

# Testwork achieves extremely high quality hematite fines at Simandou North Project

**Outstanding metallurgical testwork results have once again highlighted a high grade, low alumina product. This follows Arrow's MoU with Baosteel for mine gate sales.**

## Highlights

- Arrow has completed additional ore type characterisation and metallurgical testwork on the Simandou Formation Oxide BIF (Oxide BIF) at its Simandou North Iron Project (Simandou North)
- Simulated flowsheets deliver high grade +66% Fe, low alumina (<0.5% Al<sub>2</sub>O<sub>3</sub>) hematite fines product across all three flowsheet options
- Products are exceptionally low in alumina, highlighting the potential to attract a price premium given the reduced supply of low alumina product in the market
- The results provide a preferred flowsheet to be further assessed as part of process plant scoping study work
- Simulated "All spirals" simple gravity separation flowsheet delivers the most attractive combined mass recovery and grade results at the following density cut point: SG4.05; 44% mass yield, 66.8% Fe, 2.9% SiO<sub>2</sub>, 0.49% Al<sub>2</sub>O<sub>3</sub>

Arrow Minerals Limited (ASX: **AMD**) (**Arrow** or the **Company**) is pleased to announce highly favourable metallurgical testwork results which demonstrate the premium quality of the iron ore at its Simandou North project in Guinea.

Arrow recently signed a Memorandum of Understanding (MoU) providing a framework for potential mine gate sales of iron ore to Baosteel Resources Holding (shanghai) Co.Ltd<sup>1</sup> (Baosteel) from Simandou North<sup>2</sup>.

This important strategic partnership will leverage complementary strengths and resources, including access to the Simandou port and rail, and markets, to advance the development of Arrow's iron ore and bauxite projects.

In August 2024, Arrow announced a significant Exploration Target (281Mt to 716Mt Simandou Formation Oxide BIF at 33-46% Fe)<sup>3</sup> at the project, as well as results of bench scale metallurgical

<sup>1</sup> Baosteel Resources Holding (shanghai) Co. Ltd is a wholly owned subsidiary of Baowu Group

<sup>2</sup> Refer to ASX Announcement 21 October 2024 titled "Baosteel and Arrow sign Iron Ore Development MoU."

<sup>3</sup> Refer to ASX Announcement 6 August 2024 titled "Exploration Target for Hematite Fines Project."

testwork (stage 1) that supported a 61-64% Fe, low alumina hematite fines product being achieved via a simple wet gravity process<sup>3</sup>.

Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

**Arrow Managing Director David Flanagan said:**

*“These outstanding metallurgical results demonstrate the premium quality of the Simandou North product, characterised by its high grade and low contaminants. These results have exceeded our expectations.”*

*“For some time, the market has been experiencing a decline in the supply of low alumina product to the steelmaking industry. The Simandou North mineralisation is inherently low in alumina which is a bonus for the project. This testwork has once again demonstrated that a simple gravity separation process is highly effective in getting rid of the silica and producing a very high iron grade product with very low alumina content.”*

*“This is important because it highlights the potential to attract a premium price, typically in the order of an additional US\$10 - \$15/t above the normal 62% Fe Pilbara fines index.”*

*“Commissioning of the Trans-Guinean multi-user railway remains on track for late 2025. We fully intend to maximise the opportunity this railway provides.”*

*“Consistent with the terms of the MOU agreed in October 2024, Arrow continues to engage with Baosteel regarding potential sales at the mine gate or rail siding. Baosteel is the world’s largest steel producer, is a significant investor and shareholder in all the infrastructure and is actively involved in the development of Simandou blocks 1 and 2, on the adjoining tenements to the south.”*

**STAGE 2 METALLURGICAL TESTWORK SUMMARY**

Following the stage 1 sighter metallurgical testwork completed in the first half of 2024<sup>4</sup>, stage 2 testwork has focussed on further characterisation of the Oxide BIF ore types (Friable and Intact) of Simandou North through a more comprehensive testwork characterisation program<sup>4</sup>. The objective was to assess the amenability of the two main rock types to different process flowsheet options, and in doing so, select a preferred process flowsheet to be assumed in a scoping study level estimate of process plant’s capital and operating costs. Results of the testwork provide other key information that will also be used in scoping study work for the process plant.

This testwork has utilised a broader suite of drill hole intervals to increase representation of testwork composite samples relative to previous testwork. As previously announced<sup>4</sup>, Arrow awarded the stage 2 metallurgical testwork program to Nagrom, a metallurgical laboratory based in Perth. Mineral Technologies were engaged by Arrow Minerals to provide input to the test program as well as specialist advice regarding the potential for gravity and magnetic separation equipment inclusion in the process flowsheet. Mineral Technologies are a globally recognised fine mineral separation specialist company with expertise in iron ore, mineral sands and other commodities.

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<sup>4</sup> Refer to ASX Announcement 23 October 2024 titled “Arrow takes key step towards project development with next phase of metallurgical testwork.”

Refer to Appendix I for detailed information on the composite samples, the testwork program completed, and detailed results from the testwork that have been used to complete the simulated flowsheets that are summarised below.

### **Process flowsheet simulation results**

The testwork results have been used to simulate three potential process flowsheets to produce saleable specification product. All flowsheets have a crushing stage to produce the different sized feed. Each flowsheet varies by the type of gravity separation equipment utilised.

The flowsheet options are summarised as:

- All spirals processing of -1mm feed; 1mm product;
- Dense Media Separation (DMS) (-6.3+1.0mm feed) and Spirals (-1.0mm feed); > 6.3mm product; and
- Dense Media Separation (DMS) (-3.35+1.0mm feed) and Spirals (-1.0mm feed); > 3.35mm product.

Note that all results reported in this release are laboratory bench-scale test results. There is a possibility that plant-scale outcomes may not achieve the same results due to the differences in plant-scale performance and the laboratory-scale testing where all conditions are controlled. Further testwork, equipment selection and piloting may be required to validate all outcomes.

Figure 1 below shows the mass recovery (%) and Fe grade (%) of the product for each of the simulated flowsheet options, using the results of the stage 2 testwork. For each of the flowsheets shown, the mass recovery and Fe grade varies according to the mass of deleterious elements (namely silicate minerals) being recovered to product. Lower values on the horizontal axis (HLS Liquids SG) relate to a lower density cutpoint for product; in practise emulating higher density material with a high Fe content and lower density material containing less Fe (and a higher content of deleterious elements) being recovered to product. The higher density values on the horizontal axis emulate the process recovering only the higher density material that contains a higher Fe content and a lower content of deleterious elements.

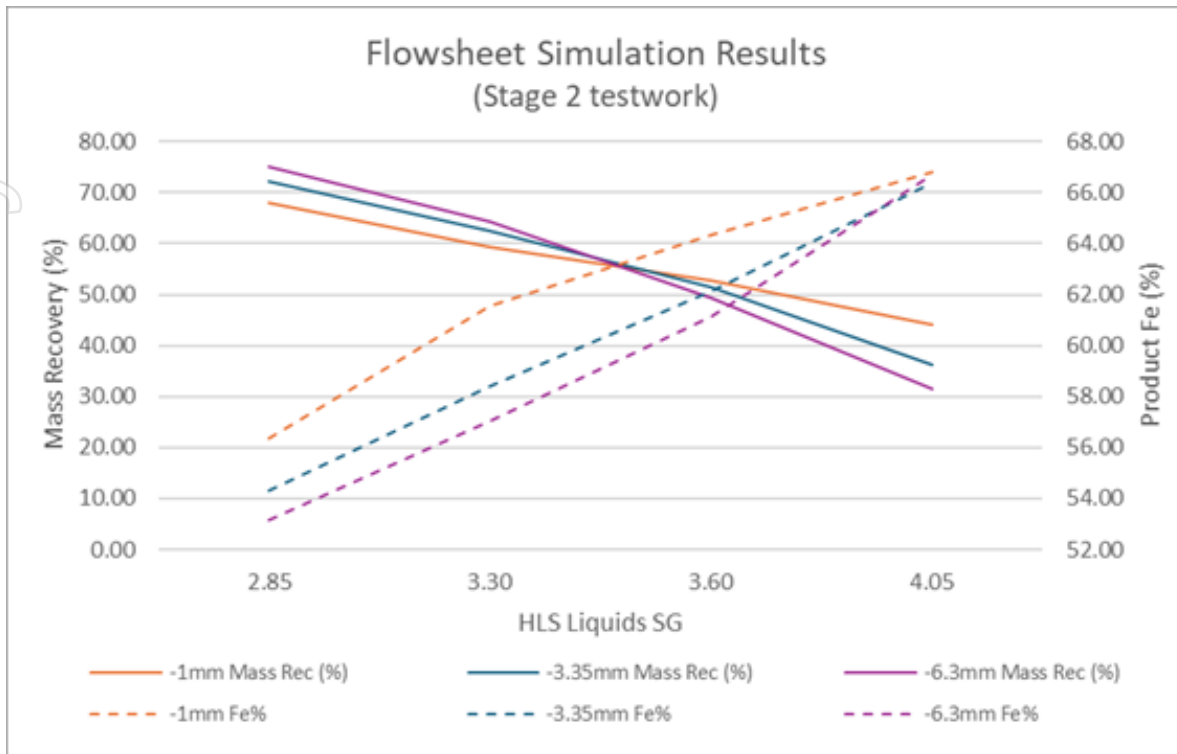


Figure 1. Mass Recovery (%) and Fe grade by Process Flowsheet

Plant scale spiral performance would be expected to closely follow the heavy liquids laboratory tests performed at the 4.05SG, therefore the flowsheet simulation predicted product grades and mass recoveries shown in Table 1 are all based on the 4.05SG testwork for each flowsheet option. The mass balance data shown is based on an average feed blend of 50% Friable and 50% Intact oxide BIF material types. Refer to Appendix I for further details of all simulated flowsheet options.

Table 1 Flowsheet(s) Simulation Product Specification (at SG:4.05)

Flowsheet Outline	Mass yield (%)	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)
<b>Crush to -1mm</b> Spiral Processing	44	66.8	2.9	0.49
<b>Crush to -3.35mm</b> -3.35+1.00mm DMS processing -1.00mm Spiral Processing	36	66.4	3.2	0.48
<b>Crush to -6.3mm</b> -6.3+1.00mm DMS Processing -1.00mm Spiral Processing	31	66.7	2.9	0.46

### Preferred Processing Flowsheet

The -1mm flowsheet simulation has achieved a high specification product at the highest overall mass yields compared to the other options and is therefore, at this stage, the preferred process flowsheet option. Trade-off studies will be completed to determine the effect of reducing the product grade and increasing the product mass yield by selecting a lower density cut.

From the data shown in Figure 1, reducing the cutpoint of the preferred flowsheet (All spirals processing -1mm feed) to the equivalent of 3.60SG will see mass yield increase to 52% and the Fe grade of the product reduce to 64.4%.

The product specification shown in Table 1 for the -1mm option is a very encouraging step in the development of the project. This product is very high grade and represents a premium hematite iron ore concentrate with exceptionally low alumina which will be highly valued in the steel making process. The elevated theoretical product grades at the encouraging mass yields achieved, suggest a relatively simple fine iron ore beneficiation flowsheet that presents low risk of not performing as expected. The conceptual flowsheet (discussed below) will be further tested through larger batch-scale testing, which will be performed on existing samples already present in Western Australia.

The preferred conceptual flowsheet based on the simulations is one that utilises all spirals to beneficiate a -1mm feed. This flowsheet is illustrated in Figure 2. Trade-off assessments completed as part of scoping study work on the process plant, together with further metallurgical testwork (discussed below), will be used to confirm this flowsheet as the preferred case. Further, this work will provide guidance on certain elements of the flowsheet (such as those areas marked “TBC” in the figure below) and what is ultimately presented in the scoping study assessment for the plant.

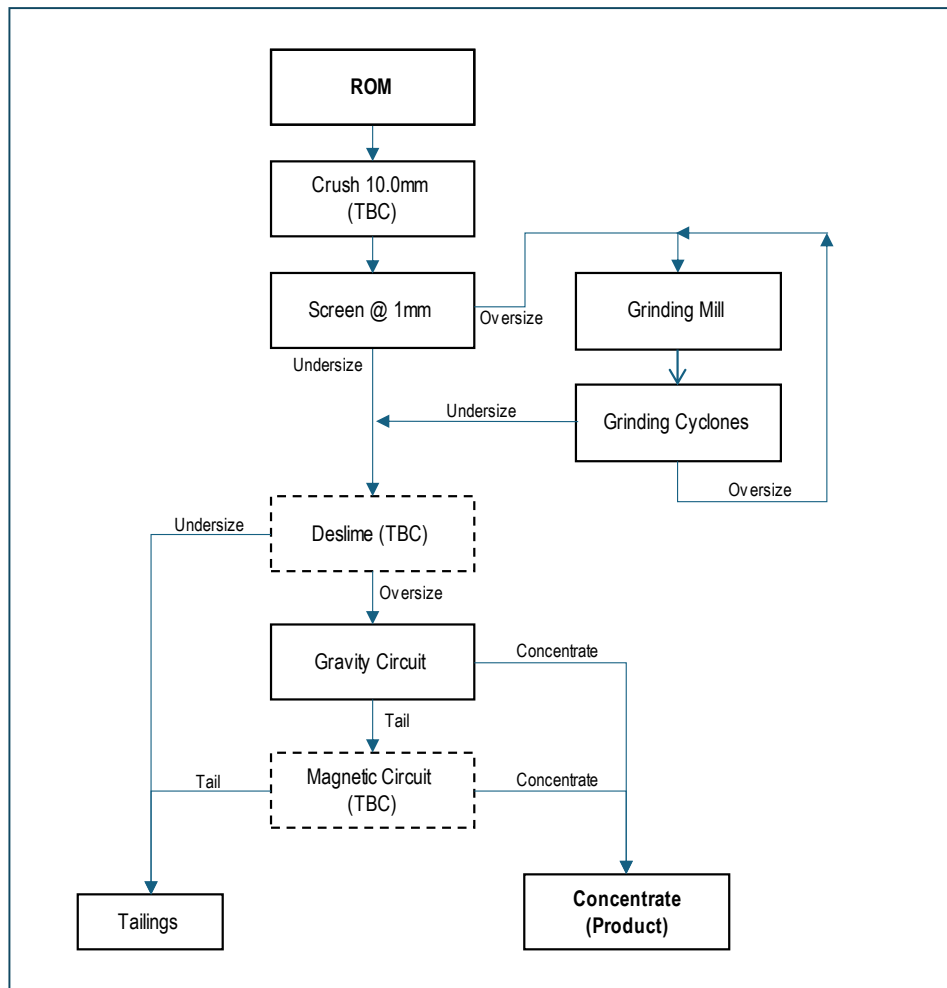


Figure 2. Conceptual Process Flowsheet (simplified block flow)

Additional testwork included Uniaxial Compressive Strength (UCS) testing on friable and intact samples of the oxide BIF to provide guidance on the relative hardness of the samples tested and crusher machine selection.

The friable oxide BIF is classified as having low hardness with average UCS of 31MPa and the intact oxide BIF hardness is also classified as low with an average UCS of 75MPa in the samples tested<sup>5</sup>. These results show that conventional crushing machines can be selected for the duty.

### **Next Steps**

Further works will now be scoped to gather key information to complete the scoping study capital and operating costs for the process plant. The forward works will likely include a bulk spiral test run aimed at controlling the level of gangue minerals remaining in the product, while maximising the iron recovery to product and as such will include additional characterisation of the feed and products at each stage.

Announcement authorised for release by the Board of Arrow.

For further information visit [www.arrowminerals.com.au](http://www.arrowminerals.com.au) or contact: [info@arrowminerals.com.au](mailto:info@arrowminerals.com.au)

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<sup>5</sup> Classification per: "Mineralogical, chemical and physical characteristics of iron ore", Clout JMF, Manuel JR from Iron Ore conference 2015.

## About Arrow Minerals

Arrow is focused on creating value for shareholders through the discovery and development of mineral deposits into producing mines. The Company's development strategy is to streamline a pathway to execution of a 'starter mine' that can later be expanded once in production<sup>6</sup>.

Arrow currently has two projects in Guinea, West Africa. The Simandou North Iron Project (**Simandou North**) and the Niagara Bauxite Project<sup>7</sup> (**Niagara, Niagara Project**). Both Niagara and Simandou North are located within trucking distance to the Trans-Guinean Railway (TGR) that is currently under construction by Winning Consortium Simandou. The location of the Niagara Project relative to the TGR provides significant benefits to the development of the project as a result of multi-user access to rail and port infrastructure (Figure 3).

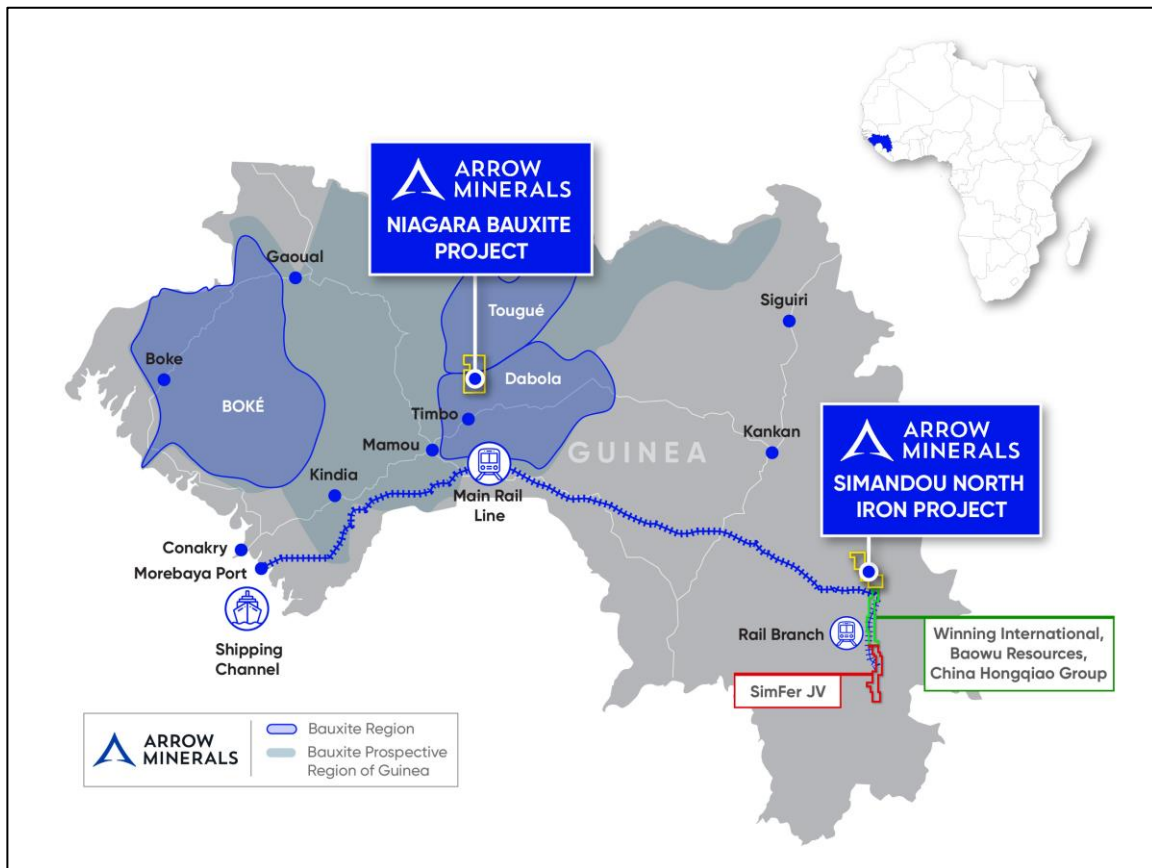


Figure 3. Location of Arrow's Projects in Guinea.

<https://arrowminerals.com.au/asx-announcements/>

<https://www.asx.com.au/markets/company/AMD/>

<sup>6</sup> Refer to presentation dated 29 October 2024 titled "Investor Presentation October 2024" available on Arrow's website

<sup>7</sup> Refer to ASX Announcement dated 1 August 2024 entitled "Arrow Expands Bulks Presence with Major Bauxite Transaction."

## **Competent Persons' Statement**

*The information contained in this announcement that relates to metallurgical information is based on, and fairly reflects, information and supporting documents compiled by Mr Aaron Debono, who is a full-time employee of NeoMet Engineering acting for Arrow Minerals Limited and a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Debono has sufficient experience which 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, Mineral Resources and Ore Reserves'. Mr Debono consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to Exploration Targets is based on, and fairly represents, information and supporting documents compiled by Marcus Reston, who is an employee of the Company and is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Reston has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr Reston is an employee of the Company and has performance incentives associated with the successful development of the Simandou North Iron Project. Mr Reston consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

## **Forward Looking Statements**

*This announcement contains "forward-looking statements" within the meaning of securities laws of applicable jurisdictions. Forward-looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "continue", "objectives", "outlook", "guidance" or other similar words, and include statements regarding certain plans, strategies and objectives of management and expected financial performance. Forward-looking statements are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance. These forward-looking statements are based upon a number of estimates, assumptions and expectations that, while considered to be reasonable by the Company, are inherently subject to significant uncertainties and contingencies, involve known and unknown risks, uncertainties and other factors, many of which are outside the control of the Company and any of its officers, employees, agents or associates.*

*Actual results, performance or achievements may vary materially from any projections and forward-looking statements and the assumptions on which those statements are based. Exploration potential is conceptual in nature, to date there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Readers are cautioned not to place undue reliance on forward-looking statements and the Company assumes no obligation to update such information made in this announcement, to reflect the circumstances or events after the date of this announcement.*

## APPENDIX I - BACKGROUND

The stage 2 metallurgical testwork program was developed in conjunction with Mineral Technologies, Nagrom, Arrow and NeoMet Engineering.

Mineral Technologies are a globally recognised fine mineral separation specialist group with expertise in iron ore, mineral sands and other commodities. Mineral Technologies were invited by Arrow Minerals to provide specialist advice relating to the potential for spiral and magnetic separation equipment inclusion in the process flowsheet.

The testwork flowsheet utilised a range of standard laboratory processes and tests to provide the characterisation and process flowsheet development data. These tests included:

- Size fraction chemical analysis at a range of starting crush sizes including 10mm; 6.3mm; 3.35mm and 1mm. This testwork was designed to determine the effect of finer crushing on iron liberation and to also investigate the ability to remove specific fractions to improve the specification of the remaining fractions;
- Heavy Liquids Separation (HLS) on +1mm and -1mm fractions for the -6.3, -3.35 and -1.0mm crushed samples to determine the likely outcome of gravity-based separation methods e.g. Dense Media Separation and Spirals;
- Magnetic fractionation of samples completed at a range of magnetic intensity settings was completed to consider the applicability of magnetic separation techniques that may be applied within the process flowsheet (extension of stage 1 findings); and
- Uniaxial Compressive Strength (UCS) tests completed on a number of samples from all geo-types to provide preliminary hardness information for input to crushing machine selection.

The suite of tests adds significant characterisation data for the geo-types and extends the works completed in stage 1 and 1A which have been previously reported<sup>8</sup>.

All of the tests provide data that can be input to vendor models for process design and preliminary equipment selection to support the scoping level flowsheet development.

### STAGE 2 COMPOSITE SAMPLES

Samples for the stage 2 metallurgical testwork originated from exploration HQ3 diamond drill core. A series of 41 individual interval samples were selected from available reserves held in Guinea at the project site. The 41 intervals included oxide BIF (Friable and Intact) and Fresh BIF geo-types. Samples were selected from the main resource areas of Dalabatini, Kowouleni, Diassa and Kalako – refer location plan shown in Figure 4.

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<sup>8</sup> Refer to ASX Announcement 6 August 2024 titled "Exploration Target for Hematite Fines Project."

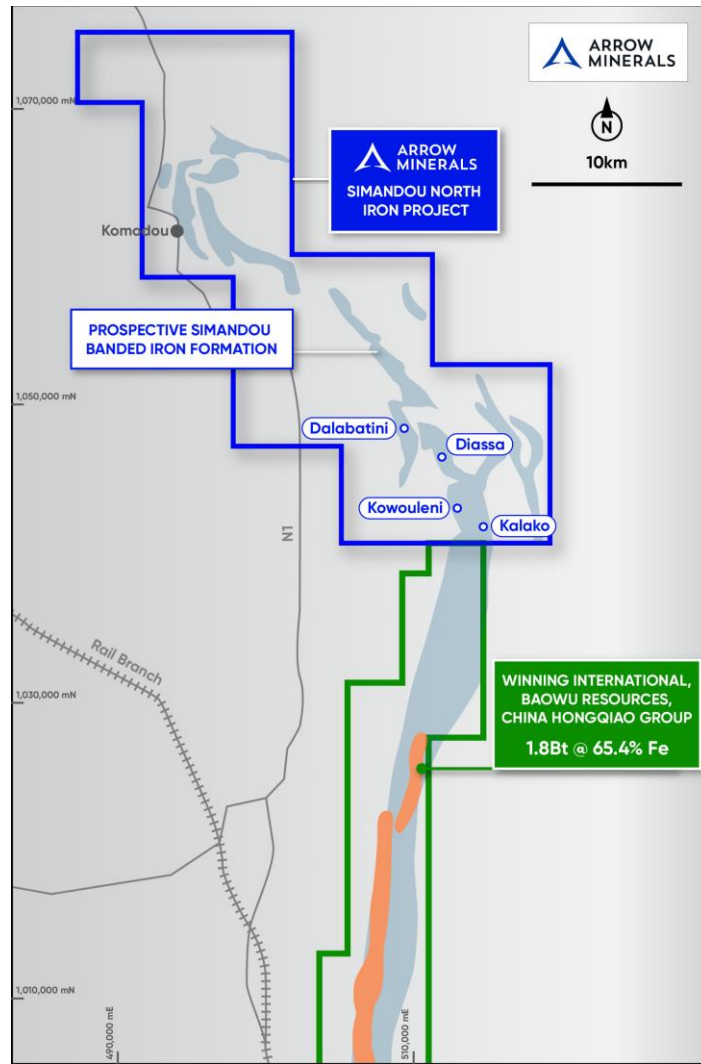


Figure 4. Location of Arrow's Simandou North Iron Project

Samples were selected to provide sufficient mass and grade variability for each of the main geotypes of Friable (HSF), Intact (HSC) and Magnetite (ITC(Mg)). The half core sample intervals were collected by site geologists, packaged into bags then barrels and dispatched to Perth, Western Australia for testwork.

Stage 2 metallurgical works was predominantly focussed on the two oxide BIF ore types, and as such the Fresh BIF samples have not been processed.

Following inspection in Perth, each of the oxide BIF interval samples had a head chemical analysis completed. In addition, nine intervals were selected for Uniaxial Compressive Strength (UCS) testing with sub samples being removed for this testing.

Details of the samples and corresponding head chemical analysis are shown in Appendix II.

Two master composites were formed on the basis of the interval head assays. Master composites included samples from all deposit areas with one composite created each for both Friable Oxide and Intact Oxide BIF units. The Friable (HSF) composite was composed of core from 13 interval samples and the Intact (HSC) master composite was made using 12 interval samples. Head analysis of the Master Composites is shown in Table 2.

Table 2 : Master Composites

Sample ID	Mass (kg)	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	P (%)	S (%)
HSF (Friable)	102	43.53	32.73	2.34	0.043	0.003
HSC (Intact)	106	41.93	38.00	0.71	0.042	0.007

## STAGE 2 METALLURGICAL TESTWORK RESULTS

Heavy liquids separation (HLS) testing was completed on the +1mm and -1mm fractions of the oxide BIF master composites at the range of starting crush sizes to assess liberation impacts. HLS was completed at a range of liquid densities including 2.85, 3.30, 3.60 and 4.05 which are standard iron ore HLS testing liquid densities.

The HLS testing of each crush size showed that high grade concentrates can be produced from the friable and intact material types. The -1mm fractions produced high grade concentrates at very good mass yields - refer to Table 3, Table 4 and Table 5 which show the individual HLS test outcomes for the highest liquid density (SG4.05) at each starting crush size.

Note the data shown in the tables is for the HLS stage only and does not equate to an overall process yield or product grade.

Table 3 : HLS Results SG4.05 (Feed crush P90 1.00mm)

Sample ID	Test Mass yield (%)	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)
HSF (Friable)				
-1.0 + 0.038mm	53.4	67.2	2.1	0.63
HSC (Intact)				
-1.0 + 0.038mm	44.1	66.5	3.8	0.34

Table 4 : HLS Results SG4.05 (Feed crush P90 3.35mm)

Sample ID	Test Mass yield (%)	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)
HSF (Friable)				
-3.35 + 1.0mm	27.5	64.1	5.7	0.68
-1.0 + 0.038mm	54.6	67.4	1.4	0.55
HSC (Intact)				
-3.35 + 1.0mm	13.2	61.4	9.8	0.59
-1.0 + 0.038mm	48.8	67.2	2.7	0.33

Table 5 : HLS Results SG4.05 (Feed crush P90 6.3mm)

Sample ID	Test Mass yield (%)	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)
HSF (Friable)				
-6.3 + 1.0mm	22.6	63.8	5.8	0.61
-1.0 + 0.038mm	53.7	67.6	1.2	0.50
HSC (Intact)				
-6.3 + 1.0mm	8.2	60.7	9.7	0.79
-1.0 + 0.038mm	49.8	68.0	2.1	0.30

The -1mm fractions at all crush sizes yielded superior specification concentrates from the HLS testwork indicating additional liberation of iron from silicate gangue occurs at this finer size. Further works will be undertaken to determine the optimum top size for liberation and mass recovery.

Uniaxial Compressive Strength (UCS) testing was completed on a range of samples from the Oxide BIF geo-types and Fresh BIF to provide guidance on hardness and crushing machine selection. UCS tests were performed on sub core pieces of the samples and record the maximum axial load sustained at the point of failure.

UCS results follow the geo-type classification as expected. The friable and intact oxide BIF results are in the low hardness range while the fresh BIF results are considered to be in the medium hardness range<sup>9</sup>.

The UCS results for each geo-type are summarised as:

- Friable oxide BIF averaged 31.35 MPa (low hardness / easy to crush);
- Intact oxide BIF averaged 75.05 MPa (medium hardness, relatively easy to crush); and
- Fresh BIF averaged 180.46 MPa with all results in the medium classification.

UCS results indicate that standard crushing equipment can be used for processing of all geo-types. In the case of the oxide BIF material types, UCS values are on the lower end of potential outcomes indicating these ore types to be relatively soft and easy to crush. Additional comminution testing will be completed in later stages of development inclusive of crusher work index (CWi) and abrasion index determinations.

Magnetic Characterisation was completed on the -1mm fractions of the crushed master composites using an induced roll magnetic separation unit at a range of magnetic intensity settings. The magnetic separation testing was completed to investigate the application of magnetic separation to reduce the volume of material to be processed by extracting a magnetic concentrate early in the process flowsheet. Additionally, previous works have indicated magnetic separation may be used to scavenge any fine iron particles that are not recovered in the wet gravity processing stages of the flowsheet, for example, spiral processing in order to increase the overall iron recovery of the process.

Magnetic separation testing of the feed showed that high grade magnetic concentrates could be produced from each of the oxide BIF geo-types, however the mass yields achieved were relatively low – refer to Table 6 . As the magnetic intensity was increased, the grade of the concentrate was reduced. This is likely due to entrained or unliberated silica being captured to the magnetic fractions.

Table 6 : Magnetic Separation (Feed crush P90 6.3mm)

Sample ID	Mass yield (%)	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)
HSF (Friable)	4.3	65.2	5.48	1.51
HSC (Intact)	5.3	64.0	8.3	0.69

Note: Results shown are for Pass 1 lowest magnetic intensity

The testwork showed that magnetic separation is likely not the initial processing upgrade stage of the Simandou North process flowsheet. The benefit of magnetic separation is that it may be utilised at later stages in the flowsheet to recover fine iron particles that are not recovered by other methods. This is a common arrangement utilised by iron ore producers globally.

<sup>9</sup> Classification per: "Mineralogical, chemical and physical characteristics of iron ore", Clout JMF, Manuel JR from Iron Ore conference 2015.

## CONCEPTUAL PROCESS FLOWSHEETS AND MASS BALANCE

The stage 1 and stage 2 metallurgical testwork has led to the development of a range of conceptual flowsheets. These flowsheets have considered different crush and liberation sizes and different upgrade processes. The flowsheets will be further assessed to determine the relative risks and opportunities of each, inclusive of capital and operating cost relativities, as part of the project scoping study.

The conceptual flowsheet summary is shown in Table 7. The mass balance data shown is based on an average feed blend of 50% Friable and 50% Intact oxide BIF material types.

Table 7 : Conceptual flowsheet comparison (HLS SG 4.05)

Flowsheet Outline	Mass yield (%)	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)
<b>Crush to -1mm</b> Spiral Processing	44	66.8	2.9	0.49
<b>Crush to -3.35mm</b> -3.35+1.00mm DMS processing -1.00mm Spiral Processing	36	66.4	3.2	0.48
<b>Crush to -6.3mm</b> -6.3+1.00mm DMS Processing -1.00mm Spiral Processing	31	66.7	2.9	0.46

Note: Results shown are based on laboratory data which has not been modified to account for process scale up or equipment selection. There are no guarantees these yields and product specifications will be achieved at plant scale.

Figure 5 shows the process flowsheet simulated product outcomes for the range of crush sizes tested and the range of heavy liquids SG's. The -1mm case at the highest SG of 4.05 yields the strongest product iron specification at a good mass recovery to product and is therefore the current preferred process flowsheet leading into the scoping study.

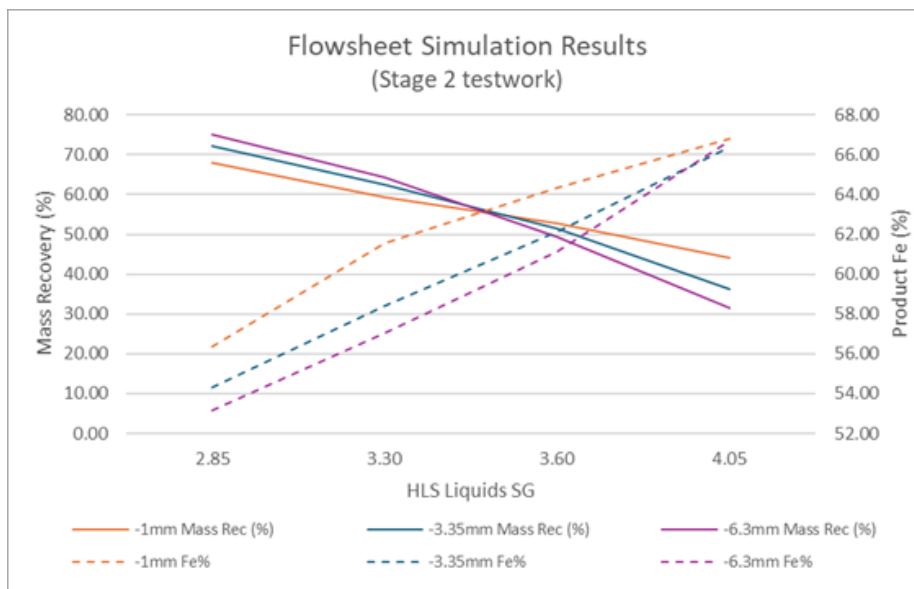


Figure 5 - Mass Recovery (%) and Fe grade by Process Flowsheet

The current preferred flowsheet option is illustrated in Figure 6.

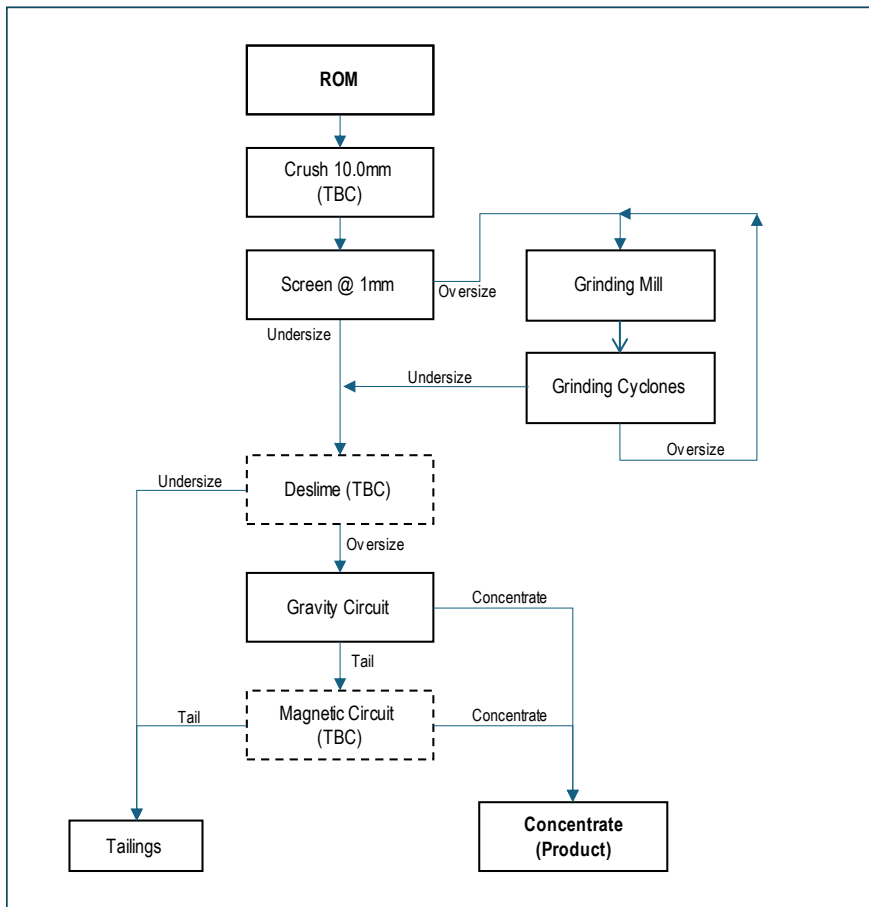


Figure 6 – Conceptual Process Flowsheet Block Flow (-1mm Option)

The conceptual process flowsheets will form the basis of trade-off assessments and plant capital and operating cost estimates completed within scoping study-level work for the process plant. Additional metallurgical testwork will be required to further refine and de-risk the process flowsheet, assess likely scale up performance, and aid in equipment selections.

Further works will now be scoped to investigate the opportunity to increase mass recovery whilst maintaining a competitive product specification. The forward works will likely include a bulk spiral run aimed at controlling the level of gangue minerals remaining in the product, while maximising the iron recovery to product and as such will include additional characterisation of the feed and products at each stage.

## APPENDIX II : Sample Details

Interval Composite Preparation										Master Composite		
Prospect	DDH Collar	Collar Location			Interval Sample ID	Geo Type	Intervals in Sample			UCS samples	Interval included in Master Comp.	
		mN	mE	RL			Depth From (m)	Depth To (m)	Length (m)			
Dalabatini	DALDDH011	1048299	509616	710	HSC-01	HSC	21.7	25.3	3.6		Yes	
Dalabatini	DALDDH012	1048150	509558	750	HSC-02	HSC	6.0	9.0	3.0	UCS	Yes	
Dalabatini	DALDDH017	1047741	509805	743	HSC-03	HSC	34.1	37.8	3.7		No	
Dalabatini	DALDDH020	1047911	509707	746	HSC-04	HSC	12.5	16.1	3.7		Yes	
Dalabatini	DALDDH023	1048523	509441	655	HSC-05	HSC	6.1	10.9	4.8	UCS	Yes	
Dalabatini	DALDDH029	1048613	509451	668	HSC-06	HSC	51.8	53.8	2.0		Yes	
Kowouleni	KOWDDH002	1043548	513221	792	HSC-07	HSC	18.0	22.0	4.0		HSC	Yes
Kowouleni	KOWDDH008	1043999	513123	772	HSC-08	HSC	34.0	36.0	2.0		Yes	
Kowouleni	KOWDDH013	1042136	513694	828	HSC-09	HSC	18.8	22.0	3.2		Yes	
Kalako	KALDDH006	1041360	514314	697	HSC-10	HSC	21.3	24.5	3.3		Yes	
Diassa	DIADDH001	1046537	512163	104	HSC-11	HSC	31.0	33.4	2.4		Yes	
Diassa	DIADDH004	1046406	511883	725	HSC-12	HSC	55.5	59.6	4.1	UCS	Yes	
Diassa	DIADDH005	1046239	512401	751	HSC-13	HSC	62.0	64.5	2.5		Yes	
Dalabatini	DALDDH009	1048284	509949	678	HSF-01	HSF	30.3	33.0	2.8		No	
Dalabatini	DALDDH011	1048299	509616	710	HSF-02	HSF	9.4	14.8	5.4		Yes	
Dalabatini	DALDDH017	1047741	509805	743	HSF-03	HSF	0.0	6.0	6.0	UCS	Yes	
Dalabatini	DALDDH018	1048153	509607	739	HSF-04	HSF	22.7	26.6	3.9		Yes	
Dalabatini	DALDDH020	1047911	509707	746	HSF-05	HSF	4.1	8.8	2.1		Yes	
					HSF-06	HSF 06 COMPOSITE CANCELLED						
Dalabatini	DALDDH020	1047911	509707	746	HSF-07	HSF	40.6	44.2	3.6		No	
Dalabatini	DALDDH029	1048613	509451	668	HSF-08	HSF	22.1	25.9	3.9		HSF	Yes
Kowouleni	KOWDDH002	1043548	513221	792	HSF-09	HSF	0.0	3.8	3.8		Yes	
Kowouleni	KOWDDH002	1043548	513221	792	HSF-10	HSF	3.8	8.5	4.7	UCS	Yes	
Kowouleni	KOWDDH008	1043999	513123	772	HSF-11	HSF	38.0	42.0	4.0		Yes	
Kalako	KALDDH006	1041360	514314	697	HSF-12	HSF	33.0	35.9	2.9		Yes	
Diassa	DIADDH001	1046537	512163	104	HSF-13	HSF	44.7	47.7	3.0		Yes	
Diassa	DIADDH004	1046406	511883	725	HSF-14	HSF	12.0	14.8	2.8	UCS	Yes	
Diassa	DIADDH004	1046406	511883	725	HSF-15	HSF	28.5	30.9	2.4		Yes	
Diassa	DIADDH005	1046239	512401	751	HSF-16	HSF	41.8	44.0	2.2		Yes	
Dalabatini	DALDDH006	1048296	509544	716	Mag-01	ITC (Mg)	63.3	68.4	5.1	UCS		
Dalabatini	DALDDH007	1048284	509949	678	Mag-02	ITC (Mg)	55.8	58.0	2.2			
Dalabatini	DALDDH007	1048284	509949	678	Mag-03	ITC (Mg)	51.0	55.8	4.8			
Dalabatini	DALDDH012	1048150	509558	750	Mag-04	ITC (Mg)	46.8	49.5	2.7	UCS		
Dalabatini	DALDDH012	1048150	509558	750	Mag-05	ITC (Mg)	71.5	72.8	1.3			
Dalabatini	DALDDH012	1048150	509558	750	Mag-06	ITC (Mg)	79.5	81.9	2.4			
Dalabatini	DALDDH023	1048523	509441	655	Mag-07	ITC (Mg)	46.9	53.2	6.4	UCS		

For personal use

Kowouleni	KOWDDH001	1043551	513219	797	Mag-08	ITC (Mg)	32.0	34.5	2.5
					Mag-09	ITC (Mg) 09 COMPOSITE CANCELLED			
Kowouleni	KOWDDH001	1043551	513219	797	Mag-10	ITC (Mg)	44.0	46.0	2.0
Kowouleni	KOWDDH005	1043452	513270	798	Mag-11	ICFP	36.0	38.0	2.0
Kowouleni	KOWDDH005	1043452	513270	798	Mag-12	ITC (Mg)	42.0	44.0	2.0
Kowouleni	KOWDDH012	1042190	513719	754	Mag-13	ITC (Mg)	41.6	45.5	3.9
Kowouleni	KOWDDH012	1042190	513719	754	Mag-14	ITC (Mg)	45.5	49.3	3.8