RioTinto

Notice to ASX

Release of Mineral Resource and Ore Reserve Estimates for Simandou

6 December 2023

Rio Tinto today announces changes in Mineral Resources and Ore Reserves for Simandou Blocks 3 and 4 iron ore deposits (Simfer Iron Ore Project) in Guinea to be developed by Simfer SA¹, a joint venture with the Republic of Guinea (State) (15%) and Simfer Jersey Ltd (85%), a joint venture between Rio Tinto (53%) and a Chinalco-led consortium of Chinese state-owned enterprises (CIOH) (47%).

For the Ouéléba deposit at Simandou the Proved Ore Reserves estimate contains 273 Mt at 66.4% Fe, 1.0% SiO_2 , 1.2% AI_2O_3 and 0.07% P and the Probable Ore Reserves estimate contains 1,226 Mt at 65.0% Fe, 0.9% SiO_2 , 1.8% AI_2O_3 and 0.10% P. These reserves estimates are based on Rio Tinto's estimate of capital cost and schedule and remain subject to closing of the co-development arrangements between the State, Simfer and Winning Consortium Simandou (WCS)² for co-development of the rail and port infrastructure to unlock the Simandou deposits in Western Guinea.

Simfer has signed agreements with the State and WCS, the owner of Simandou Blocks 1 and 2 deposits, to enable co-development of the rail and port infrastructure for the Simandou iron ore projects. The Co-Development Convention, which, along with bipartite amendments for each of the Simfer and WCS Mine Conventions, adapts the existing investment frameworks of Simfer and WCS. These conventions provide the legal framework for infrastructure co-development and establish the fiscal regime and the access arrangements (including tariff) that will apply for use of the infrastructure by the Simfer Mine (Blocks 3 and 4) and the WCS Mine (Blocks 1 and 2) as foundation customers. These conventions require ratification by the State and co-development of the Simandou rail and port infrastructure remains subject to a number of conditions, including regulatory approvals from the Guinean and Chinese governments, the entry into a number of legal agreements and agreement between Simfer, WCS and the Government of Guinea regarding the budget for the rail and port infrastructure.

Rio Tinto is also reporting Mineral Resources exclusive of Ore Reserves for the Ouéléba and Mineral Resources for Pic de Fon deposits at Simandou of 1,360 Mt at 66.1% Fe, 1.6% SiO₂, 1.4% Al₂O₃ and 0.06% P consisting of Measured Mineral Resources of 147 Mt at 67.1% Fe, Indicated Mineral Resources of 440 Mt at 66.2% Fe and Inferred Mineral Resources of 773 Mt at 65.8% Fe. The Mineral Resource cut-off for reporting is Fe greater than or equal to 58% and Al₂O₃ + SiO₂ less than or equal to 8% and P less than or equal to 0.25%.

¹ The ownership of Simfer SA in 2023 is 15% Republic of Guinea and 85% Simfer Jersey Limited, the ownership of which is 53% Rio Tinto and 47% Chalco Iron Ore Holdings Ltd, resulting in a look through interest for Rio Tinto of 45.05% Rio Tinto and 39.95% CIOH.

² WCS is a consortium of Singaporean company, Winning International Group (49.99%), Weiqiao Aluminium (part of the China Hongqiao Group) (49.99%) and United Mining Suppliers International (0.002%). WCS is the holder of Simandou North blocks 1 & 2 (with the State holding a 15% interest in the mining vehicle and WCS holding 85%) and associated infrastructure. Baowu Resources has entered into an agreement to acquire a 49% share of the WCS project through a Baowu-led consortium, subject to conditions including regulatory approvals.

The change in Mineral Resources and Ore Reserves are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (JORC Code) and the ASX Listing Rules. Supporting information is set out in this release and its Appendix. Mineral Resources and Ore Reserves are quoted in this release on a 100 percent basis. Rio Tinto ownership percentage is 45.05%. Mineral Resources are reported in addition to Ore Reserves.

Mineral Resources and Ore Reserves declaration

A tabulation of the update to the Mineral Resources at the Simfer Iron Ore Project is provided in Table A. A tabulation of the new Ore Reserves at the Simfer Iron Ore Project is provided in Table B.

Table A Simfer Iron Ore Project Mineral Resources as at 6 December 2023^{(b) (c)}

													Total Meas	sured an	d Indicate	ed Mineral	Resourc	es
Likely	Measured Mineral Resources					Indicated Mineral Resources					as at 6 December 2023							
method ^(a) Tonnage Grade					Tonnage	Tonnage Grade						Tonnage Grade						
	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	% LOI	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	% LOI	Mt	% Fe	% SiO₂	% Al ₂ O ₃	% P	% LOI
O/P	147	67.1	1.9	1.1	0.04	1.0	440	66.2	1.8	1.5	0.05	1.8	587	66.4	1.8	1.4	0.05	1.6

Likely	Inferred Mineral Resources					Total Mineral Resources as at 6 December 2023				Rio Tinto Interest	Total Min as at 31	eral Reso Decembe	ources er 2022						
mining method ^(a)	Tonnage	Grade)				Tonnage	Grad	le					Tonnage	Grade				
	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	% LOI	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	% LOI	%	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	% LOI
O/P	773	65.8	1.4	1.4	0.07	2.8	1,360	66.1	1.6	1.4	0.06	2.3	45.05	2,829	65.7	1.2	1.5	0.08	3.0

(a) Likely mining method: O/P = open pit

(b) Mineral Resources of iron ore are stated on a dry in situ weight basis

(c) Simandou Mineral Resources tonnes decreased due to conversion of Resources to Reserves following completion of the feasibility study for Ouéléba

Table B Simfer Iron Ore Project Ore Reserves as at 6 December 2023^{(b) (c)}

Type	Droved O	Proved Ore Reserves Probable Ore Reserves									Total Ore Reserves					Rio	Rio Tinto			
of	Toppago	Grad	erves				Toppage	Grad	serves				Toppago	Grad	2023 (=/	(-)			Tinto	Marketable
THINE	Tormage	Grau	e				Tonnage	Grau	e				Tonnage	Grau	e				Interest	product
	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	% LOI	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	% LOI	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	% LOI	%	Mt
O/P	273	66.4	1.0	1.2	0.07	2.5	1,226	65.0	0.9	1.8	0.10	3.9	1,499	65.3	0.9	1.7	0.09	3.7	45.05	675

(a) Type of mine: O/P = open pit

(b) Reserves of iron ore are reported on a dry weight basis and shown as recoverable Reserves of marketable product after accounting for all mining and processing losses.

(c) Simandou iron ore Reserves tonnes are reported for the first time since 2016

(d) Only Measured and Indicated Resources have been considered in the conversion of Mineral Resources to Ore Reserves after the application of modifying factors

(e) Ore Reserves relates to the Ouéléba portion only of the Simfer Iron Ore Project

Summary of information to support the Mineral Resource reporting

Rio Tinto is reporting updates to the Simandou Mineral Resources and new Ore Reserves based on Rio Tinto's estimate of capital cost and schedule and remain subject to closing of the co-development arrangements between the State, Simfer and Winning Consortium Simandou (WCS)³ for co-development of the rail and port infrastructure to unlock the Simandou deposits in Western Guinea. This Ore Reserves estimate has been made by the Competent Person and reported in accordance with the JORC Code as required by Simfer's Mining Convention. We note that, consistent with the JORC Code, some elements are at pre-feasibility level and work continues to refine all elements to feasibility level consistent with Rio Tinto's global practice.

Mineral Resources are supported by the information set out in the Appendix to this release in accordance with the Table 1 checklist in the JORC Code. The following summary information is provided in accordance with rule 5.8 of the ASX Listing Rules.

The impact of reporting the Mineral Resources in addition to Ore Reserves is the conversion of 1,469 Mt of undiluted Mineral Resources into 1,499 Mt of Ore Reserves, inclusive of dilution, at Ouéléba. Pic de Fon will undergo an additional feasibility study as part of the study required under Simfer's amended mining convention to increase production from 60 Mtpa to 100 Mtpa subject to commensurate expansion of the rail and port infrastructure pursuant to the Co-development Convention. Currently Pic de Fon is reported as Mineral Resources only.

A full tabulation of the Simfer Iron Ore Project Mineral Resources based on optimised pit shells exclusive of the mine design pit is provided in Table A. Details of data collection and resource estimation techniques are provided in the Appendix to this release.

Geology and geological interpretation

The Mineral Resources are based on the Pic de Fon and Ouéléba deposits which are typical of supergeneenriched itabirite hosted iron deposits. The deposits are similar to other known deposits such as the Nimba deposit (Guinea) and deposits within the Iron Quadrangle (Brazil). The deposits are part of a supracrustal belt with the banded iron formation (BIF) proto-ore likely deposited in a shallow marine setting within a forearc basin.

The deposits are located in the Simandou Range on a prominent ridge. The Simandou Range is the result of multi-phase ductile deformation represented by tight synformal fold keels and sheared antiformal structures. The ridge consists of a formation of itabirites (metamorphosed BIF) and phyllites overlying basement gneiss and amphibolite. The itabirites and phyllites have been deeply weathered and identifying stratigraphy is difficult, with the only discernible contact being that between the itabirites and phyllites.

Laterite and carapace domains are sub-horizontal with the laterite overlying all other lithologies, in local areas, and the carapace overlying the mineralisation and enriched itabirite lithologies. The itabirites and phyllites are interpreted to be folded with the axial planes of the fold hinges dipping moderately to steeply towards the west.

Drilling techniques; sampling and sub-sampling techniques; and sample analysis method

Drilling has been carried out using a combination of diamond (DD) and reverse circulation (RC) drilling methods, with sampling predominantly on a 2 m sample interval. Assays have been carried out on half core and split RC samples using an X-ray fluorescence (XRF) fusion disc and whole rock analysis completed for 24 elements. Loss on ignition (LOI) is measured using a thermo-gravimetric analyser at three temperatures.

Estimation methodology

³ WCS is a consortium of Singaporean company, Winning International Group (49.99%), Weiqiao Aluminium (part of the China Hongqiao Group) (49.99%) and United Mining Suppliers International (0.002%). WCS is the holder of Simandou North blocks 1 & 2 (with the State holding a 15% interest in the mining vehicle and WCS holding 85%) and associated infrastructure. Baowu Resources has entered into an agreement to acquire a 49% share of the WCS project through a Baowu-led consortium, subject to conditions including regulatory approvals.

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The geological interpretation was completed by Rio Tinto and WSP/Golder. The method involved the use of surface geological mapping, surface structural measurements, downhole televiewer structural measurements, lithological logging data, assay data and downhole geophysical data. The interpretations have evolved from 2007 to current, moving from sectional interpretations that were linked into 3D wireframes to 3D construction of wireframes using Leapfrog[™] software.

Estimation has been carried out by ordinary kriging for Fe, SiO₂, Al₂O₃, P, CaO, K₂O, Total LOI, MgO, Mn, Na₂O, S and TiO₂ and an average density has been applied to each domain. The Ouéléba block model cell size was 30 m by 30 m by 6 m with a minimum sub-cell size of 5 m by 5 m by 2 m and the Pic de Fon block model cell size was 60 m by 60 m by 12 m with a minimum sub-cell size of 10 m by 10 m by 2 m. The parent block sizes in the horizontal plane are approximately half the drill spacing at each deposit. The block heights correspond to the proposed selective mining flitch heights for each deposit.

Criteria used for Mineral Resources classification

Classification is based on sample spacing and has been carried out after consideration of the level of confidence assigned to interpretations of geology and mineralisation controls, assay and drilling data quality, confidence in estimation parameters, including kriging variance and degree of extrapolation and through visual validation. The result is a model classified as Measured Mineral Resources based on a maximum drill spacing no greater than 70 m, Indicated Mineral Resources based on a drill hole spacing greater than 70 m and maximum drill hole spacing of 120 m and Inferred Mineral Resources based on a drill spacing greater than 120 m and maximum drill hole spacing of 220 m.

Cut-off grades and modifying factors

The Mineral Resources across the Simfer Iron Ore Project deposits were calculated using a cut-off of Fe \geq 58% and SiO₂ + Al₂O₃ \leq 8% and P \leq 0.25%. A cut-off grade using a combined Al₂O₃ and SiO₂ was determined by grade tonnage curves to be representative of the material to be mined and crushed for transportation to customers.

Reasonable prospects for eventual economic extraction (RPEEE) have been assessed through a mining and processing study at Pic de Fon and a study at Ouéléba. The establishment of an economic pit-shell indicates conventional open pit mining and processing routes would be appropriate in the exploitation of the Simandou deposits. Reported Inferred, Indicated and Measured Mineral Resources have been constrained within an optimised pit shell using Rio Tinto forward looking price assumptions, potential processing routes and recoveries.

Additional mineralised material outside of the pit shell is not reported as Mineral Resources in this release, however studies are ongoing to determine under what conditions the additional mineralisation may be considered economic.

Summary of information to support the Ore Reserves reporting

Ore Reserves are supported by the information set out in the Appendix to this release in accordance with the Table 1 checklist in the JORC Code (2012). The following summary information is provided in accordance with rule 5.9 of the ASX Listing Rules.

Economic assumptions and study outcomes

The Ore Reserves were estimated for the Ouéléba deposit within the Simfer Iron Ore Project by WSP/Golder Associates. The Ore Reserves are based upon a minimum of pre-feasibility study for the mine plan and mine design including schedule covering the life of mine within the Ouéléba deposit. The total Proved and Probable Ore Reserves are estimated at 1,499 Mt at 65.3% Fe, 0.9% SiO₂, 1.7% Al₂O₃ and 0.09% P saleable product. Of this total, 82% of the saleable product is within the Probable Ore Reserves category.

Mining of the Simfer Iron Ore Project has been planned at medium-selectivity using conventional open pit mining equipment, mining two 6 m high flitches within a 12 m high mining bench. The mining process will include drill and blast as well as conventional load and haul operations. There is expected to be a notable amount of free-dig

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material below the cap rock, with the majority of material assumed to require relatively modest amounts of drilling and blasting.

Mining method and assumptions

Mining will comprise a conventional hydraulic shovel operation typically using 600 t class excavators in backhoe configuration for mining ore and waste. Rigid body 220 t class dump trucks will be used for hauling ore and waste on designed access roads. An auxiliary mining fleet of dozers, graders, water carts and utility vehicles will support the mining operation.

Mining will be carried out using a general north to south mining sequence incorporated within the Life of Mine (LOM) Final Pit. The mining schedule defines movement of ore and waste on 12 m mining benches, by year, for total LOM. First production is expected in 2025, ramping up over 30 months to an annualised capacity of 60 Mtpa which will be underpinned as to 18% by Proved Ore Reserves and 82% by Probable Ore Reserves.

Cut-off grades, estimation methodology and modifying factors

Pit optimisations were completed using the Lerchs-Grossmann (LG) algorithm in Whittle 4XTM software to calculate the optimal pit at the specified input parameters. A wireframe pit shell for each iron ore price considered was the resultant output. The Revenue Factor (RF) 0.65 pit shell was selected as the base for the final LOM Pit design. A pit of approximately 2.2 Bt of rock was selected as the final pit shell in that some 98% of the potential ore feed material was contained within the selected pit shell.

A set of designs have been created based on the pushbacks general phases and the final pit shell estimated in Whittle software at 60 million ore tonnes plant rate per annum. The designs are appropriate for the feasibility study. A minimum mining width of 50 m has been considered except for some areas located at the bottom of the pits where a minimum mining width of 35 m has been used.

An estimated marginal cut-off grade was established at $Fe \ge 58\%$ and $SiO_2 + Al_2O_3 \le 8\%$ and $P \le 0.25\%$ based upon the sales of a Direct Shipping Ore (DSO) iron ore product. The Mineral Resource model was validated and used to develop a mining model, as the basis for a LOM plan and economic assessment. Regularisation of the Mineral Resource model resulted in the mining model adequately accounting for the expected ore loss and dilution for the scale of mining being proposed.

The mine design for the Simfer Iron Ore Project consists of a series of nested conventional open pit layouts with orebody access provided through a series of ramps. For mining purposes, the Ouéléba orebody can be considered a layered sequence within a syncline fold.

An allowance of 0.5% fines losses has been incorporated within the product handling system from crusher through to ship loading, this percentage of ore loss estimate has been provided by Rio Tinto based upon experience at multiple direct shipping operations.

The site has road access and is readily accessible for power, water, and additional infrastructure requirements. Camp facilities are in place with a current workforce involved in further geological sampling and early construction works for the project. Planned expansion of the camp facilities including a dedicated airstrip are planned for the project construction phase.

The rail and port infrastructure to enable export of the ore from the Simfer Iron Ore Project will be co-developed as a joint venture between the Guinean State, Simfer Jersey and Winning Consortium Simandou (WCS), with the ultimate owner and operator of the co-developed infrastructure being the Compagnie du Transguinéen (CTG). Agreements with the State to create the legal framework for infrastructure co-development have been signed and remain subject to ratification by the State. The Co-Development Convention, along with bipartite amendments for each of the Simfer and WCS Mine Conventions, adapts the existing investment frameworks of Simfer and WCS and establish the fiscal regime and the access arrangements (including tariff) that will apply for use of the infrastructure by the Simfer Mine (Blocks 3 and 4) and the WCS Mine (Blocks 1 and 2) as foundation customers. These conventions require ratification by the State and co-development of the Simandou rail and port infrastructure remains subject to a number of conditions, including regulatory approvals from the Guinean and

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Chinese governments, the entry into a number of legal agreements and agreement between Simfer, WCS and the Government of Guinea regarding the budget for the rail and port infrastructure.

The co-developed rail and port infrastructure includes a purpose-built port facility to be constructed at Morebaya estuary which will facilitate the export of the iron ore from the Simfer Mine and WCS Mine. The port will have a capacity of 120 Mtpa and will be shared with WCS. The port will be accessed by a purpose built approximately 536 km main rail line with spurs to connect the Simfer Mine (68 km) and WCS Mines (16 km) to the port at Morebaya The rail will have initial capacity of up to 120 Mtpa. Studies to confirm the ability to expand the rail and port infrastructure to 160 Mtpa to enable the expansion of the Simfer Mine from 60 Mtpa to 100 Mtpa will be undertaken in accordance with the Co-Development Convention and Mine Bipartite Convention.

The Social and Environmental Impact Assessment (**SEIA**) was completed and approved in 2012, describing the key management requirements that apply to the development of the Simfer Iron Ore Project and the associated rail and port infrastructure to be built by Simfer Jersey. This assessment has been updated to reflect the Simfer scope of the co-developed infrastructure project and to meet current leading practices, utilising modern techniques for mitigation. The SEIA including management plans and commitments has been updated based on current project design. An updated SEIA for the mine and rail spur was submitted for regulatory review in July 2023 and an update to the SEIA for the port was submitted in November 2023. Stakeholder engagement has continued since 2012 to maintain local relationships and understand the concerns of local communities, which has been supplemented by additional consultation meetings to support the ESIA updates. Social baseline studies have been updated to reflect changing societal structures, and cultural heritage studies are ongoing. Preclearance surveys are completed to ensure no sensitive biodiversity sites or cultural heritage is being impacted by approved works. Economic and physical displacement has been minimised through integrated engineering and social designs. Social and environmental commitments have been updated in the project cost model.

Criteria used for Ore Reserves classification

The Ore Reserves estimation process converted 95% of the Ouéléba Measured and Indicated Mineral Resources to Proved and Probable Ore Reserves. All the Proved Ore Reserves estimate is based on the Measured Mineral Resources and all the Probable Ore Reserves estimate is based on the Indicated Mineral Resources.

Processing method and assumptions

The ore will be crushed and shipped directly to the market.







Figure 2 Tenement location











Figure 5 Cross section 956640 mN through northern Ouéléba orebody showing the geological model and drill hole traces

LAT=laterite; CAP=carapace; CAN=canga; TRN=transitional; HGF=friable hematite goethite; HEM=medium hard hematite; IRF=enriched itabirite; IPF=friable poor itabirite; IPC=compact poor itabirite; PHV=very weak phyllite; PHW=weak phyllite; PHS=soil strength phyllite; PHC=compact phyllite; QTW=weak quartzite; QTC=compact quartzite; BAS=undifferentiated basement. Section 956640mN



Figure 6 Cross section 956640 mN through northern Ouéléba orebody showing the geology block model and drill hole traces coloured by Fe grade, and the Ore Reserves pit limit and the Mineral Resources limit.



Figure 7 Cross section 952700 mN through southern Ouéléba orebody showing the geological model and drill hole traces

CAP=carapace; TRN=transitional; HGF = friable hematite goethite; HEP=hematite; IRF=enriched itabirite; IPF =friable poor itabirite; IPC=compact poor itabirite; PHV=very weak phyllite; PHW= weak phyllite; PHC=compact phyllite; QTC=compact quartzite. Section 952700mN



Figure 8 Cross section 952700 mN through southern Ouéléba orebody showing the geology block model and drill hole traces coloured by Fe grade, and the Ore Reserves pit limit and the Mineral Resources limit



Figure 9 Cross section 943940 mN through Northern Pic de Fon orebody showing the geological model and drill hole traces

CAP=carapace; TRN=transitional; HEF=friable hematite; IRF=enriched itabirite; IPF=friable poor itabirite; IPC=compact poor itabirite; PHC=compact phyllite. Section 943940mN



Figure 10 Cross section 943940 mN through Northern Pic de Fon orebody showing the geology block model and drill hole traces coloured by Fe grade, and the Mineral Resources limit



Figure 11 Cross section 942420 mN through Southern Pic de Fon orebody showing the geological model and drill hole traces

CAP=carapace; HEF=friable hematite; IRF=enriched itabirite; IPF=friable poor itabirite; IPC=compact poor itabirite; PHW=weak phyllite; PHC=compact phyllite. Section 942420mN



Figure 12 Cross section 942420 mN through Southern Pic de Fon orebody showing the geology block model and drill hole traces coloured by Fe grade, and the Mineral Resources limit

Competent Persons' statement

The information in this report that relates to Mineral Resources is based on, and fairly represents, information compiled under the supervision of Kaye Tindale, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Kaye Tindale has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which they are undertaking to qualify as a Competent Person as defined in the JORC Code. Kaye Tindale is a full-time employee of Rio Tinto and consents to the inclusion in this report of Simandou Mineral Resources based on the information that has been prepared in the form and context in which it appears.

The information in this report that relates to Ore Reserves is based on, and fairly represents, information compiled under the supervision of Michael Apfel who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Michael Apfel has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which he is undertaking to qualify as a Competent Person as defined in the JORC Code. Michael Apfel is a full-time employee of Rio Tinto and consents to the inclusion in this report of Simandou Ore Reserves based on the information that has been prepared in the form and context in which it appears.

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This announcement is authorised for release to the market by Andy Hodges, Rio Tinto's Group Company Secretary

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Simandou Ouéléba and Pic de Fon Deposits JORC Table 1

The following table provides a summary of important assessment and reporting criteria used at Simandou Ouéléba and Pic de Fon deposits for the reporting of Mineral Resources and Ore Reserves in accordance with the Table 1 checklist in *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition)*. Criteria in each section apply to all preceding and succeeding sections.

Section 1: Sampling Techniques and Data

	Criteria	Commentary
))) 1) 1) 1]	Sampling techniques	 Samples for geological logging, assay, geotechnical, metallurgical and bulk density were collected via drilling. Reverse circulation and diamond core drilling have been used at both Ouéléba and Pic de Fon deposits. Samples were collected at 2 m intervals for assay and geological logging from both reverse circulation and diamond core drilling. Reverse circulation samples have been collected via a number of methods (rotating or static cone splitters, and riffle splitters) to achieve a 2 kg primary sample. The samples were dried, crushed, split and pulverized to produce a pulp sample of approximately 60 g. Diamond core drilling has used a range of bit sizes with bit size decreasing with increasing depth (from PQ to NQ, for example). Diamond core was sawn in half with one half retained and the other half was dried, crushed, split, sieved for three size fractions (since 2008) which were pulverized to produce pulp samples of approximately 60 g. Density, geotechnical and metallurgical samples were collected from diamond core drilling. Geological interpretation has used a combination of geological logging, surface mapping and geochemical assay results.
))))	Drilling techniques	 Drilling was predominantly reverse circulation (RC) with a lesser proportion of diamond core drilling: 69% of total drilled metres are RC at Ouéléba and 70% at Pic de Fon. Reverse circulation drilling used two face sampling bit sizes (5 ½ inch and 5 3/8 inch). RC drillholes are generally less than 180 m in depth and where RC drilling is used as a precollar for diamond drilling the RC drilling length is generally less than 150 m. Diamond core drilling has used a range of bit sizes with the bit size decreasing with increasing hole length. Larger bit sizes (such as PQ) used for up to 180 m, a HQ (or equivalent) used for the mineralisation and for lengths greater than 180 m. A smaller size such as NQ was used for lengths beyond approximately 350 m. The diamond core drilling has used triple tube for 40 per cent of the drilled metres and the remainder is standard tube. The holes are drilled declined: Ouéléba: between -44° and -90° (-77° on average) Pic de Fon: between -43° and -90° (-70° on average). Holes are between 16 m and 541 m in length and average 200 m for Ouéléba and 210 m for Pic de Fon. A digital core orientation tool (Reflex™ ACT II RD) has been used since 2009 to mark the bottom-of-core orientation line.
	Drill sample recovery	 Diamond core recovery is recorded by the geologist whilst logging the hole. Overall diamond core recovery: Ouéléba 89% and Pic de Fon 87%. No direct recovery measurements of RC samples were performed. However, sample recovery has been assessed qualitatively by the rig geologist. In addition, primary and secondary sample weights (after splitting at the rig) have been recorded as part of the RC drilling sample workflow. The use of boosted air was ceased in 2008 for RC drilling to maximise sample recovery. Statistical analysis does not suggest a bias or relationship between sample recovery and grade.
_	Logging	• All diamond core and RC chip samples are logged over 2 m intervals. Quantitative logging for lithology, stratigraphy, texture and hardness is conducted using defined material type codes

	D	 based on characterisation studies and mineralogical assessments. Colour and any additional qualitative comments are also recorded. Logging information is stored in the Rio Tinto Simandou acQuire™ database. Each tray of core was photographed, and half core is retained in a secure storage facility. Most diamond core drilled holes since 2008 have been geotechnically logged at the drill site before transporting the core. There have also been a number of holes which have specifically been drilled to enable more detailed logging and destructive testing of core to obtain quantitative geotechnical rock property information. A subset of holes used for geotechnical investigations have also been logged with an acoustic televiewer. More than 70% of the holes have been geophysically logged using downhole tools for gamma trace, gamma density, resistivity and magnetic susceptibility.
	Sub-sampling	Diamond core:
	techniques and	• The diamond drill core is cut in half using a core saw where the core is competent enough to
	sample	be sawn or, where the core is friable, a trowel is used to select half of the material in the
	preparation	interval. The nominal sample interval is 2 m.
		 Pre-2008, and at times when the crush and screen equipment was unavailable, core was dried for 12 hours at 105°C, crushed to a 2.63 mm top size and then riffle split three times before being pulsaring to a partial size that approximate to 25% page 106 microans. Puls
		samples of approximately 60 g are taken from the pulverised samples
		 Since 2008, a grade by size methodology has been used for preparing the diamond core samples to pulp samples. The core samples are dried at 105°C for at least 24 hours, crushed
		to a 31.5 mm top size and then screened with eight sieve sizes. The sieved fractions are combined to create three size fraction samples: < 0.15 mm, between 0.15 mm and 10 mm;
1		and >10 mm. The size fraction samples are then riffle split (to a minimum weight of 300 g)
		and pulverised to a particle size that corresponds to 95% passing 106 microns. Pulp samples
		of approximately 60 g are taken from the pulverised samples.
		Reverse circulation:
		 A nominal 2 m sample interval was used for RC drilling.
		The RC samples have been collected via a number of methods targeting a 2 kg primary
		sample. The methods include: rotating cone splitter, cyclone and rig mounted rotating splitter,
		static cone and riffle splitters.
		 The primary RC samples are dried for 24 hours at 105°C then crushed in a jaw crusher to a top size of 2 mm, and then riffle split to a sample with a minimum weight of 300 g. The
		samples are pulverised to a particle size that corresponds to 95% passing 106 microns. Pulp
		samples of approximately 60 g are taken from the pulverised samples.
)	Quality of assay	Assay methods
	data and	The null samples are sent to Litra Trace Laboratories, an external ISO 9001 accredited
	laboratory tests	independent laboratory in Perth. Western Australia for analysis.
		 A sub-sample of 0.68 g is used for preparation of an X-Ray fluorescence (XRF) fusion disc
		and whole rock analysis is completed for the following variables: Al ₂ O ₃ , As, Ba, CaO, Cl, Co, Cr, Cu, Fe, Pb, MgO, Mn, Ni, P, K2O, SiO ₂ , Na, Sr, S, Sn, TiO ₂ , V, Zn and Zr.
		 Loss on ignition (LOI) is measured using a thermo-gravimetric analyser at 371°C, 538°C and 1,000°C and then accumulated for total LOI using a 3 to 5 g sub-sample from the pulp complex
		 The assay results of the three size fraction samples are used to back calculate a composited
		head grade using the weights recorded for each of the samples. The individual size assay
		grades, the sieve weights and the back-calculated head grades are stored in the acQuire™
		database. For Ouéléba 49% of the drill core samples have been prepared using the grade- by-size process and for Pic de Fon this was 12%.
		QAQC of the sample preparation and assaying processes is via the following samples:
		 Coarse certified reference materials (CRMs) inserted into the drillhole sample sequence at a rate of one in 20 and prepared as per the regular drillhole samples.
		 Pulp CRMs inserted at the laboratory at the rate of approximately one in 60.
		 Field duplicates that are inserted at the rate of one in 20 samples.
		 Preparation laboratory duplicates inserted at the rate of one per drillhole.
		 Pulp repeats and pulp standards inserted by the laboratory at a rate of approximately one in 20 samples.

		 Analyses of the results of the coarse CRMs and pulp CRMs for the four major grade variables of iron, silica, alumina and phosphorus do not suggest a grade bias exists. Results of the QAQC indicate that there are acceptable levels of precision and accuracy to support a Mineral Resource.
	Verification of sampling and assaying	 An analysis of a small number of twinned drillholes (RC and diamond core drillholes) suggests an immaterial bias of iron, with the assays in the diamond core drillhole being slightly higher than in the twin RC drillhole. Field data was logged directly onto field Toughbook laptops using pre-formatted and validated logging templates, with details uploaded to the drillhole database on a daily basis as logging was completed. Assay data was returned electronically from the laboratory and uploaded into the drillhole database. Documented procedures exist for data management, verification and storage. Edits to the drillhole database are traceable through automatic logging by the database software. The procedures have been audited and found to be acceptable for Mineral Resource estimates. The drill core photos are stored as image files on the site geology server and incrementally copied to the server located in the United Kingdom on a daily basis.
	Location of data points	 Drillhole collars (for 99% of the drillholes) were surveyed post drilling by licenced surveyors using differential GPS with an accuracy of ±30 mm. The remaining 1% of drillholes use planned coordinates to locate the drillhole. Downhole surveying has been undertaken using a downhole gyroscopic tool since 2007, including attempted resurvey of earlier drillholes. The downhole gyroscopic tool has an accuracy of ±0.1° for the dip and ±1° for the azimuth. Overall, 84% of the diamond drilling metres are surveyed over the entire drillhole length but only 40% of the total RC drilling metres are downhole surveyed. Since 2011 downhole survey coverage of RC drilling metres has increased to 71%. The grid system used for deposit surveys are in the Dabola 1981 UTM Zone 29N grid system and the surveys are considered accurate enough for the purposes of Mineral Resources and Ore Reserves estimation. Ouéléba drill hole collar locations were converted to WGS84 / UTM Zone 29N grid. The topographic surface is based on airborne LiDAR data collected in 2011, with an accuracy of ±0.1 m in elevation and ±0.5 m in easting and northing. The digital terrain model was created with a 4 by 4 m cell size triangulation with a 0.2 m offset decimation applied to allow mining software to use the surface.
	Data spacing and distribution	 Drillholes are spaced irregularly due to topographic constraints. Areas of approximately 60 by 60 m, 125 by 125 m, and 250 m have been established. There are also two small areas at Ouéléba and one small area at Pic de Fon of approximately 30 by 30 m drilling. The drillhole spacing is sufficient to establish geological and grade continuity for Mineral Resource estimation purposes and for the Mineral Resource classification applied. Downhole compositing of drillhole sample intervals for grade estimation purposes is discussed in Section 3.
ク コ	Orientation of data in relation to geological structure	 Drillholes are oriented in multiple directions, due to the topography. Drillhole orientations are either vertical or in a fan arrangement drilled at varying angles, between -44° and -90°, either towards the east (approximately 37% of the drillholes) or west (approximately 32% of the drilling). The phyllite and itabirite formations are interpreted as folded, with the axial planes of the fold hinges interpreted to dip moderately, to steeply, towards the west overall but, due to the multiple deformation phases, can locally vary. The drillhole paths have been planned to transect the geological layering at a high angle. Due to the strong folding and geochemical geometries in the deposit and the requirement for fan drilling, as a function of rig-access difficulties, many drillholes are drilled sub-parallel to the overall interpreted structural geometries. However, it is considered that there is a very low risk that sampling biases have been introduced due to the orientation of drilling.

Sample security	 The Simfer Iron Ore Project employs a security team to monitor site security. Half of the diamond core for each drillhole is stored in a secure fenced compound. Since 2010, the secondary RC samples have been riffle split and retained as reference samples in a secure storage facility. RC drillhole retention pulps, of approximately 120 g, are put in small plastic bags (150 by 250 mm) with around 20 small plastic bags put in larger bags. The retention pulps are stored in a secure shipping container at site. Prepared pulps are stored at site inside a secured shipping container. The primary pulps are sent by air freight in a secured metal container to an independent laboratory in Perth for assaying.
Audits or reviews	 An audit of the sample collection and pulp preparation processes was completed in 2011 by Rio Tinto Technology and Innovation. Overall, the data collection and assay data quality controls were considered to be industry-standard. Reviews of the QAQC data were completed both internally by Rio Tinto Technology and Innovation and externally by Xstract Mining Consultants in 2011. The main finding of the reviews was, overall, there are good spatial and temporal coverage of quality control data and no clear indications of significant grade biases for key grade variables. Recommendations were also made to improve procedures with respect to a more proactive approach to QAQC results and work procedures. A detailed external audit of the acQuire™ drillhole database was completed in 2010. The audit included review of the database structure, the loading and storage of data and checked 5% of the data (by laboratory analytical batch) against data sourced directly from the laboratory. The audit concluded that the drillhole database was structurally sound and contained valid data. Recommendations from the audit have been implemented by Rio Tinto with completion of all items by 2013. An internal peer review was undertaken in 2021 of the Ouéléba geology model and resource estimation by relevantly experienced Rio Tinto geologists. The review concluded the model and estimation was suitable for the current study.

Section 2: Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	 The Ouéléba and Pic de Fon deposits are located within the Simfer Mining Concession (granted on 22 April 2011 by Presidential decree namely the "Décret D/2011/134/PRG/SGG portant octroi d'une concession manière à la société Simfer SA sur le Mont Simandou") held by Simfer SA. The concession duration is 25 years (from the Effective Date of the Mine Convention), renewed automatically for a further period of 25 years followed by further 10-year periods in accordance with the applicable mining legislation, provided Simfer has complied with its obligations under its Amended and Consolidated Basic Convention between, inter alios, the Republic of Guinea and Simfer SA dated 26 May 2014, as further amended by the Mine Bipartite Convention between, inter alios, the Republic of Guinea and Simfer SA dated 10 August 2023. Thecoordinates of the are listed in the decree granting the Simfer Mining Concession. The rail and port infrastructure to enable export of iron ore from the Simfer Iron Ore Project and WCS mine project will be co-developed as a joint venture comprising the State, WCS and Simfer Jersey with the ultimate owner and operator to be the Compagnie du Transguinéen S.A (CTG). The infrastructure will be developed pursuant to the Co-Development Convention between, inter alios, the State, CTG, Winning Consortium Simandou Railway SAU, Simfer S.A. and Simfer InfraCo Guinée SAU dated 10 August 2023. The Co-Development Agreement remains subject to ratification by the Guinean State.

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Geology

The ownership of Simfer SA in 2023 is as listed in the table below:					
	JV Partners	% Ownership			
	Simfer Jersey	85%			
	Republic of Guinea	15.00%			
	Simfer Jersey Nominee Ltd	1 share			
	Rio Tinto International Holdings Ltd	1 share			

• The ownership of Simfer Jersey Ltd in 2023 is as listed in the table below:

JV Partners	% Ownership
Rio Tinto	53%
Chalco Iron Ore Holdings Ltd	47%

• The ownership of Simfer InfraCo Guinée SAU in November 2023 and as it will be following effectiveness of the Co-Development Convention and joint venture agreements is as listed in the table below:

JV Partners	% Ownership at November 2023	% Ownership after Co- Development Convention effective date
Simfer InfraCo Ltd	100%	85.00%
Republic of Guinea	-	15.00%

• Simfer InfraCo Ltd is 100% owned by Simfer Jersey Ltd.

The ownership of the Compagnie du Transguinéen is listed in the table below:

JV Partners	% Ownership
Simfer InfraCo Ltd	42.5%
WCS InfraCo Ltd	42.5%
Republic of Guinea	15%

 Areas of the Simfer mining concession sit within the Pic de Fon Classified Forest and as such one key component of the Social and Environmental Impact Assessment (SEIA) with respect to the Simfer Mine is to manage the impacts to this area and establish offset areas described in the SEIA.

xploration one by other	•	Regional mapping by French (1950s) and Chinese (1970s) technical teams identified the
		potential in the Simandou deposits.
arties	•	All exploration information used in generating the Mineral Resources has been collected by
		Rio Tinto managed exploration and evaluation programs since 1997.

• The Pic de Fon and Ouéléba deposits are typical of supergene-enriched itabirite hosted iron ore deposits.

 The deposits are located in the Simandou Range on a prominent ridge. The Simandou Range is the result of multi-phase ductile deformation represented by tight synformal fold keels and sheared antiformal structures. The ridge consists of a formation of itabirites (metamorphosed BIF) and phyllites within the Simandou Group overlying basement gneiss and amphibolite. The itabirites and phyllites have been deeply weathered and identifying stratigraphy is difficult, with the only discernible contact being that between the itabirites and phyllites.

	 mineralisation, friable nematite goethite mineralisation, friable enriched itabirite, friable poor itabirite and compact poor itabirite. Phyllite domains have been interpreted for very weak phyllite, soil strength phyllite, weak phyllite, compact pyritic phyllite, weak quartzite and compact quartzite. Laterite and carapace are sub-horizontal with the laterite overlying all other lithologies and the carapace overlying the mineralisation and enriched itabirite lithologies. The itabirites and phyllites are interpreted to be folded with the axial planes of the fold hinges dipping moderately to steeply towards the west. The high-grade mineralisation at Pic de Fon and Ouéléba is located on the top of the ridge, and typically consists of hematite-martite and hematite-goethite mineralisation respectively. Drilling has confirmed that the high-grade mineralisation extends to over 400 m from the surface. The high-grade mineralisation at both deposits transitions downwards into a partially enriched, generally friable, itabirites and then into unenriched itabirites which also transition from friable to compact with increasing depth away from the mineralisation front. A surface covering of weathered mineralisation typically up to 20 m to 30 m in depth is found over the high-grade mineralisation at Pic de Fon. At Ouéléba much deeper pervasive weathering is observed with a weathered carapace (goethite, clay and limonite rich) and a transitional weathering/mineralisation zone are observed over the high-grade mineralisation. These zones are typically between 30 m to 100 m thick but can be over 300 m thick in some locations.
hole rmation	Ouéléba Summary of drilling data used for the Ouéléba resource estimate:

Year	Reverse circulation		Diamo	nd core	Reverse circulation pre-collar and diamond core tail	
	# Holes	Metres	# Holes	Metres	# Holes	Metres
2005	23	2,013	-	-	-	-
2006	-	-	5	1,285	-	-
2007	141	25,795	19	4,999	-	-
2008	316	58,378	29	9,625	6	2,148
2009	-	-	26	7,574	-	-
2010	-	-	49	10,567	-	-
2011	23	3,210	41	8,582	17	4,724
2012	60	8,792	79	16,965	8	2,844
2013	-	-	10	2,844	-	-
Total	563	98,188	258	62,441	31	9,716

 44 additional holes (4,362 m) with no assay or geological logging, or with location uncertainty were excluded from geological modelling and grade estimation.

 An additional 5 holes with no assay information were used for geological modelling but not grade estimation.

	Pic de Fon					
	Summary of	drilling data	used for th	e Pic de Fo	n resource es	stimate:
		Year	Reverse	circulation	Diamo	nd core
		rear	# Holes	Metres	# Holes	Metres
		1999	16	1,355	-	-
		2000	-	-	7	1,384
		2001	8	970	1	156
		2002	97	17,956	2	511
		2003	26	5,500	-	-
		2006	-	-	15	3,369
		2007	46	10,482	35	6,773
		2008	211	44,963	49	12,777
		2010	-	-	15	4,373
		2011	-	-	1	230
		Total	404	81.282	125	29.573
				•		
ineralisation idths and tercept ngths iagrams	 Potential diffudimensional No individual Plans are incomentation of the second sec	l interpreted erences betw interpretatio d drill results cluded in the Figure 1 Figure 2 Figure 3 Figure 4	structural g ween dowr n of the str are reporte release as Prope Tene Drill h Drill h	geometries. hole and tru atigraphic u ed in this rel below: erty location ment location nole location	ue thickness a nits using the ease. map on map o plan Ouéléb o plan Pic de l	are mitigated by th nominal 2 m sam
	0	Figures 5 to	8 Ouéle	ba cross se	ections	
alanced eporting	Not relevant	as exploration	on results a	are not being	g reported.	
Other Substantive Exploration data	 In addition to work, structu mapping in p studies. 	the drilling ral mapping otential reso	data the fo for engine ource exter	llowing item ering geolog ision areas,	s have also b gy and geoteo surface wate	een completed: m chnical purposes, g r studies and geot

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Section 3: Estimation	ation and Reporting of Mineral Resources			
Criteria	ria Commentary			
Database integrity	 All drilling data is stored in the Rio Tinto Simandou acQuire [™] drillhole database. The system is backed up daily to a server located in Conakry. All data is transferred electronically and checked prior to upload to the database. In-built validation tools are used in the acQuire [™] database and data loggers are used to minimise keying errors, flag potential errors and validate against internal library codes. Data that is found to be in error is investigated and corrected where possible. If the data cannot be corrected it is removed from the data set used for resource modelling and estimation. The drillhole database used for the Mineral Resource estimation has been validated. Methods included checking of: QAQC data, duplicate drillhole locations, duplicated intervals, odd total assay values, extreme values, zero values, possible miscoded data based on location within a geodomain and assay value, sample overlaps, the total LOI against the sum of the individual LOI values and inconsistencies in length of drillhole surveyed and length of drillhole logged and sampled. 			
Site visits	• The Competent Person worked on site from 2005 to 2009 and visited the site in 2015 and again in 2022 and 2023.			
Geological interpretation	 The geological interpretation was completed by Rio Tinto and WSP/Golder Associates. The method involved the use of surface geological mapping, surface structural measurements, downhole televiewer structural measurements, lithological logging data, assay data and downhole geophysical data. The interpretations have evolved from 2007 to current, moving from sectional interpretations that were linked into 3D wireframes to 3D construction of wireframes using Leapfrog[™] software. The following itabirite related domains are used for the Ouéléba Mineral Resource: laterite (LAT), carapace (CAP), transitional mineralisation (TRN), friable hematite goethite mineralisation (HGF), friable hematite mineralisation (HEF), friable poor itabirite (IPC). Near surface canga (CAN) deposits are modelled from surface mapping. The following itabirite related domains are used for the Pic de Fon Mineral Resource: compact poor itabirite (IPC), friable poor itabirite (IPF), friable enriched itabirite (IRF), friable hematite (HEF), transitional (TRN), compact hard hematite (HEC) and weathered hematite (WEA). Phyllite domains have been interpreted at both deposits and include: very weak phyllite (PHV), soil strength phyllite (PHS), weak phyllite (PHW) and compact pyritic phyllite (PHC). In addition, weak quartzite (QTW), compact quartzite (QTC) and undifferentiated basement (BAS) units are interpreted at Ouéléba. Grade estimation uses the interpreted geology as hard boundaries. Confidence in the geological interpretation has been taken into account for classification of the Mineral Resources. Measured Mineral Resources are only supported in the HEF and HGF domains. The effects of alternative interpretations have not been assessed. 			
Dimensions	 The Ouéléba deposit strikes approximately north-northeast/south-southwest with an along strike extent of 9.8 km, with a width of approximately 0.8 km at the widest. The resource mineralisation extends from surface to a vertical depth of approximately 600 m. The Pic de Fon deposit strikes approximately north-northwest/south-southeast with an along strike extent of 7.5 km, with a width of approximately 1 km at the widest extent (approximately 0.5 km on average). The resource mineralisation extends from surface to a vertical depth of approximately 0.5 km on average). 			
Estimation and modelling techniques	 No compositing was applied to Ouéléba drillhole data. The majority of drill hole samples used a 2 m downhole interval. The Pic de Fon drillhole data was composited to 2 m intervals downhole, which is equivalent to the sample interval for the majority of the drilling. Statistical analyses were carried out on data by domain and assessment was made on potential outliers. No top-cuts were applied to the data. Variography for Ouéléba were conducted using OBO (WSP/Golder proprietary) software. 			

Variography was completed for Pic de Fon using semi-automatic variogram fitting software . (Centre for Computational Geostatistics VARFIT program) to maintain the correlation between variables. The Ouéléba block model cell size was 30 m by 30 m by 6 m, with a minimum sub-cell size of 5 m by 5 m by 2 m. The parent block size in the horizontal plane is approximately half the drill spacing of 62 m by 62 m in the northern part of the deposit. The block height of 6 m corresponds to the proposed selective mining flitch height. The Pic de Fon block model cell size was 60 m by 60 m by 12 m, with a minimum sub-cell size of 10 m by 10 m by 2 m. The parent block size in the horizontal plane is approximately half the average deposit drill spacing of 125 m by 125 m. The block height of 12 m corresponds to the proposed mining bench height. Resource modelling has considered the dimensions of drilling and probable mine equipment sizing in the choice of the blocking criteria. Grade estimation used ordinary kriging algorithms to estimate block grades of Fe, SiO₂, Al₂O₃, P, CaO, K₂O, Total LOI, MgO, Mn, Na₂O, S and TiO₂. WSP/Golder Associates proprietary software was used for the grade estimation of Ouéléba and Maptek™ Vulcan™ software was used for Pic de Fon. Hard boundaries were applied to the geology domains. Internal dilution was modelled and estimated as separate subdomain of the HGF domain. A 'high yield limit', or grade-dependent restriction on a sample's range of influence, was used in estimating manganese block grades in the domains of TRN, HGF and QTW. For Ouéléba, kriging neighbourhood analyses were completed to determine appropriate parameters for block size, discretisation and numbers of samples. The minimum number of samples was set to 6 and the maximum number of samples to 24, with a limit of 9 samples per drillhole. Three increasing search volumes were used for grade estimation. The primary search ranges used are 375 m by 86 m by 75 m for Ouéléba. Kriging neighbourhood analyses were completed at Pic de Fon to determine appropriate parameters for block size, discretisation and numbers of samples. The minimum number of samples was set to 6 and the maximum number of samples to 20, with a limit of 5 samples per drillhole. Three increasing search volumes were used for grade estimation. The primary search ranges used are 180 m by 120 m by 60 m. The grade estimation was validated using: visual comparisons between the composited drillhole data and block grades 0 comparisons of declustered composited drillhole global mean grades with block 0 grades comparing the composited drillhole and block model mean grades in northing, 0 easting and elevation slices (grade trend charts) The Mineral Resources were also compared with the 2021 Mineral Resource 0 estimates. The grade estimation and validation techniques are considered appropriate for the Mineral Resources estimates. Recovery factors are not applied to the Mineral Resource models. Construction of the Ore Reserves model is when both recovery and dilution are incorporated. No mining has occurred that will allow reconciliation of actual and predicted data. Moisture ٠ All Mineral Resource tonnages are estimated and reported on a dry basis. Cut-off The Mineral Resources cut-offs for reporting are greater than or equal to 58% Fe and less parameters than or equal to 8% Al₂O₃ + SiO₂ and less than or equal to 0.25% P. The decision is based on, economic analysis of the material meeting the cut-off criteria, . mining continuity and market for the directly shippable product defined in these models. Mining factors The proposed mining operation will be open cut mining with a large annual tonnage (after or assumptions initial production and ramp up). The proposed bench height is 6 m and this has been taken into account for the selection of the resource model block size for both Ouéléba and Pic de Fon. No other mining factors or assumptions have been applied to the mineral resource model. The ultimate shell for reporting Mineral Resources has been selected from Whittle™ software optimisation of direct ship material in the mining models for all resource categories (excluding the unclassified category).

Metallurgical factors or assumptions	 No metallurgical modifying factors have been applied given the mineralisation is of direct shipping grade and it is modelled that 100% of plant feed is recovered as product. Processing characteristics, such as abrasiveness, are factored into the operating cost model.
Environmental factors or assumptions	 Drillhole samples with elevated sulphur levels have been identified in a number of the domains: The waste material with elevated sulphur currently accounts for approximately 1% of the expected waste rock to be moved during the life of mine. A program to test different potential waste dump mixes for this material is underway to assess potential acid forming material and sediment runoff issues with results expected in 2024. Undertaking humidity cell (HC) tests to determine long term ARD risk. The studies to date have used a conservative approach for the mine plan economics by segregating potentially acid forming waste into managed cells within the waste dump and with appropriate treatment facilities if required. It may be feasible to blend the low quantities of this material with other neutralising wastes. The Social and Environmental Impact Assessment (SEIA) was completed and approved in 2012, describing the key management requirements that apply to the development of the Simfer Iron Ore Project and the associated rail and port infrastructure to be built by Simfer Jersey. This assessment has been updated to reflect the Simfer scope of the co-developed infrastructure project and to meet current leading practices, utilising modern techniques for mitigation. The SEIA including management plans and commitments has been updated based on current project design. An updated SEIA for the mine and rail spur was submitted for regulatory review in July 2023 and an update to the SEIA for the port was submitted in November 2023. Stakeholder engagement has continued since 2012 to maintain local relationships and understand the concerns of local communities, which has been supplemented by additional consultation meetings to support the ESIA updates. Social baseline studies have been updated to reflect changing societal structures, and cultural heritage studies are ongoing. Pre-clearance s
Bulk density	 Bulk dry density values were determined by using the Corelok[™] system where samples, nominally 15 cm in length, are vacuum sealed and then water displacement is used to determine the density value and the porosity. The 3,884 density samples (1,918 from Ouéléba and 1,966 from Pic de Fon) have been selected from 146 diamond drillholes since 2007. The domains represented by the density samples are similar in representation to the domains in the resource drilling data. The density data was statistically analysed to determine an average bulk dry density value to be used for each geology domain used in the resource model. Itabirite density values range from 2.8 to 3.3 t/m³. Phyllite density values range from 1.7 to 2.4 t/m³.
Classification	 The resource has been classified as Measured, Indicated and Inferred Mineral Resources. The classification is based on drill spacing, includes consideration of geological confidence, downhole survey risk, kriging variance, grade extrapolation of blocks estimated in the third search pass, blocks estimated with low numbers of samples and areas visually identified by coordinate extents as being of lower confidence. Measured Mineral Resources are only supported in the HEF and HGF domains. A significant number of drill holes (103) at Ouéléba did not have any downhole deviation survey, but this was not considered to pose significant positional uncertainty. Many of these are short and the longer holes are spread though out the deposit with adjacent holes not displaying significant deviation. No areas at Pic de Fon were considered to be significantly affected by downhole survey risk to require a downgrade in the resource classification. The distance to the nearest samples used for block grade estimation has been determined for the Inferred Mineral Resources. The block grades that were estimated using samples

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	greater than 125 m are considered to be the result of grade extrapolation. The extrapolated block grades represent 12% of the Inferred Mineral Resources tonnage for Ouéléba and 14% of the Inferred Mineral Resources tonnage for Pic De Fon.
Audits or reviews	 The resource interpretation and estimation methodology for Pic de Fon and Ouéléba were reviewed by an external peer reviewer in 2011. Actions from the findings of that review were addressed as part of the 2012 and 2021 modelling process. The resource estimation of Pic de Fon was completed in 2012 by Xstract. Internal peer reviews were completed at key stages during the resource estimation process by Xstract, and Rio Tinto also reviewed the output at key stages during the resource estimation process. Coffey reviewed the Pic de Fon Minerals Resource in February 2015. They endorsed the processes used and supported the work as fit for purpose. The updated resource model and estimation of Ouéléba was completed by WSP/Golder Associates in 2021. Internal peer reviews were completed at key stages during the resource estimation process by WSP/Golder Associates. Rio Tinto also reviewed the output at key stages during the resource the output at key stages during the resource estimation process by WSP/Golder Associates. Ouéléba 2022 resource model and estimation was reviewed internally by geologists with relevant experience from the Rio Tinto Group.
Discussion of relative accuracy/ confidence	 No specific geostatistical studies have been completed to estimate the local accuracy or degree of grade smoothing in the Mineral Resource estimate. The Mineral Resource estimate has good global accuracy and a level of local accuracy that is sufficient to support mine planning studies aimed at preparing Proved and Probable Ore Reserves. Variances to the tonnage and grade of the Mineral Resource estimate are expected with further definition (and grade control) drilling and additional density data but are not expected to significantly affect the global accuracy. No production data is available, as mining has not commenced, to reconcile the Mineral Resource estimates.
Section 4: Estin	nation and Reporting of Ore Reserves
Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	 The Mineral Resource model used as input to the mining model was the WSP/Golder Associates 2021 Mineral Resource model as identified in Section 3. The Ouéléba block model cell size was 30 m by 30 m by 6 m, with a minimum sub-cell size of 5 m by 5 m by 2 m. The parent block size in the horizontal plane is approximately half the drill spacing of 62 m by 62 m in the northern part of the deposit. The block height of 6 m corresponds to the selected mining flitch height, with two flitches within an overall 12 m bench height. The Ore Reserve has been estimated using Measured and Indicated Mineral Resources within the final pit design. Contaminant restrictions were applied on import within the mine scheduling package to eliminate mineralised zones within the Measured and Indicated Mineral Resources that are deemed outside of desired product specifications.
Site visits	 The Competent Person undertook multiple extended site visits to the Simandou Project from May to December 2022. During the visit both the Ouéléba and Pic de Fon deposits were visited as well as both existing and planned facility locations. The core shed, workshop facilities, camp accommodation, office accommodation and ongoing drill sites were visited. Matters pertinent to the application of the requisite modifying factors and conversion of Mineral Resource to Ore Reserve were considered and assessed on site. The site has road access and is readily accessible for power, water and additional

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	 The Mineral Resource model used as input to the mining model was the WSP/Golder Associates 2021 Mineral Resource model as identified in Section 3. The Ouéléba block model cell size was 30 m by 30 m by 6 m, with a minimum sub-cell size of 5 m by 5 m by 2 m. The parent block size in the horizontal plane is approximately half the drill spacing of 62 m by 62 m in the northern part of the deposit. The block height of 6 m corresponds to the selected mining flitch height, with two flitches within an overall 12 m bench height. The Ore Reserve has been estimated using Measured and Indicated Mineral Resources within the final pit design. Contaminant restrictions were applied on import within the mine scheduling package to eliminate mineralised zones within the Measured and Indicated Mineral Resources that are deemed outside of desired product specifications.
Site visits	 The Competent Person undertook multiple extended site visits to the Simandou Project from May to December 2022. During the visit both the Ouéléba and Pic de Fon deposits were visited as well as both existing and planned facility locations. The core shed, workshop facilities, camp accommodation, office accommodation and ongoing drill sites were visited. Matters pertinent to the application of the requisite modifying factors and conversion of Mineral Resource to Ore Reserve were considered and assessed on site. The site has road access and is readily accessible for power, water and additional infrastructure requirements. Camp facilities are in place with a current workforce involved in further geological sampling and early construction works for the project.
Study Status	 The Ore Reserves for the Ouéléba deposit are based upon a minimum of pre-feasibility study for the mine plan and mine design including schedule covering the life of mine within the Ouéléba deposit. The Ore Reserves are deemed technically achievable and have been tested for economic viability using input costs, metallurgical recovery and expected long term iron ore price, after due allowances for royalties. Apparent differences may occur due to rounding.

	 Approximately 95% of the Measured and Indicated Mineral Resources within the final pit were converted to Ore Reserves with the remaining 5% being allocated to waste rock within the pit. Material meeting the acceptance criteria for direct shipping ore production was scheduled over the life of the deposit with resulting Ore Reserves.
Cut-off parameters	• A global cut-off grade of 58% Fe was applied for Measured and Indicated Resources within the final pit. The material was further restricted with the rejection of material having a combined alumina plus silica grade exceeding 8%, or a phosphorous grade exceeding 0.25%.
Mining factors or assumptions	 The Simfer Iron Ore Project will be mined by medium-scale conventional open pit mining equipment. The mining process will include drill and blast, and conventional load and haul operations. There is a moderate proportion of free-dig material within the HEF/HGF lithology with the majority of other rock types requiring drilling and blasting. The Ouéléba deposit will be mined with a planned annual sales export tonnage of 60 Mt. First production is expected in 2025, ramping up over 30 months to an annualised capacity of 60 Mtpa which will be underpinned as to 18% by Proved Ore Reserves and 82% by Probable Ore Reserves. Pursuant to the Amended and Consolidated Basic Convention, as amended by the Mine Pinettine Amended and Consolidated Basic Convention, as amended by the Mine
	 Bipartite Agreement, Simier will seek to increase production to up to 100 Mtpa (subject to the commensurate increase in the rail and port infrastructure capacity and completion of a feasibility study, which will include consideration of the Pic de Fon resource. Mining will be carried out using staged advances within the LOM final pit. The mining faces will be mined on 6 m flitches within a 12 m mining bench using hydraulic excavators in backhoe configuration supported by rigid dump trucks, track dozers, rubber tyred dozers, motor grades, and drill rigs. No unconventional or novel equipment or mining methods are included within the mining operational plan. The pit slopes have been assessed from a geotechnical investigation by WSP/Golder
	 Associates with the phyllite material accommodated by shallower slope angles. De-watering of the pit below the water table has been allowed for with 100 m sub-horizontal drill holes spaced at 10 m wide spacing every 36 m vertical along the pit edges within the final pit. Grade control drilling and sampling of combined reverse circulation and blast holes will precede ore identification and ore mark out on a flitch/bench basis. The mining block model has assumed that sufficient account for estimated ore loss and dilution has been incorporated into the Mining Model with the regularization from the 5 m by 5 m by 2 m sub celled geology model to a 20 m by 40 m by 6 m regularised block size within the Mining Model. Moderate bulk mining (minimal selectivity) will be used with 600 t excavators feeding 220 t rigid body haul trucks.
	 A minimum mining width of 50 m was assumed, with the exception of selected areas at the base of the mining panels where a minimum mining width of 35 m has been allowed with single-lane access. Inferred Mineral Resources within the final limit design have been considered as waste material. There is a relatively low proportion of Inferred Resource material within the final pit design equating to some 13% of total mineralized material within the product specification criteria inside the pit limit. Mining infrastructure requirements have been identified by Rio Tinto and will be incorporated as part of the mining project build scope.
Metallurgical factors or assumptions	 The Ouéléba ore is a low impurity high-grade Direct Shipping Ore (DSO) with an average export grade of some 65% Fe. An allowance of 0.5% fines losses has been incorporated within the product handling system from crusher through to ship loading, this percentage of ore loss estimate has been provided by Rio Tinto based upon experience at multiple direct shipping operations. Current work is underway to test the viability of producing a dual product including blast furnace and direct reduction feed.
Environmental factors or assumptions	• Capacity building with local organisations is ongoing, including training of Classified Forest teams and supporting biodiversity awareness programs in local communities.

		Social and environmental commitments have been updated and included in the project cost model.
	Infrastructure	 The site has road access and is readily accessible for power, water, and additional infrastructure requirements. Camp facilities are in place with a current workforce involved in further geological sampling and early construction works for the project. Planned expansion of the camp facilities including a dedicated airstrip are planned for the project construction phase. The rail and port infrastructure to be built pursuant to the Co-development Agreement and owned and operated by the Compagnie du Transguinéen includes a purpose-built port facility to be constructed at Morebaya estuary which will facilitate the export of the iron ore from the Simfer Mine and WCS Mine. The port will have a capacity of 120 Mtpa and will be shared between Simfer and WCS as fundamental customers. The port will be accessed by a purpose built approximately 536 km main rail line with spurs to connect the Simfer Mine (68 km) and WCS Mines (16 km) to the port at Morebaya. The rail will have initial capacity of up to 120 Mtpa. Studies to confirm the ability to expand the rail and port infrastructure to 160 Mtpa to enable the expansion of the Simfer Mine from 60 Mtpa to 100 Mtpa will be undertaken in accordance with the Co-Development Convention and Mine Bipartite Convention.
	Costs	 Costs were provided by Rio Tinto for the 'down-stream' processing costs of the export ore. Operating costs were compiled from quotations, database and a variety of sources and compared against existing and planned west African mining operations. Mining costs were built up from first principles by WSP/Golder Associates using vendor quotations and current databases to derive contractor equivalent rates. The estimated base mining cost used an incremental cost increase with depth for both above crusher elevation and below crusher elevation to account for increased haulage costs. All costs were determined on a US dollar (US\$) basis. The mining operation has been costed based upon an owner mining operation, with heavy mobile machinery costs maintained under an OEM repair and maintenance agreement.
	Revenue factors	• An allowance of 3.5% for iron ore royalties payable to the Government of Guinea, consistent with the Simfer Mine Convention, has been allowed for in the selling price along with an estimated deduction equivalent to the provided shipping costs from the port of Conakry to southern China. The life of mine pit shell was selected based upon a Revenue Factor of 0.65 representing the estimated maximum discounted average value point within the nested pit shells.
))	Market Assessment	 Iron ore is a readily traded commodity, and no specific market study has been carried out. The World Bank Iron Ore historical price using a 62% Fe CFR (Iron Ore Pricing including the cost of freight and insurance) with a deduction equivalent to the provided shipping costs, was used to estimate the three-year trailing average Iron Ore price for the Ouéléba direct shipping ore which was confirmed to be below the ruling spot price at the time of the estimation.
	Economic	• A feasibility study has been undertaken on the project against the primary value drivers using a discount factor of 10%. The project was assessed against changes in mining costs, changes in downstream processing and handling costs, capital costs and Iron Ore pricing. The project returns a positive discounted cash-flow under all conditions tested.
	Social	 Stakeholder engagement has continued since 2012 to maintain local relationships and understand the concerns of local communities, which has been supplemented by additional consultation meetings to support the ESIA updates. Social baseline studies have been updated to reflect changing societal structures, and cultural heritage studies are ongoing. Pre-clearance surveys are completed to ensure no sensitive biodiversity sites or cultural heritage is being impacted by approved works. Economic and physical displacement has been minimised through integrated engineering and social designs. Social and environmental commitments have been updated and included in the project cost model. Stakeholder engagement has continued since 2012 to maintain local relationships and understand the significant concerns of local communities. Social baseline studies have been

D	 conducted to reflect changing societal structures, and cultural heritage studies have commenced. Pre-clearance surveys have been completed for for sensitive biodiversity and cultural heritage to minimise potential impacts from approved works. Economic and physical displacement has been minimised through integrated engineering and social designs. Social and environmental commitments have been updated and included in the project cost model.
Other	 There are no known current impediments to the progression of the project or foreseen encumbrances to the granting of a licence to operate. Simfer has signed agreements with the State and Winning Consortium Simandou (WCS), the owner of Simandou blocks 1 & 2 deposits (WCS Iron Ore Project), to enable co-development of the rail and port infrastructure for the Simfer Iron Ore Project and the WCS Iron Ore Project. The Co-Development Convention, which adapts the along with bipartite amendments for each of the Simfer and WCS Mine Conventions to amend the existing investment frameworks of Simfer and WCS. These conventions provide the legal framework for infrastructure co-development, establishing the fiscal regime and the access arrangements (including tariff) that will apply for use of the infrastructure by the Simfer and WCS as foundation customers. These conventions require ratification by the State and are conditional on satisfaction of certain conditions including regulatory approvals. Finalisation of the joint venture agreements is ongoing and closing of Simfer Jersey's investment in the WCS entities is remain subject to conditions including regulatory approvals. Discussions with the regulatory authorities and submission of the mine plan and closure plan to the Guinean authorities are continuing as part of the feasibility study and execution plan.