AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT
AND MEDIA RELEASE

10 April 2024

Jambreiro Iron Ore Project – Development Update

POSITIVE METALLURGICAL TESTWORK RESULTS REINFORCE ABILITY TO PRODUCE HIGH-PURITY DIRECT REDUCTION PELLET FEED PRODUCT

Only minor changes to the 2019 PFS process flowsheet required to deliver direct reduction product

Key Points:

- **Consistent high-grade, low-impurity results achieved from recent bench scale metallurgical testwork on ore from multiple phases of the proposed mine plan for the Jambreiro Iron Ore Project in Brazil.**
- **Average product specification achieved from current bench scale testwork program shows an Fe grade of 67.8% with Silica (SiO_2) at 1.08% and Alumina (Al_2O_3) at 0.64% for a combined Silica + Alumina level of 1.72% - well under the 2% threshold required to achieve direct reduction quality.**
- **Testwork confirms the ability to produce a high-purity product, which is becoming more attractive to off-takers who are now increasingly demanding iron units that can significantly reduce their Scope-3 emissions and their overall carbon footprint.**
- **Tailings testwork has delivered slimes tailings cake with moisture in the range of 21-22%, and spiral tailings of approximately 11%. This combination is favourable for the future dry stacking of all tailings from the Jambreiro Project.**
- **In light of the highly encouraging results received from the testwork, the Company is now:**
  - **Assessing the impact of the changes to the proposed process flowsheet from a capital and operating cost perspective; and**
  - **Engaging further with potential off-takers for a direct reduction pellet feed product from Jambreiro.**

Centaurus Metals (ASX Code: CTM, OTCQX: CTTZF) is pleased to report highly encouraging results from recent bench scale metallurgical testwork on the 100%-owned Jambreiro Iron Ore Project in south-east Brazil, confirming the potential for the project to produce a Direct Reduction Pellet Feed (DRPF) product across its entire projected mine life.

The average product specification achieved from the Company's recent testwork program delivered an iron grade of 67.8% Fe, 1.08% Silica and 0.64% Alumina (Silica + Alumina of 1.72%), as shown in Figure 1, with this specification well within the 2% threshold required to achieve a Direct Reduction (DR) quality product. The average Phosphorus grade in the concentrate product was very low at 0.011%. A summary of all the assay results for each concentrate produced is set out in Table 1.

DR quality product is achieved when the combined Silica and Alumina levels in the pellet feed product are under 2%. The product can be converted to direct reduction (DR) pellets and used as a primary ingredient in Direct Reduction furnaces and electric arc furnace steelmaking, technology that produces steel at considerably lower carbon emissions when compared to traditional blast furnace processes.

Over the past 24 months, the average premium for the DRPF product has been 15-30% over the benchmark 62% Fe CFR China Index (Platts) price with premiums increasing and decreasing with corresponding movements in the iron ore price. The Company expects the demand for DRPF to increase over time as more steelmakers look to source iron ore that can deliver lower overall emissions to their business.

Australian Office
Centaurus Metals Limited
Level 2, 1 Ord Street
West Perth WA 6005
AUSTRALIA

Brazilian Office
Centaurus Niquel Ltda
Edificio Century Tower
Rua Maria Luiza Santiago, 200
Santa Lúcia, 17º Andar - Sala 1703
Belo Horizonte - MG - CEP: 30360-740
BRAZIL

ASX: CTM / OTCQX: CTTZF
ACN 009 468 099
office@centaurus.com.au
T: +61 8 6424 8420

Centaurus' Managing Director, Mr Darren Gordon, said the Company was pleased with the ongoing metallurgical testwork program, which continued to demonstrate the potential for Jambreiro to deliver a high-grade, low impurity DR quality pellet feed product with strong metal and mass recoveries.

"When the project was first studied in 2012/2013, we were looking to maximise the coarseness of the product to meet the then prevailing market conditions and produce a sinter feed product for consumption in the Brazilian domestic steel industry. However, the inherent physical properties of Jambreiro ore – being very friable – lends itself perfectly to the production of a finer, high-grade product with low impurities, especially at a time when the steel industry is aggressively pursuing decarbonisation and demanding higher-grade, low-impurity products to lower their overall carbon footprint.

"The Company has already seen a marked change in the way steel producers and iron ore majors are looking at the iron ore sector and low-emission iron products, with strong interest already being shown in the ability of the Jambreiro Project to produce a DR quality pellet feed product."

Figure 1 – Jambreiro Product Results from Current Metallurgical Testwork Program

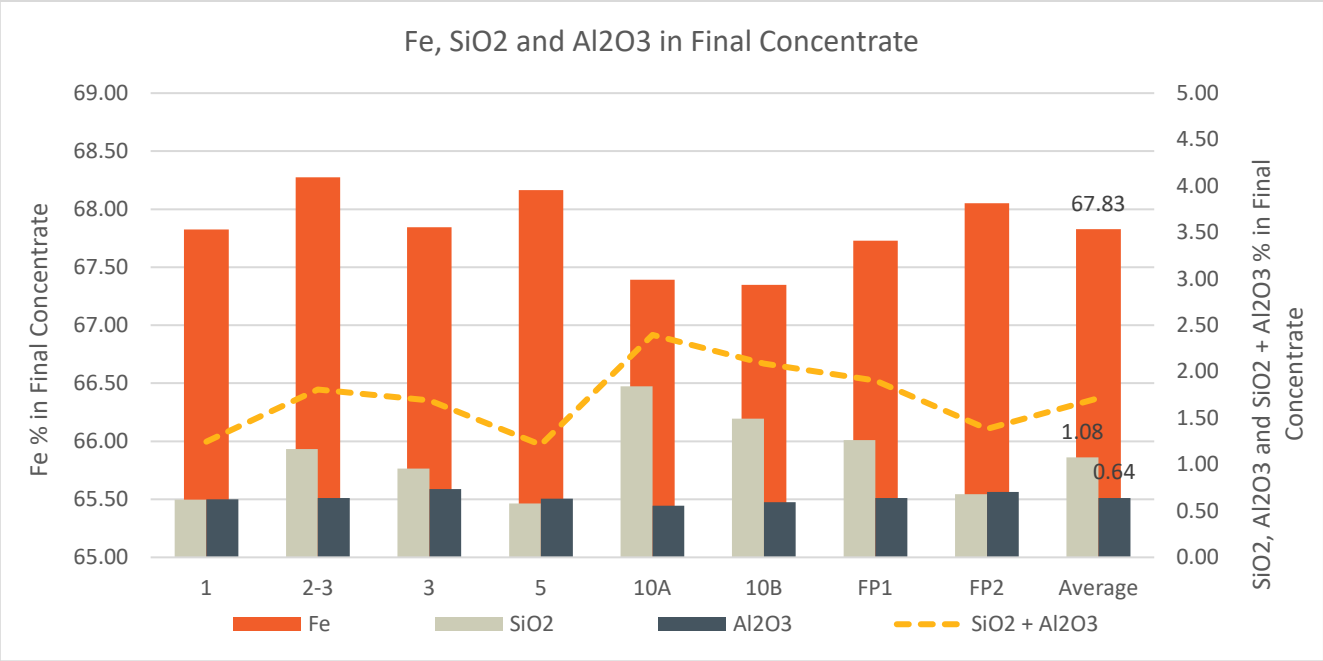


Table 1 – Jambreiro Product Results from Current Metallurgical Testwork Program

Sample	Final Concentrate Grades (%)											
	Fe	SiO_2	Al_2O_3	P	Mn	CaO	MgO	TiO_2	Na_2O	K_2O	Cr_2O_3	LOI
1	67.82	0.62	0.62	0.004	0.05	0.02	0.06	1.10	<0.01	<0.01	0.04	0.12
2-3	68.27	1.17	0.64	0.010	0.11	<0.01	<0.01	0.17	<0.01	<0.01	0.02	0.06
3	67.85	0.96	0.73	0.011	0.17	<0.01	<0.01	0.43	<0.01	<0.01	0.03	0.31
5	68.17	0.58	0.63	0.012	0.21	0.02	0.07	0.60	0.05	<0.01	0.08	0.03
10A	67.39	1.84	0.56	0.015	0.12	0.01	0.03	0.57	<0.01	<0.01	0.04	0.16
10B	67.35	1.49	0.59	0.020	0.16	0.02	0.02	0.82	0.02	<0.01	0.04	0.26
FP1	67.73	1.26	0.64	0.011	0.14	0.02	0.03	0.68	<0.01	<0.01	0.04	0.07
FP2	68.05	0.68	0.70	0.014	0.17	<0.01	0.05	0.56	0.03	<0.01	0.03	0.18

Testwork Program

The new metallurgical testing was undertaken by independent Brazilian laboratory, Fundação Gorceix, on eight composite samples that are representative of the various years of the Jambreiro mine plan. Composite sample weights were approximately 100kg with the head grade of each sample shown in Table 2 below. The coordinates of all drill holes and sample intervals are shown in Appendix A.

Table 2 – Head Grades of Jambreiro Composite Samples

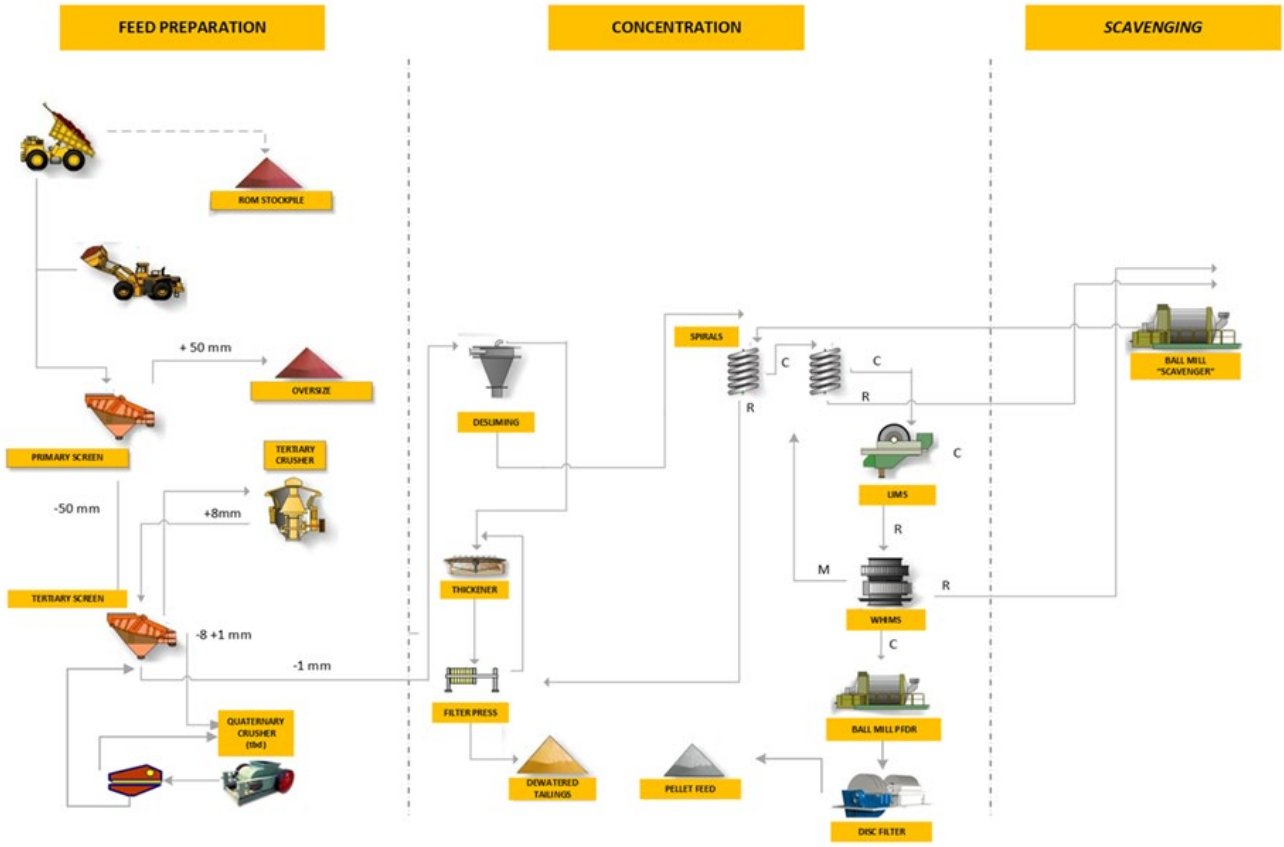
Sample ID	Fe%	SiO_2%	Al_2O_3%	P%
1	35.02	40.79	5.58	0.082
2-3	31.09	52.46	1.48	0.017
3	35.54	42.22	3.69	0.021
5	30.03	49.01	4.03	0.043
10A	32.24	47.49	3.90	0.035
10B	33.56	43.74	4.52	0.044
Final pit - 1	27.77	54.73	2.59	0.029
Final pit - 2	28.60	49.59	5.15	0.031

The bench-scale testwork was completed using two flowsheet alternatives. Option 1 included a Jig as per the original flowsheet while Option 2 excluded the Jig and added a quaternary crusher and a ball mill.

The results from both options were very similar with respect to product quality, but there was a notable difference in relation to mass and metallurgical recovery in favour of the Option 2 flowsheet, with roughly 10% higher mass recovery and more than 9% higher metallurgical recovery achieved with this option.

As a result of these higher recoveries, the process flowsheet to be used moving forward for future testwork, costing and the planned production of DRPF from Jambreiro is set out in Figure 2 below.

Figure 2 – Selected Flowsheet for Future Testwork, Costing and DRPF Production



Based on the results from the new bench-scale testwork and all the extensive historical metallurgical testwork data on the Project, a METSIM model (using Usimpac software) has been developed to simulate the processing of multiple samples of ore through the selected flowsheet.

The results of the modelling for the proposed process flowsheet at the average grade of the current bench scale testwork program delivered an average metallurgical recovery of 87.7% and an average mass recovery of 41.2%.

This new proposed flowsheet is very similar to the original Jambreiro flowsheet, which was designed to produce a sinter feed product. The differences, however, from the original flowsheet are:

- The removal of the jig,
- The inclusion of a new quaternary crusher; and
- The inclusion of a ball mill after the magnetic separators.

The original flowsheet was designed to produce a sinter feed as coarse as possible and, as such, the jig was included in the flowsheet. Removing the jig allows all of the ore to be crushed, deslimed and fed to the spirals, which, in turn, facilitates an easier production path to a pellet feed size fraction product. Further, given the goal is to now produce a high-grade, low-impurity pellet feed product, a ball mill has been included at the back end of the process flowsheet to reduce the grainsize to achieve pellet feed size fraction specification.

The Company expects these minor changes to have little effect on the process plant footprint and energy consumption, as the ball mill will only grind the final product and not the entire plant feed.

In addition to the metallurgical testwork, slimes dewatering testwork has also been completed using filter presses. The results from this work demonstrate that the filtered slimes cake (Figure 3) has a moisture content of 21-22%. Further, previous spirals tailings testwork using dewatering screens has delivered spirals tailings with a moisture content of 11%.

It is anticipated that the slimes cake and the spirals tail will be able to be combined to deliver a tailings product with a moisture content well under the targeted level of 20% and, as a result, the tailings will be able to be dry stacked with mine waste. The spiral tailings represent approximately 80% of the total tailings material, with the slimes being only 20% of total tailings from the project.

Figure 3 – Jambreiro Filtered Tailings Cake

Centaurus is currently assessing the impact of the changes to the process flowsheet on previous capital and operating cost estimates so that the Company can confirm, at a high level, its expectations that the production of a DRPF product can deliver strong economics for the Company at a time when the steel industry is demanding lower-emission iron products as feed for its steel-making activities. This work should be completed in H1 2024.

The new Preliminary License (LP) is expected in H2 2024 and the Installation License (LI) in H1 2025. As the project had already been licensed in 2013 and significant environmental improvements were implemented in the project design, including the removal of the tailings dam, the Company expects no issues with the new approvals process.

Further details on the Jambreiro Iron Ore Project can be found on the Company's website, www.centaurus.com.au

-ENDS-

For further enquiries please contact:
Nicholas Read
Read Corporate
M: +61 419 929 046
T: +61 8 9388 1474

Authorised for Release by
Darren Gordon
Managing Director
Centaurus Metals Ltd
T: +61 8 6424 8420

Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Roger Fitzhardinge who is a Member of the Australasia Institute of Mining and Metallurgy. Mr Fitzhardinge is a permanent employee and shareholder of Centaurus Metals Limited. Mr Fitzhardinge 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 Fitzhardinge consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

APPENDIX A– DRILL HOLE COORDINATES AND SAMPLE INTERVALS TO MAKE COMPOSITES FOR METALLURGICAL TESTING

Sample ID	Drill hole ID	Drill hole Coordinates (zone 23K)*			Sample Interval		
		Easting	Northing	mRL	From	To	Interval (m)
1	JBR-DD-11-00021	722727	7944645	1021	19.3	45.3	26.0
2-3	JBR-DD-11-00021	722727	7944645	1021	45.3	48.4	3.1
	JBR-DD-11-00023	722596	7944919	970	0.0	2.9	2.9
	JBR-DD-11-00042	722978	7944955	955	16.3	22.0	5.6
3	JBR-DD-10-00011	722474	7944989	962	0.5	7.0	6.5
	JBR-DD-11-00017	722554	7944876	991	32.9	36.6	3.7
	JBR-DD-11-00023	722596	7944919	970	5.0	11.0	6.0
	JBR-DD-11-00029	723096	7944851	957	0.0	2.0	2.0
	JBR-DD-11-00030	722938	7945077	929	0.0	7.5	7.5
5	JBR-DD-10-00007	722858	7945112	894	12.6	22.1	9.5
	JBR-DD-10-00013	723004	7944789	961	62.3	65.0	2.7
	JBR-DD-11-00026	722198	7945026	912	8.0	63.0	55.0
	JBR-DD-11-00030	722938	7945077	929	26.0	36.0	10.0
	JBR-DD-11-00032	722959	7945213	909	0.0	5.0	5.0
	JBR-DD-11-00040	722930	7944942	928	34.0	36.0	2.0
	JBR-DD-11-00044	722865	7945193	894	6.7	12.1	5.4
10A	JBR-DD-10-00001	722380	7944993	952	41.0	46.1	5.1
	JBR-DD-11-00017	722554	7944876	991	51.8	86.9	35.1
	JBR-DD-11-00023	722596	7944919	970	64.0	65.0	1.0
	JBR-DD-11-00026	722198	7945026	912	0.0	13.4	13.4
	JBR-DD-11-00047	722723	7944292	920	0.0	6.2	6.2
10B	JBR-DD-10-00001	722380	7944993	952	53.9	77.0	23.1
	JBR-DD-10-00003	722229	7945120	909	7.6	40.5	32.9
	JBR-DD-11-00008	722428	7945014	953	74.9	86.6	11.8
	JBR-DD-11-00027	722382	7944931	956	87.1	89.9	2.8
Final pit -1	JBR-DD-10-00003	722229	7945120	909	43.1	102.8	59.7
	JBR-DD-10-00007	722858	7945112	894	22.1	34.3	12.2
	JBR-DD-10-00009	722111	7944535	873	13.5	20.5	7.0
	JBR-DD-10-00002	721935	7945380	842	5.5	23.8	18.3
	JBR-DD-10-00010	721897	7945308	840	18.5	22.9	4.4
	JBR-DD-10-00014	722485	7945908	904	42.0	43.3	1.3
	JBR-DD-10-00015	722282	7946043	865	0.0	5.1	5.1
	JBR-DD-11-00027	722382	7944931	956	105.2	109.6	4.4
	JBR-DD-11-00046	722855	7945052	902	34.3	36.4	2.1
Final pit -2	JBR-DD-10-00003	722229	7945120	909	41.5	43.1	1.7
	JBR-DD-10-00005	722501	7945952	907	0.0	26.1	26.1
	JBR-DD-11-00033	722349	7946097	884	0.0	4.2	4.2
	JBR-DD-10-00014	722485	7945908	904	31.8	42.0	10.3
	JBR-DD-11-00034	722740	7945794	967	23.0	26.0	3.0
	JBR-DD-10-00009	722111	7944535	873	0.0	6.5	6.5
	JBR-DD-11-00037	722319	7944002	908	0.0	8.6	8.6
	JBR-DD-11-00040	722930	7944942	928	46.4	50.2	3.8
	JBR-DD-11-00047	722723	7944292	920	0.0	6.2	6.2
	JBR-DD-11-00049	722883	7944090	922	10.1	11.1	1.0
	JBR-DD-11-00051	722616	7944575	1000	89.2	90.3	1.0

APPENDIX B– JORC CODE, 2012 EDITION – TABLE 1 COMPLIANCE STATEMENT FOR JAMBREIRO PROJECT

SECTION 1 - SAMPLING TECHNIQUES AND DATA

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

Criteria	Commentary
Sampling techniques	• Metallurgical composite samples were taken from drill holes within the pit shells of selected years across the Jambreiro mine plan. This selection criteria was completed to ensure representativity across all phases of the project mine plan. • To determine composite sample grade the samples were blended and dried, crushed to <8mm, homogenised, crushed to – 1 mm and pulverised to 150 mesh then fused with lithium tetraborate and lithium nitrate. The resultant disk is assayed in X-Ray Fluorescence (XRF) Spectrometer to quantify 10 oxides. Total Fe was determined by a titrimetric method and LOI by gravimetry.
Drilling techniques	• No new drill results are reported in this announcement.
Drill sample recovery	• No new drill results are reported in this announcement.
Logging	• All sample locations have been logged geologically to a level of detail appropriate to support metallurgical sampling.
Sub-sampling techniques and sample preparation	• No new drill results are reported in this announcement.
Quality of assay data and laboratory tests	• All chemical analysis was completed at a third-party laboratory. Analysis at the third-party laboratory was for a 12-element suite. Total Fe is determined using titrimetric method, 10 oxides were determined by XRF analysis and LOI was determined by gravimetric method. • Laboratory procedures are in line with industry standards and are appropriate for iron ore. • The third-party laboratory insert their own standards at set frequencies and monitor the precision of the XRF analysis.
Verification of sampling and assaying	• Composite sample selection was elaborated by a geologist using existing mine plan. • All primary data both electronic and physical is stored in the Centaurus office (Belo Horizonte, Brazil). • No adjustments were made to the assay data apart from resetting the below detection level values to half of the detection limit.
Location of data points	• The grid system used is SAD-69 23S. This is in line with Brazilian Mining Agency requirements. All sample locations were surveyed using a handheld GPS.
Data spacing and distribution	• Based on the extensive geological understanding of the deposit and mine plan, the composite sample locations are considered adequate to establish the degree of geological and grade continuity appropriate for the samples.
Orientation of data in relation to geological structure	• The orientation of the mineralisation is well understood and sample locations were selected to sample the mineralisation appropriately.
Sample security	• All samples are placed in plastic sample bags and then a sample ticket is placed within the bag as a check. Bags are sealed and then transported by courier to Centaurus core facility in Jardim Canada, Nova Lima-MG. • All remnant sample is stored at Centaurus' core shed.
Audits or reviews	• No external audit or reviews have been undertaken specifically in relation to these exploration results.

SECTION 2 - REPORTING OF EXPLORATION RESULTS

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

Criteria	Commentary
Mineral tenement and land tenure status	• The Jambreiro Project is located wholly within the following Mining Leases: 831.649/2004, 833.409/2007 and 834.106/2010. The Mining Leases are 100% Centaurus owned. • The tenements are part of the Cenibra-Centaurus Agreement. Centaurus will pay a vendor royalty of 0.85% of gross revenue. • All mining projects in Brazil are subject to a government royalty of 2% of revenue (less taxes and logistics costs). Additionally, a landowner royalty of 50% of the CFEM royalty is to be paid to Cenibra. • The Project is not located within national or state wilderness or historical parks. • At the time of this report, the three mining leases are in good standing. There are not any known impediments to obtaining a licence to operate in the area.
Exploration done by other parties	• Cenibra conducted geological mapping and a small diamond drill program in 2007 to satisfy Brazilian Mining Agency requirements.
Drill hole Information	• No new drill results are reported in this announcement. • Refer to Appendix A for drill hole data for sample composites relating to the exploration results reported in this announcement.
Data aggregation methods	• No new drill results are reported in this announcement.
Relationship between mineralisation widths and intercept lengths	• No new drill results are reported in this announcement. • The bulk sample location was excavated perpendicular to the mineralisation strike foliation angle and as a result returned approximately true width and was representative of the mineralised interval.
Diagrams	• Refer to Figures 1-3
Balanced reporting	• This announcement contains comprehensive information related to the reported exploration results sufficient to ensure balanced reporting.
Other substantive exploration data	• A number of metallurgical tests have been carried out on the Jambreiro Project mineralisation. See ASX announcement on 6 August 2012 for full details of the Jambreiro Pilot Plant Results and ASX Announcement on 12 March 2024 for bulk sample test results. • The Company historically completed a 1Mtpa Pre-Feasibility Study on the Jambreiro Project in 2019. See ASX announcement on 5 July 2019 for full details.
Further work	• Future work programs will assess the impact of changes to the flowsheet necessary to produce direct reduction pellet feed product from the Project, including a review of capital and operating costs and the impact on the economics of the Project.