of the Simandou Range (Blocks 3 & 4) approximately 100km south of Arrow's Simandou North Iron Project.

<sup>&</sup>lt;sup>1</sup> Rio Tinto Annual Report 2022

The deposit occurs on a prominent ridge and is divided into three contiguous high-grade iron zones, Northern, Central and Southern that extend for 7.5km along strike. Banded Iron Formations (BIF) at Pic de Fon were structurally deformed regional tectonic events providing conduits for hydrothermal fluids along synformal keels. These hydrothermal fluids precipitated haematite and dissolved quartz resulting in significant iron enrichment of the BIFs in these areas from 30-35% Fe to >65% Fe over thicknesses of at least 250m (*Cope et. al. 2008*<sup>2</sup>).

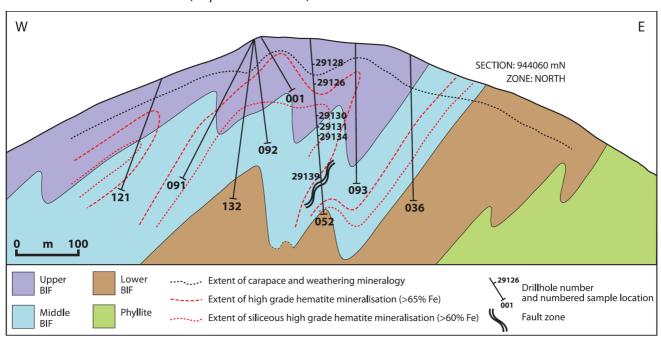


Figure 3. Simplified east-west cross section at 944060mN, Northern zone, showing interpreted phyllite-BIF stratigraphy, drill holes, and selected sample locations. Also shown are the interpreted depth of weathering and the extent of high-grade (>65%) and siliceous high-grade (>60%) enrichment which appear to transgress the BIF banding and locally extend to depth. Vertical = horizontal scale (*Cope et. al. 2008*<sup>2</sup>).

Comparing the geology and distribution of high-grade mineralisation shown in Figures 2 and 3, the Company believes drilling at Dalabatini has intersected a high-grade iron zone, with an average of 60.1% iron over a downhole width of 12m in the upper silicious haematite cap (*Figure 2*) similar to shallow high-grade mineralisation observed at Pic de Fon (*Figure 3*).

Notably the main high grade iron zones at Pic de Fon shown in Figure 3 occur at vertical depths in excess of 80m whilst drilling at Dalabatini has only penetrated to a depth of around 50m vertically. This highlights the significant potential to be tested with deeper drilling at Dalabatini.

CSA Global, a Perth based geoscience consultancy firm, has reviewed the data collected from Arrow's 2023 exploration program and recommended that all future holes at Dalabatini should be drilled through to basement to ensure the full potential of the BIF to host high-grade iron mineralisation is tested, particularly at Dalabatini.

#### Kowouleni Target

The Kowouleni Target consists of a zone 3,000m long and between 500m and 1,500m wide. This geologically complex area has mapped zones of siliceous haematite, goethite-haematite and canga

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<sup>&</sup>lt;sup>2</sup> Cope, I,L.,Wilkinson, J.J., Boyce, A. J., Chapman, J.B., Herrington, R.J. and Harris, C.J., 2008 Genesis of the Pic de Fon Iron Oxide Deposit, Simandou Range, Republic of Guinea, West Africa: Society of Economic Geologists SEG Reviews vol. 15, p. 339-360.

surrounded by a quartzite. Geophysical modelling reflects the geological detail mapped at surface and suggests high potential for enriched haematite development.

Geochemical results from rock chips collected over the area range from 30% Fe to 64.85% Fe. Drilling in this area will target the haematite rich zones identified from geological mapping and geochemistry.

Initial scout drilling at the Kowouleni Target focused beneath zones of mapped haematite rich lithologies at surface where elevated iron assays have been reported from rock chip samples collected as part of the regional exploration program. Geophysical modelling over these areas is also consistent with the high potential for rich haematite development.

A total of eleven (11) scout diamond drill holes have been completed (620m) at the Kowouleni Target (*Figure 1*) with analytical results received from all eleven holes along four separate sections. All holes intersected the anticipated BIF formations with seven (7) terminating in the apparent crystalline basement. Analytical results (*Table 2*) are indicative of lower grade iron stone formations with consistent results around 45% Fe.

Additional geophysical modelling and structural geological mapping work is recommended by CSA Global to identify the potential synforms which may facilitate the hydrothermal enrichment of the haematite zones.



Photo 2. Diamond drilling to test the subsurface geology and geochemistry beneath a high-grade haematite outcrop at the Kowouleni target where a rock chip sample collected returned an assay in excess of 64% Fe.

#### **Kalako Target**

Extending from the southern boundary of the Simandou North Iron Project permit and Block 1 of Winning Consortium Simandou (*Figure 1*), the Kalako Target covers 3km of strike of contiguous Simandou Range stratigraphy.

Rock-chip samples collected from outcropping goethite-haematite zones surrounded by extensive canga development returned eleven high-grade (>58%) iron analytical results from two distinct areas aligning in a north-south orientation (*Figure 1.*).

The Kalako Target area represents a high potential tract of lithologies with markers consistent with the areas to the south hosting world class iron ore deposits. Geological mapping and detailed structural interpretation of the geophysics is planned to be conducted, starting from the south moving north over the area. This work will confirm orientation and distribution of the geological domains prior to construction of pads for systematic drilling across sections of the Kalako Target to test for thickness and grade of subsurface iron occurrences and provide invaluable information of the underlying stratigraphy.

#### SIMANDOU NORTH IRON PROJECT - 3 STAGE EXPLORATION PROGRAM

The Simandou North Iron Project (*Figure 5*) lies at the northern end of the Simandou Range, host to the largest undeveloped high-grade iron deposits in the world, including WCS's Block 1 & 2 with a reported measured, indicated and inferred mineral resource of 1.8 billion tonnes at 65.4% Fe and Simfer's Simandou Project Block 3 & 4 with a total measured, indicated and inferred mineral resource estimate of 2.8 billion tonnes grading 65.8% Fe.

#### **Forward Exploration Program**

Initial high priority target areas identified within Arrow's Simandou North Iron Project have had preliminary field work conducted on them, the results of which have allowed the Company to develop four main target areas where area coincident modelled geophysical responses combined with favourable geology and elevated iron geochemistry demonstrate the potential for significant haematite development and enrichment within the iron bearing lithologies.

Sixteen scout diamond drill holes have been completed on the Simandou North Iron Project. The results of this work have confirmed the presence of high-grade iron and iron bearing BIFs with the potential to be hydrothermally upgraded at the Dalabatitni and Kowouleni Targets.

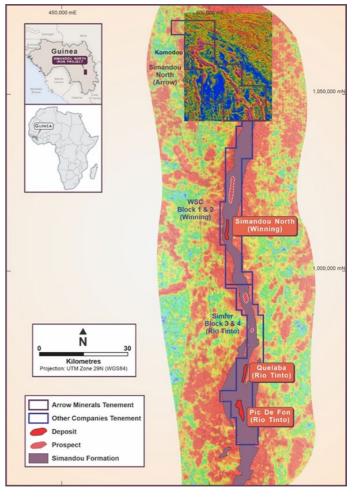


Figure 5. Map showing distribution of the Simandou Range stratigraphy, including known iron deposits, extending north through Simfer (Rio Tinto) Blocks 3 & 4, WSC Blocks 1 & 2, into Arrow's Simandou North Iron Project area where detailed airborne magnetic geophysical image highlights the interpreted stratigraphic continuation (Datum WGS84-29N).

A three-stage systematic exploration program has been designed in conjunction with CSA Global to establish the potential and rapidly advance the Simandou North Iron Project.

Stage 1 of this work program is underway with Stages 2 & 3 planned to commence directly after the wet season subsides.

#### **Stage 1 - Refine targets (underway)**

Arrow has commenced compiling and analysing all the geological, geochemical and geophysical data collected by the Company over the past 12 months. This information is being reviewed in combination with open access public domain geological data. This work will provide a better understanding of the stratigraphic position of the project area in relation to other known high-grade deposits contained within the Simandou Range.

Additionally, a detailed structural analysis of the area covering the four target areas to the southern boundary of the permit area is being conducted incorporating the airborne geophysical information and subsurface geological data collected from the scout drilling program. The aim of this work is to identify structural corridors that may reflect synformal deformations and conduits for hydrothermal fluids that result in haematite upgrading.

In conjunction with this work detailed geological mapping of the Kalako Target ridgeline extending from the southern boundary north for approximately 2km covering the area of significant surface geochemical anomalism reported from rock chips will occur at the end of the wet season. This work will tie the known geology of WCS's Block 1 into Arrow's Simandou North Iron Project geology.

#### Stage 2 - Advance current drill targets

Based on the outcome of geological mapping and airborne geophysics interpretation undertaken in Stage 1 above, the Company will execute two detailed single traverse lines, consisting of 6 to 10 regularly spaced vertical diamond drill holes. These holes are intended to penetrate to basement. This information collected will provide understanding of the stratigraphy and depth to basement, allowing the Company to vector in on potential structural conduits for hydrothermal fluids capable of upgrading haematite within synforms.

Diamond drilling will also be conducted at Dalabatini to extend the known high-grade iron zones intersected in DALDDH001 & DALDDH003 and test to depth to ascertain the potential for similar mineralisation to that observed at Pic de Fon at depth.

### Stage 3 - Regional target generation

The four target areas, Dalabatini, Diassa, Kowouleni and Kalako occur in the southern 25% of the Simandou North Iron Project permit area. Additional work including detailed geological mapping and geochemical sampling of 75% of the permit area lying north of Dalabatini will be conducted. The aim of this work will be to identify additional target zones with potential for significant high-grade iron mineralisation.

#### ARROW MINERALS STRATEGY

Arrow Minerals has a strategy of delivering long-term value to shareholders through the discovery and development of economic mineral deposits in West Africa. Arrow has beneficial rights of 33.3% in the Simandou North Iron Project, Guinea and a clear road map to extend these rights to 100% by delivering on key milestones (AMD ASX Announcement 30 August 2023). Arrow aims to systematically advance the Simandou North Iron Project over the coming months to identify areas of high-grade iron within the project area and realise the potential value released through the major infrastructural upgrades, rail and port, underway in the region.

Announcement authorised for release by Mr Hugh Bresser, Managing Director of Arrow Minerals.

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Investor & Media Relations contact Investability: investors@investability.com.au

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#### **Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Hugh Bresser who is a Member of the Australian Institute of Geoscientists and Australasian Institute of Mining and Metallurgy. Mr Bresser is an employee of Milagro Ventures which provides executive and technical consultancy services to Arrow Minerals, Mr Bresser is in the role of Managing Director of Arrow Minerals, he has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves". Mr Bresser consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Disclaimer

Information included in this release constitutes forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue" and "guidance" or other similar words, and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

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Forward looking statements are based on the company and its management's assumptions made in good faith relating to the financial, market, regulatory and other relevant environments that exist and effect the company's business operations in the future. Readers are cautioned not to place undue reliance on forward looking statements.

Forward looking statements are only current and relevant for the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the company does not undertake any obligation to publicly update or revise any of the forward-looking statements or advise of any change in events, conditions or circumstances on which such statement is based.

Table 1 - Diamond Drillhole Information (Coordinates are reported in UTM MGA84 Zone 29)

Hole ID	Northing (m)	Easting (m)	<u>RL (m)</u>	<u>Dip</u>	<u>Azimuth</u>	<u>EOH (m)</u>
DALDDH001	1048274	509930	668	-60	90	21.6
DALDDH002	1048301	509593	727	-60	90	56.1
DALDDH003	1048301	509593	727	-60	270	58.5
DALDDH004	1047902	509893	752	-60	90	29.1
DALDDH005	1047900	509793	760	-60	90	40.6
KOWDDH001	1043551	513219	797	-60	90	56.7
KOWDDH002	1043548	513221	797	-60	270	80.1
KOWDDH003	1043553	513120	788	-60	90	33.0
KOWDDH004	1043401	512608	727	-60	90	66.0
KOWDDH005	1043452	513270	798	-60	270	54.1
KOWDDH006	1043999	513218	767	-60	90	68.8
KOWDDH007	1043999	513215	767	-60	270	79.5
KOWDDH008	1043999	513123	772	-60	90	74.9
KOWDDH009	1043440	513150	752	-60	270	28.3
KOWDDH010	1043906	513381	756	-60	220	45.6
KOWDDH011	1043845	513313	757	-60	40	32.9

Table 2 - Drillhole assay results Information (Coordinates are reported in UTM MGA84 Zone 29)

						_			,
Hole ID	Sample ID	From (m)	To (m)	Fe (%)	SiO <sub>2</sub> (%)	P ppm	Al <sub>2</sub> O <sub>3</sub> (%)	LOI (%)	<u>Significant</u> <u>Intercept</u>
DALDDH001	SR0030251	0	2	45.15	13.35	510	14.40	6.93	
	SR0030252	2	4	57.48	7.16	510	7.10	3.29	
	SR0030253	4	6	51.32	17.60	470	6.11	3.38	
	SR0030254	6	8	55.71	8.80	560	7.59	4.24	
	SR0030255	8	10	48.33	11.75	930	10.65	6.70	12m @ 55.0%Fe
	SR0030256	10	12	58.56	8.55	470	5.75	2.71	
	SR0030257	12	14	58.89	6.93	580	5.93	2.41	
	SR0030258	14	16	11.56	53.50	740	20.90	8.97	
DALDDH002	SR0030261	0	2	56.66	7.67	440	7.00	4.84	4m @ 59.8%Fe
	SR0030262	2	4	62.92	3.63	550	3.67	3.22	
	SR0030263	4	6	44.55	35.90	300	0.43	0.37	
	SR0030264	6	8	43.36	37.30	490	0.31	0.44	
	SR0030265	8	10	44.80	33.60	230	0.66	0.93	
	SR0030266	10	12	47.28	31.40	240	0.73	0.81	
	SR0030267	12	14	45.16	35.20	470	0.37	0.69	
	SR0030268	14	16	44.36	35.80	230	0.43	0.26	
	SR0030269	16	18	44.97	34.30	250	0.84	0.64	
	SR0030270	18	20	42.64	38.50	70	0.59	0.55	
	SR0030271	20	22	42.35	38.70	160	1.08	1.01	
	SR0030272	22	24	41.59	38.80	490	0.76	0.85	
	SR0030273	24	26	39.73	40.90	360	0.76	1.08	
	SR0030274	26	30	37.47	44.80	420	0.75	0.48	
	SR0030275	30	32	39.01	42.90	370	0.43	0.18	
	SR0030276	32	34	37.62	43.80	750	1.14	0.77	
	SR0030277	34	36	34.58	45.80	540	2.29	1.24	
	SR0030278	36	38	26.26	54.10	880	3.92	3.27	
	SR0030279	38	40	37.80	41.20	540	3.08	1.50	
	SR0030281	40	42	39.08	40.90	540	1.41	0.81	
DALDDH003	SR0030284	0	2	42.79	25.10	690	8.24	5.64	
	SR0030285	2	4	59.79	5.39	950	4.52	5.58	
	SR0030286	4	6	56.90	6.38	690	5.20	6.05	_
	SR0030287	6	8	57.22	10.25	470	4.68	3.11	

	SR0030288	8	10	61.37	6.33	490	3.33	2.58	12m @ 60 10/ Es
	SR0030289	o 10	12	63.23	4.33	740	3.43	2.56	12m @ 60.1% Fe
	SR0030209 SR0030290	12	14	62.38	4.92	890	3.43	2.56	
	SR0030290 SR0030291	14	16	56.34	10.40	450	5.04	3.05	4m @ 54.6% Fe
	SR0030291 SR0030292	16	18	52.83	17.70	520	4.41	2.50	4111 (W 34.0 /6 FE
	SR0030292 SR0030293	18	20	50.10	22.10	480	4.41	1.71	
	SR0030293 SR0030294	20	22	52.18	21.20	460	3.32	1.71	
	SR0030294 SR0030295	22	24	48.33	26.80	680	3.32	1.33	
	SR0030295 SR0030296	24	26	41.59	39.10	430	0.40	0.49	
	SR0030290 SR0030297	26	28	45.45	34.30	480	0.40	0.49	
	SR0030297 SR0030298	28	30	43.43	36.90	430	1.28	0.23	
	SR0030290 SR0030299	34	36	49.94	22.40	570	3.83	1.99	
	SR0030299 SR0030501	38	40	54.45	12.85	880	4.85	2.73	4m @ 57.2% Fe
	SR0030501 SR0030502	40	42	60.01	7.82	420	3.90	1.88	4111 (W 31.2% FE
	SR0030502 SR0030503	42	44	45.15	25.90	430	4.59	2.60	
	SR0030503 SR0030504	44	46	53.14	14.60	480	4.39	2.00	
		44	48				3.22		4m @ 56 20/ Ea
DAI DDU004	SR0030505			59.31	9.62	490		1.40	4m @ 56.2% Fe
DALDDH004	SR0030553	0	2	50.61	6.37	940	12.50	9.29	
	SR0030554	2	4	48.08 45.82	7.12	410	13.15	9.84	
	SR0030555	4	6 8		8.94 29.60	640 370	13.60 19.60	11.78 11.35	
	SR0030556	6	10	27.45					
DAL DDI 100E	SR0030557	8		20.55	26.20	320	29.60	13.83	
DALDDH005	SR0030558	0	2	36.87	11.15	420	19.90	13.78	
	SR0030559	2	4	35.06 17.32	16.55	360 320	19.70	12.67	
KOMDDI 1004	SR0030561	4	6		36.10		26.80	11.18	
KOWDDH001	SR0030509	0	2	49.30	21.60	80	4.95	3.68	
	SR0030510	2	4 6	37.15	26.40	230	13.60	7.26	
	SR0030511	4		44.79	32.70	220	0.94	1.66	
	SR0030512	6	8	45.64	31.00	480	0.94	1.31	
	SR0030513	8 10	10 12	46.78	29.10	680	2.57	2.10	
	SR0030514	12		47.73	30.80	550	0.66	0.80	
	SR0030515		14 16	47.36	29.60	470	1.25	0.21	
	SR0030516	14 16	18	46.15 38.74	33.90	390	0.36	-0.01	
	SR0030517				39.20	520	4.49	1.20	
	SR0030518	18	20	44.86	35.80	660	0.38	0.67	
	SR0030519	20	22	44.90	34.10	570	0.38	0.45	
	SR0030521	22	24	42.52	37.30	360	0.23	0.67	
	SR0030522	24	26	43.31	37.00	540	0.27	0.84	
	SR0030523	26	28	38.52	41.70	830	0.84	1.05	
	SR0030524	28	30	31.15	44.20	860	5.30	0.85	
	SR0030525	30	32	40.08	41.50	610	0.44	0.77	
	SR0030526	32	34	37.44	43.50	710	0.88	0.25	
	SR0030527	34	36	37.68	41.40	780	2.77	0.56	
	SR0030528	36	38	19.36	54.30	610	11.45	2.35	
	SR0030529	38	40	11.68	49.20	850	13.45	1.18	
	SR0030530	40	42	30.91	45.70	850	4.38	-0.01	
	SR0030531	42	44	37.59	40.90	740	1.02	-0.01	
KOMDDI 1000	SR0030532	44	46	31.94	47.50	910	1.82	-0.01	
KOWDDH002	SR0030536	0	2	46.33	30.90	80	0.85	1.26	
	SR0030537	2	4	45.92	31.60	50	0.59	0.94	
	SR0030538	4	6	47.21	28.00	180	3.27	1.87	
	SR0030539	6	8	45.81	31.90	290	1.46	1.20	
	SR0030541	8	10	46.22	30.60	490	1.60	1.69	
	SR0030542	10	12	45.26	33.40	610	0.78	0.21	
	SR0030543	12	14	43.59	33.80	360	1.95	0.59	
	SR0030544	14	16	40.72	34.20	460	4.69	2.56	

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	SR0030545	16	18	43.71	36.00	460	0.90	-0.01	
	SR0030545 SR0030546	18	20	45.02	33.50	580	0.51	0.80	
	SR0030547	20	22	45.04	33.40	560	0.37	1.11	
	SR0030547 SR0030548	22	24	43.45	35.40	510	0.83	0.83	
	SR0030549	24	26	39.65	37.30	490	3.24	1.59	
	SR0030549 SR0030550	26	28	40.17	39.60	470	0.91	-0.01	
KOWDDH003	SR0030563	0	20	50.95	22.80	480	2.46	2.38	
KOWDIIIOOS	SR0030564	2	4	44.10	33.20	180	2.40	0.98	
	SR0030565	6	8	41.76	34.40	340	3.62	1.54	
	SR0030566	8	10	47.49	31.20	460	0.90	0.52	
	SR0030567	10	12	42.70	36.60	550	1.48	0.67	
	SR0030568	12	14	41.56	36.10	970	3.11	1.75	
	SR0030569	16	18	41.65	38.10	540	1.72	0.73	
KOWDDH004	SR0030571	18	20	37.75	38.70	170	3.95	2.43	
ROWDDIIOOT	SR0030571	20	22	37.89	39.70	240	2.49	2.19	
	SR0030573	22	24	38.85	39.00	270	1.90	2.35	
	SR0030574	24	26	30.39	45.60	220	6.66	3.85	
	SR0030574	26	28	18.41	54.10	500	11.90	5.48	
	SR0030576	28	30	35.39	39.90	510	5.29	2.94	
KOWDDH005	SR0030570	0	2	43.79	28.10	350	5.56	3.66	
ROWBBII000	SR0030653	2	4	48.25	28.00	500	1.92	1.07	
	SR0030654	4	6	43.26	34.40	470	2.35	0.92	
	SR0030655	6	8	44.18	34.80	550	0.84	0.94	
	SR0030656	8	10	46.43	33.10	660	0.81	0.40	
	SR0030657	10	12	46.79	30.50	770	0.82	1.16	
	SR0030658	12	14	45.79	32.60	560	0.58	0.85	
	SR0030659	14	16	45.57	32.50	560	0.90	0.41	
	SR0030661	16	18	42.31	37.50	520	1.23	1.12	
	SR0030662	18	20	43.73	36.00	550	1.17	0.99	
	SR0030663	20	22	45.06	33.50	630	0.62	2.16	
	SR0030664	24	26	40.95	38.00	570	1.7	1.29	
	SR0030665	26	28	41.64	38.20	480	0.63	0.92	
	SR0030666	28	30	43.21	36.80	690	0.35	1.28	
KOWDDH006	SR0030578	0	2	47.36	20.90	210	5.88	5.25	
	SR0030581	4	6	45.09	27.80	350	3.96	3.94	
	SR0030582	6	8	47.72	28.90	440	1.42	2.26	
	SR0030583	8	10	48.88	26.10	300	0.40	2.57	
	SR0030584	10	12	44.64	31.70	200	2.75	2.56	
	SR0030585	12	14	43.28	35.30	190	0.56	2.01	
	SR0030586	14	16	48.91	27.70	260	0.68	3.36	
	SR0030587	16	18	43.58	34.20	230	0.80	2.54	
	SR0030588	18	20	42.84	34.30	340	1.37	2.36	
	SR0030589	20	22	40.12	37.30	300	3.27	2.56	
	SR0030590	22	24	44.48	33.80	380	0.67	1.43	
	SR0030591	30	32	40.78	36.60	740	1.64	3.91	
	SR0030592	32	34	41.25	36.90	480	0.67	3.29	
	SR0030593	34	36	42.76	34.10	180	1.59	3.78	
	SR0030594	36	38	44.45	32.70	170	0.73	3.25	
	SR0030595	38	40	49.43	23.80	160	0.86	4.90	
	SR0030596	40	42	44.79	29.50	180	2.36	4.51	
	SR0030597	42	44	45.37	28.30	290	2.33	3.88	
	SR0030598	44	46	49.37	18.15	690	2.49	8.28	
	SR0030599	46	48	35.94	34.70	1700	5.16	8.47	
	SR0030601	48	50	20.55	52.70	570	9.32	7.54	
KOWDDH007	SR0030604	0	2	50.55	20.00	160	2.93	4.88	
	SR0030605	2	4	50.53	22.80	320	1.66	2.77	

	CD0030606	4	6	40.00	20.00	220	0.46	1.04	
	SR0030606	4	6	48.00	30.00	330	0.46	1.94	
	SR0030607	6	8	43.33	34.30	140	0.25	3.62	
	SR0030608	8	10	43.82	33.70	150	2.05	1.52	
	SR0030609	12	14	51.01	23.90	240	0.63	3.12	
	SR0030610	14	16	48.36	27.40	100	0.68	2.80	
	SR0030611	16	18	36.61	39.30	140	5.20	3.23	
	SR0030612	18	20	44.88	34.00	300	0.66	1.54	
	SR0030613	20	22	49.51	26.30	490	0.60	2.63	
	SR0030614	22	24	50.39	24.20	280	0.55	2.78	
	SR0030615	24	26	47.15	28.70	540	0.60	3.96	
	SR0030616	28	30	49.71	19.20	640	1.94	7.57	
	SR0030617	34	36	29.38	44.30	110	7.13	5.78	
	SR0030618	36	38	39.50	34.00	340	3.85	6.27	
	SR0030619	38	40	45.06	24.20	340	2.89	8.23	
	SR0030621	40	42	38.91	32.70	440	1.26	7.06	
	SR0030622	42	44	39.28	36.30	300	1.07	5.71	
	SR0030623	44	46	40.42	32.30	560	0.89	6.67	
	SR0030624	48	50	44.18	30.60	450	1.26	4.46	
	SR0030625	50	52	44.88	30.80	430	0.73	3.76	
KOWDDH008	SR0030628	0	2	54.07	10.40	560	4.26	8.23	2m @ 54.1% Fe
	SR0030629	2	4	50.61	16.40	230	3.78	7.25	
	SR0030630	4	6	49.47	21.10	180	2.62	6.33	
	SR0030631	6	8	47.09	27.70	150	0.66	5.33	
	SR0030632	8	10	48.32	25.40	100	0.56	5.21	
	SR0030633	10	12	49.02	23.50	140	1.24	5.58	
	SR0030634	12	14	56.71	12.95	150	0.74	5.82	2m @ 56.7% Fe
	SR0030635	14	16	48.55	22.10	220	2.57	5.79	
	SR0030636	18	20	48.85	23.50	100	3.04	3.83	
	SR0030637	20	22	40.74	36.70	330	2.14	3.19	
	SR0030638	22	24	43.03	35.80	420	0.83	2.48	
	SR0030639	24	26	22.05	63.20	350	3.16	3.19	
	SR0030641	30	32	43.21	32.10	580	1.87	4.36	
	SR0030642	32	34	45.79	26.00	480	2.25	5.98	
	SR0030643	34	36	57.43	11.15	380	0.99	5.90	4m @ 55.0% Fe
	SR0030644	36	38	52.48	19.75	740	1.50	2.49	
	SR0030645	38	40	44.87	30.00	270	2.15	3.88	
	SR0030646	40	42	43.59	33.20	430	1.15	4.30	
	SR0030647	42	44	42.63	36.00	120	0.96	3.09	
	SR0030648	44	46	53.97	17.10	670	0.6	6.03	
	SR0030649	46	48	47.45	17.75	680	4.87	10.49	
KOWDDH009	SR0030668	0	2	46.73	24.80	500	4.34	3.38	
	SR0030669	2	4	44.60	31.60	900	1.62	2.33	
KOWDDH010	SR0030670	0	2	39.32	17.05	550	15.3	11.06	
	SR0030671	2	4	28.00	27.20	860	19.95	11.14	
	SR0030672	4	6	34.11	31.10	1250	9.36	9.45	
KOWDDH011	SR0030675	0	2	47.40	16.60	940	4.72	9.26	
	SR0030676	2	4	28.00	44.50	610	8.51	6.84	
				41.81	24.90	1140	5.54	8.54	
	SR0030677 I	4	0	41.01	ZT.JU	1170			
	SR0030677 SR0030678	<u>4</u> 6	6 8	44.06	20.90	1430	6.33	8.64	

JORC Code 2012 Edition
Section 1 Sampling Techniques and Data

Section 1 Sampling Ted Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Diamond Drilling</li> <li>The diamond drill core was photographed and logged by Company geologists to industry standard.</li> <li>Selected zones were identified for analysis and sampled in 2m intervals.</li> <li>Full core was marked up and cut using an electric powered core saw. Halfcore was collected for analysis.</li> <li>2-3kg samples were crushed to 70% less than 2mm, rotary split off 250g then pulverised better than 85% passing 75 microns (ALS Prep 31Y).</li> <li>Lithium borate fusion and XRF finish is the industry method of analysis (ALS ME_XRF21u) used to analyse the split and pulverized sample.</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit, or other type, whether core is oriented and if so, by what method, etc).	Diamond Drilling  Arrow utilised a contracted professional diamond drilling company that utilised a man portable Ranger drillrig.  Drillcore of HQ3 (63.5mm) diameter was collected from surface to the end of hole (EOH).  Drill holes were not surveyed. Drill core was not oriented.
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>	Diamond Drilling Core recovery was determined as part of the geotechnical information collected at the drillsite using the driller marker blocks as reference. Core recovery was targeting >90%, when specific run recovery was <90% this was recorded and run lengths reduced until >90% recovery was again achieved.
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>	Diamond Drilling All logging is qualitative. The entire core length was logged and recorded in 2m intervals. Diamond drill core was geologically logged with geological units, colour and grain size, weathering intensity and alteration average. All core was photographed directly from the barrel (run) and again in core boxes prior to sampling.
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</li> </ul>	Diamond Drilling Selective 2m intervals of the diamond core were selected for sampling based on lithology. Core was marked parallel to the core axis and cut down the central axis. Half core samples were collected over the entire sample interval. Half core duplicate samples were collected every 20 samples. All samples were taken to ALS Global Bamako for industry standard sample preparation. Quality control was assessed as adequate for this

Criteria	JORC Code explanation	Commentary
	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.	<ul> <li>batch.</li> <li>Samples are considered to be sufficiently representative to inform a mineral resource estimate should this be required in the future.</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 model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Diamond Drilling</li> <li>All samples were taken to ALS Global Bamako for industry standard sample preparation.</li> <li>2-3kg samples were crushed to 70% less than 2mm, rotary split off 250g then pulverised better than 85% passing 75 microns (ALS Prep 31Y).</li> <li>Samples were then dispatched to ALS Johannesburg for analysis.</li> <li>Lithium borate fusion and XRF finish is the industry method of analysis (ALS ME_XRF21u) used to analyse the split and pulverized sample.</li> <li>Commercial standards were inserted at every 20th sample.</li> <li>Blank samples were inserted at an approximate rate of 1:20, this varied with run and batch size.</li> <li>ALS Global ran internal duplicates and standards as part of their QA/QC processes.</li> <li>The QC is acceptable for these holes and the reporting level.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	No independent verification of results have been conducted, it is not considered required at this stage of exploration.      No holes have been twinned.      Data is entered and stored electronically, managed by a professional database administrator.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	Diamond Drilling Collar locations were recorded using hand held GPS units. All output images were generated in a WGS84, UTM zone 29N projection. Topographic control is established using handheld GPS (+/- 2m). No downhole survey data has been recorded. Topographic control has been established using a DTM created as part of an airborne geophysical survey (previously reported).
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>	Diamond Drilling  All data collected from the drillholes in this report is of data spacing and distribution sufficient to inform quantitative work such as Minerals Resource.  No sample compositing applied.  No Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.
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>	Diamond Drilling The drilling is early-stage scout drilling and not adequately spaced to determine the key geological features with high confidence. The orientation of drill lines is appropriate for the known regional geology trends other than the identification of regional stratigraphy. Sampling was bias by nature. Targeting specific lithologies, these samples are not considered representative of the entire lithological unit or regional lithological package.
Sample security	The measures taken to ensure sample security.	Diamond Drilling     Core processing and sampling is conducted under the supervision of Company geologists.     Samples secured in single sample bag with unique identification number, then zip locked into large

Criteria	JORC Code explanation	Commentary
		rice bags and transported via company vehicle to ALS Global laboratory in Bamako, Mali.  At which point the laboratory takes control as part of chain of custody.  Pulps were shipped to ALS Global Laboratories in Johannesburg for analysis.  Pulps are securely stored at ALS Global Laboratory in Johannesburg.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Diamond Drilling  Arrow is not aware of any audit or review conducted on the lithological and geochemical characteristics of the Simandou North Iron Project area.

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Simandou North Iron Project southeast Guinea consists of a single permit owned by Societe Mineralfields Guinea SARLU a wholly owned subsidiary of Amalgamated Minerals Pte. Ltd. The permit details are ACtIF 22967, expiry 28/04/2024.</li> <li>Arrow holds beneficial rights to a 33.3% interest in Amalgamated and is earning a majority 60.5% interest in Amalgamated Minerals Pte. Ltd with rights to move to 100%. The permit is granted and currently live and in good standing.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Minimal exploration has been conducted in the area by Vale and BSGR (previously disclosed).
Geology	Deposit type, geological setting, and style of mineralisation.	The iron deposits of the Simandou Range are in the southern domain of the West African Craton. The Simandou Range is composed of metamorphosed supracrustal rocks of the Simandou Group that comprises basal quartzites, ferruginous quartzites, cherts, shales to phyllites and banded iron formations or itabirites. The rocks are interpreted to have been deformed by the 'Eburnean/Birimian' Orogeny.  The iron deposits are composed of selectively enriched iron formation/itabirite, located along a ridge of intensely deformed and strongly weathered Simandou Group rocks, which overlie a biotite granite-gneiss basement.
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>	The drill hole data referred to in this document has been summarised in Table 1 of this report.
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</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</li> </ul>	<ul> <li>Significant intercepts of Fe are reported at 54% Fe cut-offs.</li> <li>Maximum internal dilution of 2m is considered.</li> <li>No minimum significant interval length is considered.</li> <li>Refer to Table 2 significant interval table.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation 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 (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Drill holes were designed to test across the dominant N-S structural grain.</li> <li>Lithologies are observed to be deformed and folded, downhole widths are reported, there is insufficient geological understanding to determine true width.</li> </ul>
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>	<ul> <li>Summary maps are provided in this report</li> <li>Surface outcrop geological map and simplified cross section images are provided in this document.</li> </ul>
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.	<ul> <li>Further exploration activities are required to allow assessment of potential target size and will be provided when Arrow Minerals progresses work and data validation.</li> <li>Lithological units described are based on visual mineral composition estimates made by Arrow Exploration Geologists in the field.</li> <li>No quantitative petrographic analysis has been conducted to verify these lithological descriptions.</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.	<ul> <li>This report addresses the outcomes of seven diamond drillholes over two selected target areas.</li> <li>A total of 94 half core samples were submitted for analysis in four separate batches.</li> <li>Drilling intercepts with combined average analytical results with higher than 58% Fe are considered significant based upon comparisons to existing iron ore operations in the Pilbara and reported mineral resources in the Simandou Range.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further exploration work will occur across the Simandou North Iron Project utilising fit for purpose techniques that may include reverse circulation and diamond drilling, ground, and airborne geophysics to investigate anomalies that, incorporating all data available, warrant further work to determine if economic mineralisation exists.</li> </ul>