

**CZR Resources Ltd** 

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The Company Announcements Office, ASX Limited

4 October 2022

CZR Resources Limited (CZR) provides the following clarification to Table 1 titled "Robe Mesa Fines Peer Analysis" in the 29 September 2022 ASX announcement titled "Assay Results confirm extensive DSO mineralisation below PFS pit designs".

#### Table 1. Robe Mesa Fines Peer Analysis

Product	Fe	SiO2	Al2O3	Р
	%	%	%	%
Robe Mesa – 2020 Ore Reserves	56.0	5.9	2.7	0.04
Rio Tinto - Robe Valley Fines	56.4	5.5	3.1	0.03
FMG - Super Special Fines	56.5	6.4	3.1	0.05
Atlas Iron - Atlas Fines	57.5	6.5	2.0	0.09

Comparison made between Robe Mesa Ore Reserves (note the Company is currently non-producing from Robe Mesa) and operating mines of similar grade specification in the Pilbara, Western Australia.

Source: S&P Global Platts Iron Ore and Metallurgical Coal Specifications Tree (2021)

https://www.spglobal.com/platts/PlattsContent/ assets/ files/en/our-methodology/methodology-specifications/iron-ore-andmetallurgical-coal-specifications-tree.html

CZR confirms that other than the inclusion of the extra information above in regards to the peer analysis of iron ore and the extra information regarding the source of the S&P Global Platts Iron Ore source document, no other changes have been made to original announcement. An amended Announcement is attached.

This announcement is authorised for release to the market by Stefan Murphy Managing Director of CZR Resources Limited.

Stefan Murphy Managing Director CZR Resources Ltd +61 8 9468 2050



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# Robe Mesa Iron Ore Project, Pilbara

# Assay results confirm extensive DSO mineralisation below PFS pit designs

Results support plans to increase production and mine life at Robe Mesa, with updated Resource/Reserve on track for December Quarter

## Highlights

- Assays from the lower channel iron deposit (CID) in the south of the Robe Mesa deposit have returned strong direct shipping ore (DSO) results, in line with CZR's targeted production grade
- These results sit below the December 2020 Pre-Feasibility Study (PFS) pit designs and provide further support for CZR's plans to increase the production rate and mine life at Robe Mesa
- Mineralisation is very consistent and shows thick intersections along the southern boundary adjacent to Rio Tinto's Mesa F Deposit (Figure 2)
- The upper CID outcrops at surface, with DSO mineralisation confirmed in drill results reported on 28 March 2022 (ASX announcement: "Robe Mesa Final Assay Results")
- Remaining assays, including the northern extension, are expected within 3-4 weeks, with an updated JORC Resource, Ore Reserve and mine plan for Robe Mesa targeted for later in the December 2022 Quarter

CZR Resources Limited (ASX: CZR) is pleased to announce that initial assay results from extensional Reverse Circulation (RC) drilling at the Robe Mesa Iron Ore Project in Western Australia have confirmed extensive DSO mineralisation in the lower CID, supporting the Company's plans to increase production and extend mine life.

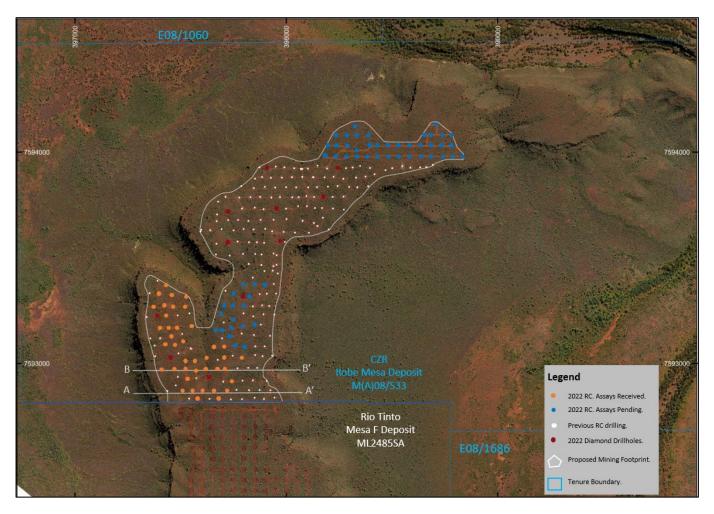
The drilling program, which was completed in August 2022, comprised a total of 94 holes for 5,738 metres, focused on expanding the Resource to the north and infill drilling the lower CID in the south of the deposit.

Assay results from the first 39 holes provide further evidence of strong DSO mineralisation below the pit designs modelled in the December 2020 PFS and shows good continuity along strike with particularly strong results recorded on the boundary with Rio Tinto's Mesa F deposit.

All drilling has now been completed to a nominal 50m x 50m drill pattern. This will enable CZR to maximise the conversion of Inferred Resources to Indicated Resource category, with Indicated Resources available for conversion to Ore Reserves.

Assay results are pending along the eastern flank of the Robe Mesa deposit and from the northern extension (Figure 1), which was drilled for the first time following heritage approval in June 2022. CZR is on track to report an updated JORC Mineral Resource, Ore Reserve and mine plan in the December quarter, 2022.





**Figure 1**. Location of all RC drill-holes on the Robe Mesa deposit – showing tenement boundary and recent drill pads on Rio Tinto's Mesa F deposit

CZR completed an RC program targeting the upper CID in the south of the Robe Mesa deposit in late 2021, with assay results showing extensive DSO mineralisation at surface and supporting plans for a follow-up program to test the lower CID unit. The 2022 RC drill program twinned the southern holes but drilled deeper into the lower CID in areas where there was strong near-surface mineralisation that may support pushing the proposed pits deeper.

Significant intercepts from the initial batch of assays are listed in Table 2, with selected results annotated in Figure 2. At a 53% Fe cut-off (60% Fe calcined)<sup>1</sup>, the significant intercepts average 55.6% Fe (62.2% Fe calcined), 6.1% SiO<sub>2</sub>, 3.0% Al<sub>2</sub>O<sub>3</sub> and 0.05% P, similar to Rio Tinto's Robe Valley Fines, FMG's Super Special Fines, and Atlas Iron's Atlas Fines (see Table 1).

The depth to base of mineralisation is still very shallow, on average only 51 metres below surface, with a maximum depth of 61m below surface (Appendix A – Robe Mesa Cross sections). All mining will be above the water table with all waste back-filled in the mining void, minimising the environmental impact.

In addition to the RC drilling, CZR also completed a diamond drill program in July 2022. The core is now being processed and metallurgical and geotechnical test work has commenced. The results will provide process plant specifications, material handling data for shipping and sinter test work for customer acceptance trials, as well as geotechnical pit design and drill and blast parameters.

<sup>1. 60%</sup> Fe calcined cut-off grade is greater than the 55% Fe calcined cut-off grade used in the previous JORC Resource estimate

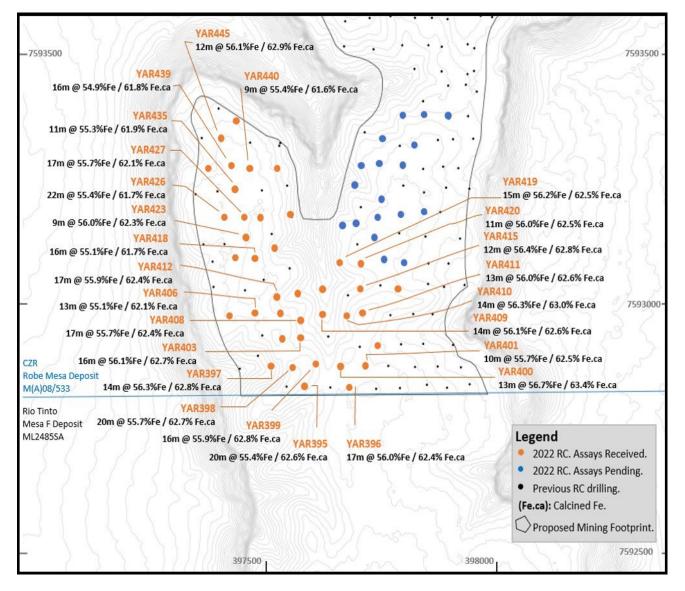


CZR Managing Director Stefan Murphy said the strong DSO assay results from outside of the PFS pit designs were a very positive outcome and strengthened the outlook for the Robe Mesa deposit.

"This first batch of assays from Robe Mesa provides strong support for our expansion plans, confirming the lower CID contains thick intersections of DSO, with the infill drilling also providing the opportunity to convert additional Resource tonnes into Reserves," Mr Murphy said.

"We look forward to receiving the balance of the assay results in the coming weeks, in particular those from the northern extension which has never been previously drilled area and shows the same mineralisation extending north of the current Resource outline.

"CZR is now rapidly advancing the Robe Mesa Definitive Feasibility Study, with the next key milestones – an updated JORC Resource and Ore Reserve estimate – expected to be delivered in the December quarter."



**Figure 2**. Location of RC drill-holes with a selection of significant intersections (refer to Table 2 for a full list of significant intersections)



## Appendix A – Robe Mesa Cross sections

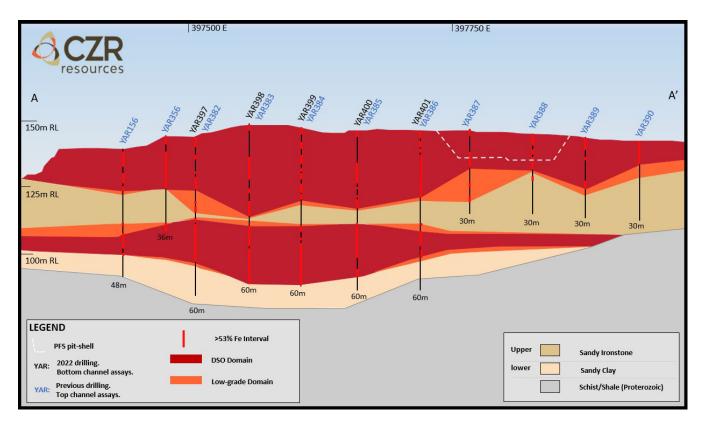


Figure 3. Robe Mesa Deposit. Cross Section 7592880

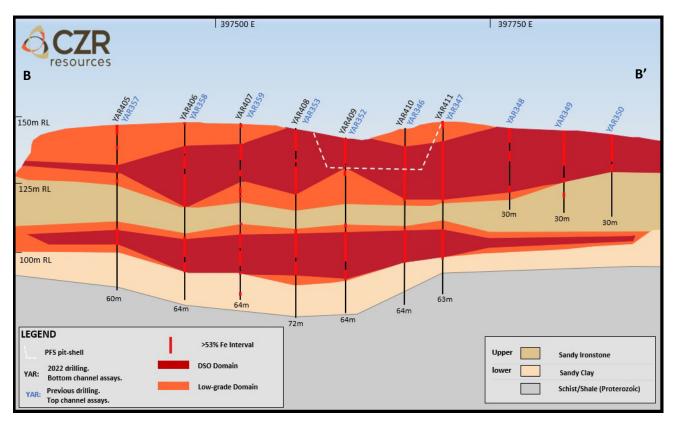
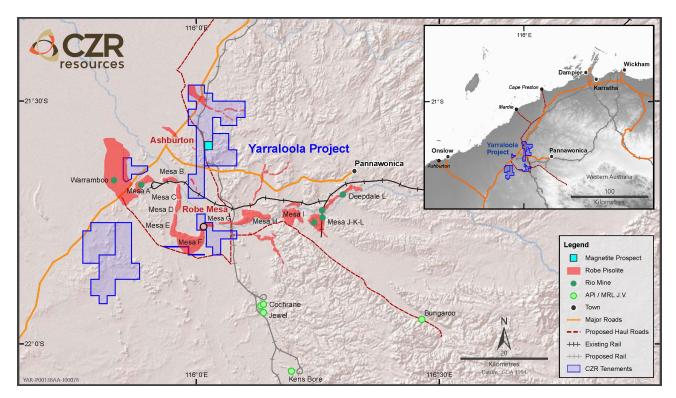


Figure 4. Robe Mesa Deposit. Cross Section 7592980



# Appendix B – Project Background

CZR's 85%-owned Robe Mesa deposit sits within the Robe Valley Channel Iron Deposits (Robe Valley CID). The Robe River JV (Rio Tinto 53%, Mitsui 33%, Nippon Steel 14%) has been mining Robe Valley CID since the 1970s and has current mining operations at Mesa A, Warramboo and Mesa J, with rail linking to export facilities at Cape Lambert.



**Figure 5**. CZR's Yarraloola project and Robe Mesa deposit showing local infrastructure and iron ore deposits. Insert map showing regional infrastructure of the West Pilbara, relative to the Robe Mesa deposit

The Robe Mesa iron ore deposit currently has JORC compliant Mineral Resource base of 37.5Mt at 56% Fe (62.6% Fe calcined) at a 55% Fe cut-off grade. The JORC Resource increases significantly to 69.6Mt at 54.5% Fe (61.0% Fe calcined) at a lower 50% Fe cut-off grade (Appendix C– Robe Mesa Resource and Reserves).

The Robe Mesa PFS (ASX announcement 10 December 2020) demonstrated a robust development plan with strong financial returns. However, CZR believes there is significant scope to further improve the project economics, hence its recent focus on expanding the PFS pit designs to extend the mine life and increase production rates from 2Mtpa to a more optimal 3Mtpa.

A key recommendation of the PFS was to close the drill spacing from 100m x 100m to 50m x 50m to improve confidence in grade distribution and enable larger, more coherent pit designs. In addition to increasing the size of the pits, the larger mining footprint will enable the new pit designs to extend into the lower pisolite of the Robe Valley CID, which was previously excluded from the PFS and which provides the best opportunity to rapidly increase the mining inventory of the Robe Mesa iron ore deposit.

CZR completed a 164 RC infill drilling program in December 2021 and a further 94 holes in August 2022, targeting the upper and lower pisolite units of the Robe Valley CID. The drilling was designed to reduce the drill-grid spacing and improve the Resource categorisation for Reserve conversion, and extend drilling into the previously untested northern extension. The results have also provided valuable data for CZR to assess additional iron ore products and/or adjust cut-off grades to increase mining inventory.



CZR is focused on increasing the production profile and mine life above the levels reported in the PFS. The DFS mine plan will target a production rate of +3Mtpa of DSO fines of similar specification to Rio Tinto's Robe Valley fines, produced at the adjoining Mesa A and Warramboo mines.

The iron ore quality from Robe Mesa is comparable to other Pilbara fines products that have a strong market presence, having been used by steel mills for decades. The combined silica and alumina levels from Robe Mesa are comparable to its Pilbara peers (see Table 1), and while the iron content is lower, this is due to higher LOI (loss on ignition), meaning Robe Mesa iron ore calcines to similar levels through the sintering process.

Table 1 – Robe Mesa Fines Peer Analysis

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Comparison made between Robe Mesa Ore Reserves (note the Company is currently non-producing from Robe Mesa) and operating mines of similar grade specification in the Pilbara, Western Australia.

Source: S&P Global Platts Iron Ore and Metallurgical Coal Specifications Tree (2021)

https://www.spglobal.com/platts/PlattsContent/\_assets/\_files/en/our-methodology/methodology-specifications/iron-ore-andmetallurgical-coal-specifications-tree.html

This announcement is authorised for release to the market by the Board of Directors of CZR Resources Limited.

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#### **Forward Looking Statements**

This announcement contains "forward-looking information" that is based on CZR's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the pre-feasibility study, CZR's business strategy, plan, development, objectives, performance, outlook, growth, cashflow, projections, targets and expectations, mineral resources, ore reserves, results of exploration and related expenses. Generally, this forward looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that CZR's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause CZR's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices and demand of iron and other metals; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list and the further risk factors detailed in the remainder of this announcement are not exhaustive of the factors that may affect or impact forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information. CZR disclaims any intent or obligations to revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

Statements regarding plans with respect to CZR's mineral properties may contain forward-looking statements in relation to future matters that can only be made where CZR has a reasonable basis for making those statements. Competent Person Statements regarding plans with respect to CZR's mineral properties are forward looking statements. There can be no assurance that CZR's plans for development of its mineral properties will proceed as expected. There can be no assurance that CZR will be able to confirm the presence of mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of CZR's mineral properties.

CZR believes it has a reasonable basis for making the forward looking statements in this Announcement, including with respect to any production targets and economic evaluation, based on the information contained in CZR's ASX announcement entitled "Pre-Feasibility Study finds Robe Mesa iron ore project is technically robust with potential to generate strong financial returns" dated 10 December 2020. CZR confirms that it is not aware of any new information or data that materially affects the production targets contained in the previous announcement of the PFS and all material assumptions underpinning the production targets and economic valuation in the previous market announcement continue to apply and have not materially changed.

#### **Competent Person Statement**

The information in this announcement that relates to exploration activities and exploration results is based on information compiled by Stefan Murphy (BSc), a Competent Person who is a Member of the Australian Institute of Geoscientists. Stefan Murphy is Managing Director of CZR Resources, holds options in the Company and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a 'Competent Person' as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code).

Stefan Murphy has given his consent to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.



# Table 2 – Significant Intercepts

	Unit	From	То	Interval	Fe	Si	Al	Р	LOI	Fe.ca
YAR395	Lower	41	61	20	55.4	5.5	3.0	0.06	11.6	62.6
YAR396	Lower	37	54	17	56.0	5.8	3.2	0.05	10.3	62.4
YAR397	Lower	33	47	14	56.3	5.9	2.6	0.04	10.3	62.8
YAR398	Lower	29	34	5	54.6	6.4	3.1	0.03	11.9	62.0
	Lower	40	60	20	55.7	5.6	2.6	0.05	11.0	62.7
YAR399	Lower	43	59	16	55.9	5.7	2.7	0.05	11.1	62.8
YAR400	Lower	35	48	13	56.7	5.0	2.8	0.04	10.6	63.4
	Lower	51	55	4	54.1	7.5	3.4	0.05	11.0	60.8
YAR401	Lower	38	48	10	55.7	5.4	3.2	0.05	10.8	62.5
YAR402	Lower	28	38	10	54.2	6.9	3.1	0.04	11.8	61.4
		43	57	14	54.0	6.6	3.8	0.06	11.5	61.1
YAR403	Lower	37	53	16	56.1	5.8	2.8	0.05	10.5	62.7
YAR404	Lower	36	41	5	56.5	5.0	2.8	0.04	10.7	63.3
YAR405	Lower	38	44	6	57.1	5.3	2.3	0.04	10.1	63.5
YAR406	Lower	42	55	13	55.1	5.7	3.5	0.06	11.2	62.1
YAR407	Lower	40	51	11	54.8	5.7	3.3	0.05	11.8	62.2
YAR408	Lower	36	53	17	55.7	6.0	2.9	0.04	10.7	62.4
YAR409	Lower	31	45	14	56.1	6.0	2.8	0.04	10.4	62.6
	Lower	48	52	4	55.0	7.3	2.3	0.05	11.2	61.9
YAR410	Lower	35	49	14	56.3	5.2	2.9	0.05	10.6	63.0
YAR411	Lower	37	50	13	56.0	5.8	2.8	0.05	10.5	62.6
YAR412	Lower	37	54	17	55.9	5.8	3.1	0.05	10.4	62.4
YAR413	Lower	34	44	10	55.1	7.2	3.0	0.04	10.3	61.4
YAR414	Lower	33	40	7	56.1	5.7	3.1	0.04	10.2	62.5
	Lower	44	48	4	55.1	6.9	2.4	0.05	11.3	62.1
YAR415	Lower	35	47	12	56.4	5.9	2.6	0.04	10.2	62.8
YAR416	Lower	39	42	3	55.2	6.3	3.3	0.04	10.8	61.9
YAR417	Lower	35	59	24	54.5	6.9	3.4	0.07	10.7	61.0
YAR418	Lower	38	54	16	55.1	6.6	3.2	0.04	10.6	61.7
YAR419	Lower	32	47	15	56.2	5.9	3.0	0.04	10.0	62.5
YAR420	Lower	37	48	11	56.0	5.8	3.1	0.05	10.5	62.5
YAR423	Lower	37	46	9	56.0	5.6	3.4	0.04	10.2	62.3
	Lower	49	54	5	55.9	6.8	2.4	0.05	10.2	62.2
YAR424	Lower	39	51	12	55.7	6.0	2.9	0.04	10.6	62.3
YAR426	Lower	38	60	22	55.4	6.5	3.2	0.06	10.2	61.7
YAR427	Lower	37	54	17	55.7	6.4	3.0	0.04	10.2	62.1
YAR428	Lower	34	45	11	55.8	5.6	3.1	0.05	10.5	62.4
	Lower	51	54	3	54.8	7.0	2.5	0.06	11.4	61.8
YAR429	Lower	34	40	6	56.0	5.5	2.8	0.05	11.0	62.9
	Lower	46	49	3	55.7	5.9	2.4	0.05	11.5	62.9
YAR435	Lower	36	47	11	55.3	6.1	3.3	0.04	10.7	61.9

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	Unit	From	То	Interval	Fe	Si	Al	Р	LOI	Fe.ca
	Lower	50	54	4	54.6	8.6	3.0	0.05	9.5	60.4
YAR438	Lower	40	46	6	54.1	8.7	2.6	0.04	10.6	60.6
YAR439	Lower	38	54	16	54.9	6.4	3.2	0.05	11.1	61.8
YAR440	Lower	37	46	9	55.4	6.6	3.1	0.04	10.1	61.6
YAR441	Lower	34	40	6	55.8	5.8	3.0	0.04	10.8	62.5
	Lower	43	51	8	55.0	7.3	2.4	0.05	11.1	61.9
YAR445	Lower	37	49	12	56.1	5.4	2.7	0.05	10.8	62.9
YAR448	Lower	37	42	5	54.6	7.9	3.3	0.0	10.0	60.6
	Lower	48	51	3	56.0	6.9	2.6	0.1	9.7	62.0

# Table 3 – Location of 2022 RC drill-collars on the Robe Mesa deposit

HOLE ID	Tenement	Northing GDA94_Z50	Easting GDA94_Z50	RL (m)	Azimuth	Dip	EOH_(m)
YAR_395	E08/1060	7592830	397583	147	0	-90	70
YAR_396	E08/1060	7592830	397680	147	0	-90	72
YAR_397	E08/1060	7592872	397505	144	0	-90	60
YAR_398	E08/1060	7592874	397556	148	0	-90	60
YAR_399	E08/1060	7592876	397605	147	0	-90	60
YAR_400	E08/1060	7592872	397658	146	0	-90	60
YAR_401	E08/1060	7592873	397718	146	0	-90	60
YAR_402	E08/1060	7592930	397534	148	0	-90	64
YAR_403	E08/1060	7592930	397574	145	0	-90	76
YAR_404	E08/1060	7592916	397743	145	0	-90	64
YAR_405	E08/1060	7592974	397410	147	0	-90	60
YAR_406	E08/1060	7592979	397471	147	0	-90	64
YAR_407	E08/1060	7592979	397523	147	0	-90	64
YAR_408	E08/1060	7592964	397573	145	0	-90	72
YAR_409	E08/1060	7592974	397618	142	0	-90	64
YAR_410	E08/1060	7592973	397673	145	0	-90	64
YAR_411	E08/1060	7592977	397708	148	0	-90	63
YAR_412	E08/1060	7593013	397517	146	0	-90	64
YAR_413	E08/1060	7593017	397567	143	0	-90	64
YAR_414	E08/1060	7593026	397621	140	0	-90	58
YAR_415	E08/1060	7593029	397706	144	0	-90	64
YAR_416	E08/1060	7593027	397788	145	0	-90	58
YAR_417	E08/1060	7593088	397427	147	0	-90	60
YAR_418	E08/1060	7593088	397473	148	0	-90	66
YAR_419	E08/1060	7593079	397659	143	0	-90	66
YAR_420	E08/1060	7593080	397705	145	0	-90	66
YAR_421	E08/1060	7593085	397756	145	0	-90	60
YAR_422	E08/1060	7593080	397803	144	0	-90	60
YAR_423	E08/1060	7593128	397452	148	0	-90	60
YAR_424	E08/1060	7593108	397512	146	0	-90	58
YAR_425	E08/1060	7593130	397732	145	0	-90	60
YAR_426	E08/1060	7593171	397399	147	0	-90	60



HOLE ID	Tenement	Northing GDA94_Z50	Easting GDA94_Z50	RL (m)	Azimuth	Dip	EOH_(m)
YAR_427	E08/1060	7593172	397447	148	0	-90	60
YAR_428	E08/1060	7593171	397482	148	0	-90	60
YAR_429	E08/1060	7593175	397552	143	0	-90	60
YAR_430	E08/1060	7593156	397664	144	0	-90	60
YAR_431	E08/1060	7593159	397695	144	0	-90	60
YAR_432	E08/1060	7593168	397744	145	0	-90	60
YAR_433	E08/1060	7593176	397794	146	0	-90	60
YAR_434	E08/1060	7593181	397848	145	0	-90	54
YAR_435	E08/1060	7593226	397428	148	0	-90	66
YAR_436	E08/1060	7593234	397691	142	0	-90	54
YAR_437	E08/1060	7593209	397750	145	0	-90	54
YAR_438	E08/1060	7593269	397369	147	0	-90	54
YAR_439	E08/1060	7593272	397418	147	0	-90	66
YAR_440	E08/1060	7593270	397463	147	0	-90	66
YAR_441	E08/1060	7593271	397521	145	0	-90	66
YAR 442	E08/1060	7593275	397705	142	0	-90	60
YAR_443	E08/1060	7593278	397747	144	0	-90	60
YAR_444	E08/1060	7593275	397798	145	0	-90	60
YAR_445	E08/1060	7593331	397396	147	0	-90	62
YAR_446	E08/1060	7593330	397752	142	0	-90	60
 YAR_447	E08/1060	7593315	397825	144	0	-90	60
YAR_448	E08/1060	7593370	397429	145	0	-90	60
YAR 449	E08/1060	7593374	397797	142	0	-90	54
 YAR_450	E08/1060	7593378	397848	142	0	-90	54
YAR 451	E08/1060	7593372	397898	142	0	-90	54
YAR_452	E08/1060	7593980	398184	148	0	-90	72
YAR 453	E08/1060	7593980	398234	149	0	-90	66
YAR_454	E08/1060	7593980	398284	149	0	-90	66
YAR_455	E08/1060	7593980	398334	149	0	-90	66
YAR_456	E08/1060	7593980	398385	150	0	-90	60
YAR_457	E08/1060	7593980	398434	151	0	-90	66
YAR_458	E08/1060	7593980	398484	151	0	-90	60
YAR_459	E08/1060	7593980	398534	150	0	-90	54
YAR_460	E08/1060	7593980	398584	150	0	-90	54
YAR_461	E08/1060	7593980	398634	149	0	-90	60
YAR_462	E08/1060	7593980	398684	148	0	-90	60
YAR_463	E08/1060	7593979	398788	145	0	-90	54
YAR_464	E08/1060	7593980	398832	144	0	-90	54
 YAR_465	E08/1060	7593978	398736	146	0	-90	54
YAR_466	E08/1060	7594030	398194	149	0	-90	66
 YAR_467	E08/1060	7594030	398234	149	0	-90	66
YAR_468	E08/1060	7594030	398283	150	0	-90	66
YAR_469	E08/1060	7594005	398330	150	0	-90	66
YAR_470	E08/1060	7594029	398395	150	0	-90	66
YAR_471	E08/1060	7594029	398427	150	0	-90	60
YAR_472	E08/1060	7594029	398529	150	0	-90	54
 YAR_473	E08/1060	7594028	398578	149	0	-90	54
 YAR_474	E08/1060	7594030	398631	149	0	-90	54
YAR_475	E08/1060	7594030	398683	148	0	-90	54

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HOLE ID	Tenement	Northing GDA94_Z50	Easting GDA94_Z50	RL (m)	Azimuth	Dip	EOH_(m)
YAR_476	E08/1060	7594030	398734	146	0	-90	54
YAR_477	E08/1060	7594030	398778	145	0	-90	54
YAR_478	E08/1060	7594029	398478	150	0	-90	60
YAR_479	E08/1060	7594080	398234	150	0	-90	66
YAR_480	E08/1060	7594080	398284	150	0	-90	66
YAR_481	E08/1060	7594080	398334	150	0	-90	66
YAR_482	E08/1060	7594080	398384	150	0	-90	66
YAR_483	E08/1060	7594079	398653	147	0	-90	60
YAR_484	E08/1060	7594083	398683	147	0	-90	55
YAR_485	E08/1060	7594083	398737	146	0	-90	60
YAR_486	E08/1060	7594082	398783	145	0	-90	54
YAR_487	E08/1060	7594124	398327	149	0	-90	60
YAR_488	E08/1060	7594131	398707	145	0	-90	60

# Appendix C- Robe Mesa Resource and Reserves

Cut-Off Grade	Category	Tonnes Mt	Fe %	SiO2 %	Al2O3 %	LOI %	P %	S %	Fe <sub>ca</sub> %
55% Fe	Indicated	25.2	55.9	6.0	2.8	10.6	0.04	0.02	62.6
	Inferred	12.3	56.0	5.9	2.8	10.6	0.04	0.02	62.7
	Total	37.5	56.0	6.0	2.8	10.6	0.04	0.02	62.6
50% Fe	Indicated	47.4	54.5	7.4	3.2	10.7	0.04	0.02	61.1
	Inferred	22.2	54.5	7.5	3.2	10.6	0.04	0.02	60.9
	Total	69.6	54.5	7.5	3.2	10.7	0.04	0.02	61.0

#### Table A1. Robe Mesa Mineral Resource Estimate (CZR release to ASX; 2 June 2022)

 Table A2 Robe East JORC 2012 Mineral Resource estimate reported above a 50% Fe cut-off grade (CZR release to ASX; 26 April 2017).

Category	Tonnes	Fe	SiO2	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	Р	S	Fe <sub>ca</sub>
	Mt	%	%	%	%	%	%	%	%
Inferred	4.6	51.8	9.7	3.8	0.20	10.9	0.1	0.02	58.2

**Table A3** P529 JORC 2012 mineral resource reported above a 50% Fe cut-off grade (9 May 2017 ASXAnnouncement).

Category	Tonnes	Fe	SiO2	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	Р	S	Fe <sub>ca</sub>
	Mt	%	%	%	%	%	%	%	%
Inferred	4.2	53.0	9.1	3.9	0.20	10.4	0.04	0.01	59.2

**Table A4** – Robe Mesa JORC 2012 Ore Reserve reported above a cut-off grade of 55% Fe (CZR release to ASX; 10 December 2020).

Category	Mt	Fe %	Al <sub>2</sub> O <sub>3</sub> %	P%	SiO <sub>2</sub> %	<b>S%</b>	LOI%
Probable	8.2	56.0	2.7	0.039	5.9	0.020	10.9

 $Fe_{ca}$  is the calcined iron-content calculated as (Fe%/(100-LOI%))\*100 and represents the amount iron after the volatiles (mainly held as weakly bound water in the structure of the hydrous iron-rich minerals) is excluded from the analysis.

**Note:** CZR confirms that it is not aware of any new information or data that materially affects the information included in the CZR announcements to the ASX on 26 April 2017, 9 May 2017, 10 December 2020 and 2 June 2022 and, in the case of estimates of the Mineral Resources in Tables A1, A2, A3, and Ore Reserves in Table A4, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

# Appendix D – JORC Code, 2012 Edition Table 1

### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Samples were all collected from 5.5" (140mm) reverse circulation drilling with continuous down- hole sampling.
Sampling	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	2-3kg of RC drill cuttings are spilt continuously during drilling and collected at 1 metre intervals in a pre-labelled calico sample bag. Samples passed over a static cone splitter attached to the drill-rig.
techniques	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	The entire 2-3kg RC drill-chip sample was crushed, dried and pulverized. A sub sample was fused and the "extended iron-ore suite" of major oxide and selected trace-element analysis was obtained by XRF Spectrometry in 2014 and a basic iron-ore suite was reported from the 2015, 2016, 2021 and 2022 programmes because most trace elements are below detection.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	All reverse circulation (RC) drill-holes used a 5.5" (140mm) face-sampling percussion hammer.
Drill sample	Method of recording and assessing core and chip sample recoveries and results assessed.	RC sample size was monitored by Geologists during the drilling programme. The volume of sample derived from each metre drilled was approximately equal.
recovery	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Standard RC sampling techniques were employed and deemed adequate for sample recovery. Some water was injected into the sample stream during drilling to minimise the loss of fine particles.



Criteria	JORC Code explanation	Commentary
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Sample recovery is regarded as being representative.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Each metre of reverse circulation chips are described geologically for colour, texture and have an estimate of mineralogical abundance.
Logying	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips is qualitative.
	The total length and percentage of the relevant intersections logged.	Entire drill-holes are logged.
	If core, whether cut or sawn and whether quarter, half or all core taken.	No core was collected in the programme being reported.
Sub-sampling techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Reverse circulation drill chip samples were collected dry and split by a static-cone splitter during drilling.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Reverse circulation drilling is an appropriate method of recovering representative samples though the interval of mineralisation. The drilling contractor used suitable sample collection and handling procedures to maintain sample integrity.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Duplicate RC samples were simultaneously collected at a ratio of 1:20, using the splitters attached to the rig to ensure representivity. Certified Reference Material (CRM) were also added as standards at a ratio of 1:20. Duplicates and standards were inserted across the entire drillhole, not just the mineralised interval.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	The reverse circulation method samples continuously and the splitters attached to the rig selects a representative proportion of the sample, providing an indication of compositional variations associated with each lithology or mineralised interval.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The 2-3kg of homogenised drill chips that was recovered for each sample is sufficient to provide a representative indication of the material being sampled.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	All samples from the 2022 drill programme have been analysed at ALS Laboratories in Perth. A



Criteria	JORC Code explanation	Commentary
		standard suite of major-element oxides and trace element oxides were determined by XRF analysis on fused disks. Loss on Ignition (LOI) was determined by thermogravimetric analysis at 1000° C.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No hand-held geophysical tools or hand-held analytical tools were used for the reported results.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Certified Reference Material (CRM) were also added as standards at a ratio of 1:20. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of their in- house procedures. Results highlight that sample assay values are accurate and that contamination has been contained.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	No independent or alternative company personnel were used to verify the intersections.
	The use of twinned holes.	Some RC holes have been twinned to determine short-range variations in geology and geochemistry but assays have not yet been received or reported.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All spatially located sample data is stored electronically in a Microsoft Access database. Assay data was received electronically and uploaded by CZR Geologists. Printed and laboratory-released PDF copies of analysis certificates are stored.
	Discuss any adjustment to assay data.	No adjustment or calibrations are made to any assay data.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	For the 2022 RC drill program, all drill hole locations were initially derived from hand held Garmin 73 GPS units, with an average accuracy of ±3m. CZR has since flown LiDAR survey and all collar locations are set to the LiDAR elevation. For pre-2022 drill holes, locations were initially derived from a hand held Garmin 72h GPS units, with an average accuracy of ±3m. All collars were
		then recorded by an independent licensed surveyor using a differential GPS with an accuracy of 0.1m
	Specification of the grid system used.	



Criteria	JORC Code explanation	Commentary
		The grid system is MGA GDA94, zone 50, all Easting's and Northing's are reported in MGA co- ordinates.
	Quality and adequacy of topographic control.	CZR has reviewed the accuracy of LiDAR to DGPS survey, with a very close correlation in reported elevation accuracy.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drilling is located approximately on centres from a 50m grid over an area of outcropping mapped mineralisation.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	100m spaced drilling allowed the generation of an Inferred Resource, reducing to 50m spacing was sufficient for the conversion of a high- proportion of the inferred to indicated and a maiden probable reserve.
	Whether sample compositing has been applied.	Sample results represent 1m interval reverse circulation drill-chips and samples have not been composited.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Mineralisation is contained within a sub- horizontal sheet and the vertical drill-holes and associated sampling collects representative material through the mineralised zone.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The drill orientation was selected to minimise any sampling bias.
Sample security	The measures taken to ensure sample security.	Individually numbered samples were packed into labelled bulka bags by CZR Geologists and transported to independent intra-state transport companies in Karratha from where they are transported directly to Bureau Veritas laboratories in Perth
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of the sampling techniques and data have been obtained.



## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	All exploration licenses and prospecting licenses owned 85% by Zanthus Resources Ltd and 15% by ZanF Pty Ltd. The tenements are covered by the Kuruma Marthudunera Native Title Claim and relevant heritage agreements are in place.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	In 1990-1991, Aberfoyle Resources held tenements covering the Ashburton Trough which partially overlapped Yarraloola. They collected 26 rock-chip and 73 stream sediment samples for gold and base-metal exploration but encountered no significant results and surrendered the ground. In 1991-1992, Poseidon Exploration Ltd held exploration tenements covering the Ashburton Trough which partially overlapped Yarraloola for base-metals, gold and iron-ore. They collected 54 rock-chips, 236 soil samples, 492 stream sediment samples and completed 159 RAB holes for 2410m but encountered no significant mineralisation and surrendered the tenements. In 1997-1998, Sipa Resources NL held tenements over the Ashburton Trough that partially covered Yarraloola for gold and base-metals. A field trip after the interpretation of LANDSAT and air- photos collected six rock-chip samples which failed to detect mineralisation and the tenements were surrendered. In 2005-2009, Red Hill Iron Ltd held a tenement 15km northwest of Pannawonica which partially overlapped Yarraloola for gold and base-metal prospectivity. Following and aeromagnetic survey and air-photo interpretation, 16 rock-chips and 207 soil samples were collected but no targets were generated and the ground was surrendered.



Geology	Deposit type, geological setting and style of mineralisation.	The Robe Mesa is a fluvial deposit of goethite-rich fragments of wood and pisolites supported by a fine grained goethitic matrix. The deposit outlines the trace of a Tertiary-aged channel from the Robe River into older rocks of the Ashburton Formation that have since eroded. Deposits of the channelized-style of goethitic ironstone are represented and mined in other parts of the Pilbara region of Western Australia and the material is commonly referred to a "CID"
		for marketing purposes.
		The Mesa contains two cycles of deposition and each has a sharp basal contact that shows an upwards increase the amount of iron-rich fragments.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	
	o easting and northing of the drill hole collar	Drill-hole collar Eastings and Northings are reported using map projection GDA Zone50, entered into an Access database and the map locations are checked by the competent person.
	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	All pre-2022 collars were recorded by an independent licensed surveyor using a differential GPS with an accuracy of 0.1m In July 2022 McMullen Nolan Group Pty Ltd (MNG)
		captured Aerial Laser Scanning (ALS) data and ground control surveys for the Robe Project, with an accuracy of +/- 100mm
	o dip and azimuth of the hole	All holes are vertical.
	o down hole length and interception depth	Down hole lengths and intercept depths from the RC drilling are calculated from 1m interval samples that are progressively collected as the holes are drilled.
	o hole length.	Hole lengths are reported both on the geological and drillers logs, entered into the access database and have been checked by a competent person.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	Minimum intercept widths are defined as drill intervals greater than 5m with samples reporting Fe>50% (calcined Fe>55%). Some intercepts include a maximum of 2m of samples with Fe<50%. Intercept values are numerical averages of the relevant 1m sample results. No cutting of high grades has been used.



	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of	All sample intervals used to calculate the intercepts are of equal length.
	metal equivalent values should be clearly stated.	No metal equivalents are presented
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Vertical drill-holes are designed to intercept the true widths of the horizontally-oriented sheets of pisolitic iron-stone mineralisation.
Relationship between mineralisation widths and intercept lengths	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Down-hole widths are regarded as true widths of mineralisation.
	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	A map with the drill-hole locations and representative geological cross sections are presented.
Diagrams	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Relevant diagrams have been included within the report main body of text.
Balanced reporting	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	The report is believed to include all representative and relevant information and is believed to be comprehensive.
Other substantive exploration data	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Diamond drilling for geotechnical and larger-scale metallurgical test-work has been completed and test work is underway.
Further work	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Areas of outcropping mineralisation that have yet to be drilled are identified on the relevant maps.