



Cobre Limited A.C.N. 626 241 067 (**ASX: CBE**)

Level 10, Kyle House, 27 Macquarie Place

SYDNEY NSW 2000

Tel: + 61 407 123 143

www.cobre.com.au

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HIGH PURITY QUARTZ DISCOVERED IN WESTERN AUSTRALIA

SIGNIFICANT EXPLORATION TARGET DEFINED

Cobre Limited (ASX: **CBE**, **Cobre** or **Company**) is pleased to announce a High Purity Quartz (**HPQ**) Exploration Target at the Company's wholly owned Perrinvale Project (**Perrinvale** or **Project**) in Western Australia (*Figure 1*).

Highlights:

- Multiple Quartz Units identified and sampled across the Perrinvale Project supporting a significant estimated Exploration Target of 5.1 Mt to 28.3 Mt at a pre-beneficiation SiO₂ grade of 99.1% to 99.6% ¹;
- Quartz units display pegmatitic textures and lacking any secondary minerals in outcrop are considered to be the product of metamorphism of the basal quartzites in the regional stratigraphy;
- All SiO₂ assays fall within the feedstock grades for silicon smelting, with 94% of assays between 99.15% and 99.66% SiO₂; and
- Further test work focused on contaminant deportment and beneficiation set to commence to determine amenability to upgrading to very high value ultra high purity end products.

In late 2023 mapping work on the Project identified saccharoidal quartzite within the Mt Alfred area on the east side of the Project. Lacking any visible accessory minerals or lithic particles, the potential for the Project to host HPQ was considered. Since then, the Company has completed desktop work and two programmes of fieldwork with analytical testing; identifying extensive, often pegmatitic, quartz units across the southern Panhandle area on the west side of the Project, culminating in this maiden exploration target (*Table 1*).

¹ The potential quantity and grade of the Exploration Target is conceptual in nature, and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of Mineral Resources. The Exploration Target has been prepared by the Company and reported in accordance with the 2012 edition of the JORC Code.

Maiden High Purity Quartz Exploration Target

Table 1: Southern Panhandle HPQ Exploration Target on the Perrinvale Project in Western Australia.

Southern Panhandle HPQ Exploration Target						
	Surface Area Estimate (m ²)	Depth extent (m)	Quartz surface area factor	Insitu Bulk Density (g/cm ³)	Million Tonnes	SiO ₂ %
Lower Case	271,650	15	0.5	2.52	5.1	99.1
Upper Case	271,650	40	1	2.6	28.3	99.6

Grades are based on rock chip samples analysed via XRF and prior to beneficiation

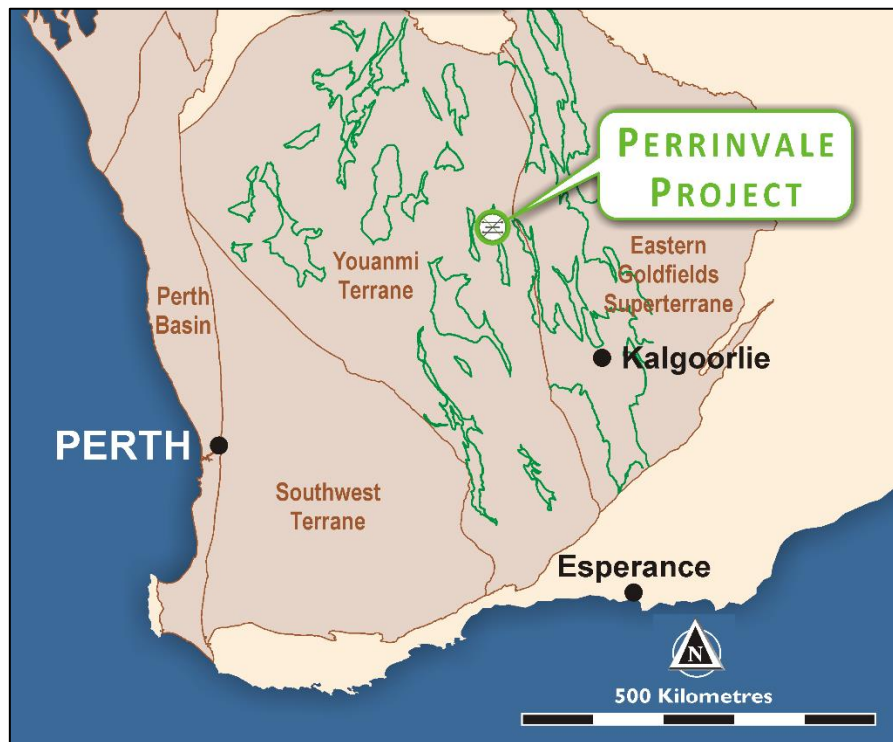


Figure 1: Perrinvale Project Location in Western Australia's Yilgarn Craton.

The Exploration Target volume and tonnage are based on field observations including the identification of outcrop margins and strike extents, with these utilised to calculate surface areas of the observed quartz units. For the lower case, the surface area was factored by 0.5, halving the volume based on observed surface extents. Some identified quartz units, shown in red on **Figure 5**, are yet to be physically checked and sampled in the field and these were not included in the calculations. Visited quartz units were rock chip sampled with assays utilised in determining the Exploration Target SiO₂ grade ranges (sample points are shown on **Figure 5** with assay data included in **Table 3**). The upper grade (99.6%) represents the average of the assays above the 50th percentile of all samples. While the lower grade (99.1%) is a conservative estimate being the average of the assays below the 10th

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percentile of all samples. Bulk density used to convert volumes to tonnages was assigned using the density of quartz (2.67 g/cm³) as a starting point and factoring for fracture and void space. The lower density of 2.52 represents a 5% void space, which is considered conservative based on field observations.



Figure 2: Foreground shows freshly exposed surface of the quartz, with broader quartz outcrop in the background (picture provided for illustrative purposes refer to Table 3 for assays).

Depth extents utilised in the Exploration Target calculations are considered reasonable based on strong strike continuity, outcrop vertical extents and the interpreted protolith of these quartz units.

Geologically, the greater project area covers sections of the Archaean Illaara and Panhandle Greenstone Belts within the Youanmi Terrane of the Yilgarn Craton. While dominated by mafic

volcanics and chemical sediments, the eastern most stratigraphy of these belts consists of a package of quartzites and quartz-mica schists. Widespread granite emplacement occurred during thermal/magmatic activity around 3 billion years ago. With closer proximity to intruded granites in the Southern Panhandle compared to the Mt Alfred area, it is hypothesised that where the quartzites (then located well below current land surface) were proximal to the intruding felsic magmas a process of melting of quartzite resulted in recrystallisation and development of locally pegmatitic textures (see **Figure 3** for example). Volatiles rising off the magma may have played a part in this process and such a process provides an opportunity for contaminants to be shed from the quartzites.



Figure 3: Example of the pegmatitic texture developed in quartz units present in the Southern Panhandle area (photo provided for illustrative purposes)

Published HPQ quartz targets and resource estimates were reviewed in light of the results achieved to date from the Project. The Southern Panhandle quartz units show similar potential in terms of raw SiO₂ and contaminant grades. When compared to Simcoa's Kiaka Hills Resource¹, which includes grades for Fe₂O₃, Al₂O₃, TiO₂, CaO, MgO and P₂O₅, the Southern Panhandle samples on average have comparable SiO₂ grades and lower contaminants.

Example of 'cleaner' sample



Example of 'dirtier' sample

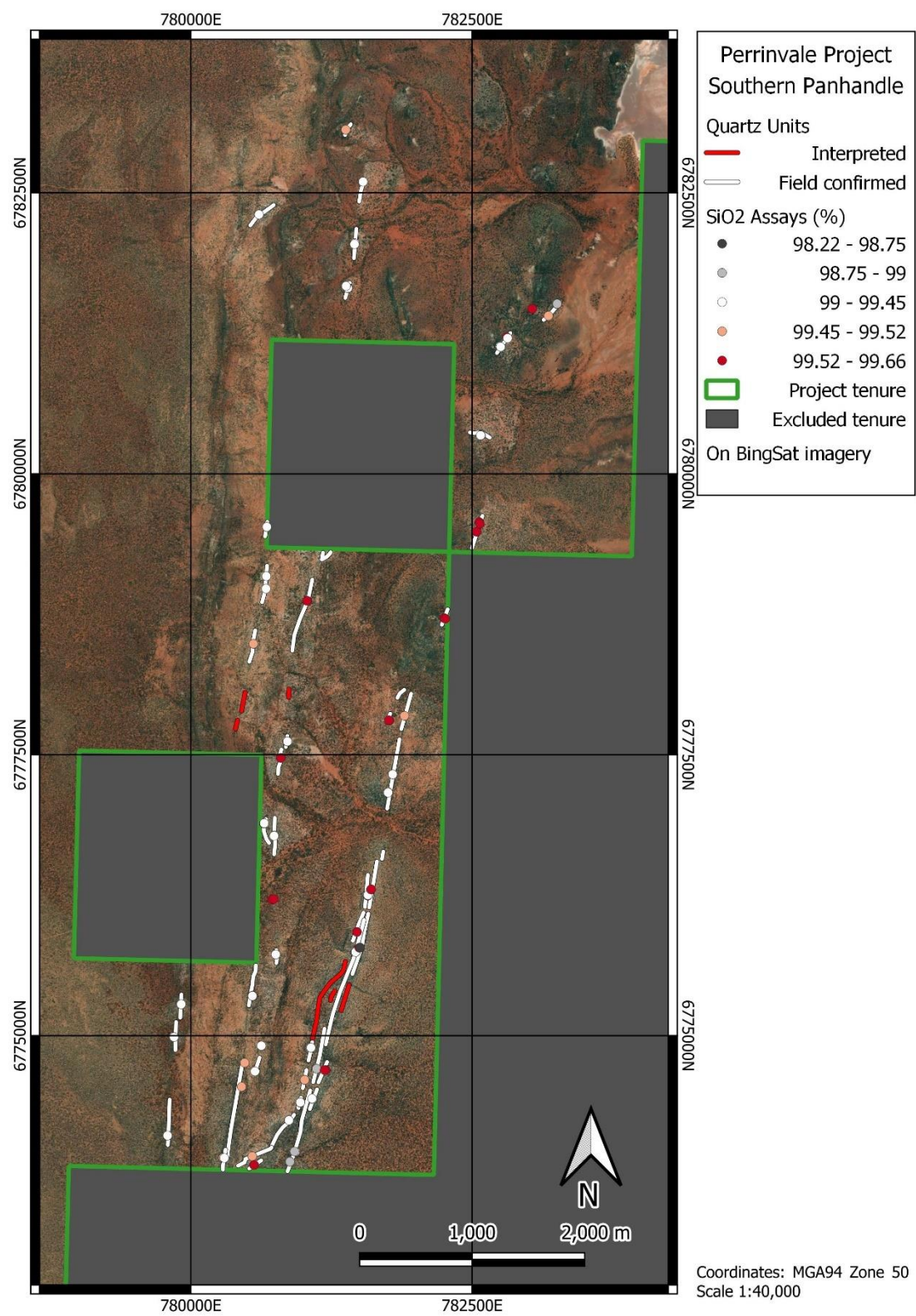


Figure 4: Examples of quartz rock chip samples collected from the Southern Panhandle area (*Sample PVR230319 assayed 99.55% SiO₂ & 260702 assayed 99.13% SiO₂*).

¹ JORC Resource published in SIMCOA's Mining Proposal submitted to the WA State Government.



Figure 5: Area of Exploration Target showing Quartz Unit outcrops and rock chip sample locations.



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Photo: Example of one Quartz unit outcrop at the Perrinvale Project

Background on High Purity Quartz

Quartz has long been a commercially mined product with uses in the construction sector and glass manufacturing as well as being a source of silicon used in high end electronics. As technology develops and the world is moving towards carbon reduction and electrification, silicon has been recognised as critical. The following is extracted from a research paper published in August 2024 titled “A review of high-purity quartz for silicon production in Australia”² :

High-purity quartz (HPQ) is the only naturally occurring and economically viable source for the production of silicon. Silicon is a critical mineral, and a key component in modern technologies such as semiconductors and photovoltaic cells. Critical minerals support the move towards a greater reliance on electrification, renewable energy sources and economic security. The global transition to net zero carbon emissions means there is a growing need for new discoveries of HPQ to supply the silicon production chain. HPQ deposits are identified in a multitude of geological settings, including pegmatites, hydrothermal veins, sedimentary accumulations and quartzite; however, deposits of sufficient volume and quality are rare.

The in-situ quartz deposits require specific beneficiation processes to remove contaminating elements and upgrade the silica (SiO₂%) content. As silica content increases so does the value of the refined silica product, as shown in *Table 2* . The ability to refine a particular deposit is dependent on the type and location of contaminants within the quartz and other physical properties meaning each potential HPQ ore needs to be tested to determine ideal process pathway and the achievable purity of the end product. Refining processes are often tailored to specific ores.

Table 2: Indicative Silicon Product Pricing.

Relative Prices of Silicon Products as Purity Increases

Product	Purity (Si %)	Price (\$AUD/t)
Silicon Metal	≥98.5	\$ 405
Recharging Polysilicon	≥99.9999	\$ 7,000
PV Polysilicon	≥99.9999999	\$ 24,225
Electronic-grade Polycrystalline Silicon	>99.999999999	\$ 41,220

Prices sourced 1/10/2024 from <https://www.metal.com/price/New%20Energy/Solar> .
Silicon Metal price sourced from maxtonco.com

Next steps:

To convert the Exploration Target to a Mineral Resource a combination of beneficiation testing and further field data collection will be required. There are two separate refinement pathways that HPQ

² <https://www.tandfonline.com/doi/full/10.1080/08120099.2024.2362296>

can take, one is a process flow of beneficiation that progressively strips contaminants and the other via submerged arc furnace to produce silicon metal.

Work will encompass:

- Bench scale beneficiation testing;
- Deportment analysis;
- Thermal stability assessment; and
- Additional fieldwork.

The Company is now moving to complete **bench scale beneficiation testing** on material retained from earlier sampling programmes. This work will include sizing analysis, attrition, floatation, magnetic separation and leaching; to give an indication of amenability to a progressive refinement processing pathway. If significant levels of contaminants can be removed in the bench scale testing, there will be justification to send samples to specialist HPQ testing facilities where more complex chemical and thermal processes can be applied and the ability of the quartz to be refined to the highest purities determined.

Deportment analysis is planned to understand the size, mineralogy and location of contaminants associated with the in-situ quartz, which is important in predicting the likely complexity of the processing required to remove these contaminants and achieve very high purity levels.

Evaluation of the **thermal stability** index of the quartz is important to assess performance in the furnace in the silicon smelting process.

Additional field work based on a geographically staged approach to converting the Exploration Target to Mineral Resources is planned. Areas of robust outcrop, easily accessible for drilling will be prioritised for the collection of higher density rock chip samples. The results of this work are expected to guide drillhole spacing, with drilling completed to confirm three dimensional volumes and grade distribution. Samples to confirm bulk density assumptions will also be collected.

In anticipation of drilling any required heritage surveys and government approvals will be progressed in the coming months.

Commenting on the Exploration Target for Perrinvale, Adam Wooldridge, Cobre's CEO, said:

"The Company has long seen copper as a key exposure to growth stimulated by the drive to net zero and the associated electrification. Silicon is now recognised as another critical metal and this work by the team is demonstrating the Perrinvale Project has the potential to host very large resources.

While our interests in Botswana have been and will remain front and centre of the Company's exploration activities, we are excited to continue our exploration efforts at Perrinvale and work to deliver a Critical Mineral Resource. Establishing the potential to move the quartz exploration target



from a valuable bulk product to an ultra-high purity product can be achieved with a relatively low-cost follow-on work programme with considerable value add.”

This ASX release was authorised on behalf of the Cobre Board by: Adam Wooldridge, Chief Executive Officer.

For more information about this announcement, please contact:

Adam Wooldridge

Chief Executive Officer

wooldridge@cobre.com.au

Competent Persons Statement

The information in this report that relates to mineral exploration results and exploration potential is based on work compiled under the supervision of Mr Todd Axford, a Competent Person and member of the AIG. Mr Axford is the Principal Geologist for GEKO-Co Pty Ltd and contracted to the Company as Exploration Manager and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that 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 Axford consents to the inclusion in this report of the information in the form and context in which it appears.

Table 3: Quartz rock chip sample details

Lab.	Latitude	Longitude	Sample ID	SiO ₂ %	Fe ₂ O ₃ %	Al ₂ O ₃ %	TiO ₂ %	CaO %	MgO %	MnO %	LOI %
ALS	Lower Detection Limit			0.01	0.01	0.01	0.01	0.01	0.01	0.01	
ALS	-29.0886702	119.8996842	PVR230301	99.53	0.07	0.1	0.01	0.01	<0.01	<0.01	0.17
ALS	-29.0887194	119.8997888	PVR230302	99.57	0.1	0.11	<0.01	0.01	0.01	<0.01	0.1
ALS	-29.0816811	119.9024525	PVR230305	99.66	0.05	0.03	<0.01	0.01	<0.01	<0.01	0.17
ALS	-29.0809046	119.9026674	PVR230307	99.63	0.06	0.06	<0.01	0.01	<0.01	<0.01	0.15
ALS	-29.0810392	119.9027223	PVR230308	99.63	0.06	0.08	<0.01	0.01	<0.01	<0.01	0.13
ALS	-29.0667712	119.904164	PVR230217	99.24	0.07	0.28	<0.01	0.01	0.02	<0.01	0.19
ALS	-29.0668055	119.904228	PVR230218	99.43	0.09	0.22	<0.01	0.01	<0.01	<0.01	0.11
ALS	-29.0660123	119.9047573	PVR230219	99.55	0.09	0.15	<0.01	<0.01	<0.01	<0.01	0.08
ALS	-29.0660962	119.9048371	PVR230220	99.36	0.09	0.27	<0.01	0.01	<0.01	<0.01	0.11
ALS	-29.0636898	119.9070217	PVR230216	99.58	0.12	0.08	<0.01	0.01	<0.01	<0.01	0.1
ALS	-29.0642212	119.9085149	PVR230214	99.47	0.07	0.18	<0.01	0.01	<0.01	<0.01	0.14
ALS	-29.0632635	119.909279	PVR230212	99.39	0.08	0.25	<0.01	0.01	<0.01	<0.01	0.13
ALS	-29.0632349	119.9092823	PVR230213	98.88	0.11	0.57	<0.01	0.01	0.01	<0.01	0.2
Nagrom	Lower Detection Limit			0.01	0.01	0.01	0.001	0.01	0.01	0.001	
Nagrom	-29.1323894	119.8807237	260701	99.52	0.02	0.09	<0.001	0.02	<0.01	<0.001	0.18
Nagrom	-29.1324055	119.8808368	260702	99.13	0.04	0.26	0.002	0.02	<0.01	<0.001	0.29
Nagrom	-29.1307149	119.8756094	260703	99.44	0.01	0.13	0.002	<0.01	0.01	<0.001	0.14
Nagrom	-29.130719	119.8756055	260704	99.41	0.05	0.09	0.001	<0.01	<0.01	<0.001	0.19
Nagrom	-29.1233287	119.8839638	260705	99.32	0.01	0.22	0.004	<0.01	<0.01	<0.001	0.12
Nagrom	-29.1253987	119.8834385	260706	99.19	0.02	0.26	0.004	<0.01	<0.01	<0.001	0.21
Nagrom	-29.1247318	119.8824742	260707	99.5	<0.01	0.11	0.004	<0.01	<0.01	<0.001	0.11
Nagrom	-29.1266582	119.88226	260708	99.5	0.01	0.11	0.003	<0.01	<0.01	<0.001	0.11
Nagrom	-29.0739438	119.902638	260709	99.45	0.01	0.1	<0.001	<0.01	<0.01	<0.001	0.17
Nagrom	-29.0739442	119.9025969	260710	99.45	0.02	0.09	0.003	<0.01	<0.01	<0.001	0.18
Nagrom	-29.1233879	119.888518	270701	99.46	<0.01	0.11	0.005	<0.01	<0.01	<0.001	0.13
Nagrom	-29.1233883	119.8884979	270702	99.35	0.01	0.16	0.001	<0.01	<0.01	<0.001	0.19
Nagrom	-29.125981	119.8879899	270703	99.54	<0.01	0.06	<0.001	<0.01	<0.01	<0.001	0.19
Nagrom	-29.125981	119.8879899	270704	99.47	0.01	0.16	<0.001	<0.01	<0.01	<0.001	0.1
Nagrom	-29.1278228	119.8876418	270705	99.24	0.01	0.21	<0.001	<0.01	<0.01	<0.001	0.19
Nagrom	-29.1277992	119.8876445	270706	99.25	0.03	0.16	0.004	<0.01	<0.01	<0.001	0.24
Nagrom	-29.1292348	119.8866184	270707	99.51	<0.01	0.11	0.002	<0.01	<0.01	<0.001	0.08
Nagrom	-29.1292567	119.8866494	270708	99.45	<0.01	0.17	0.001	<0.01	<0.01	<0.001	0.06
Nagrom	-29.1322165	119.883379	270709	99.52	<0.01	0.08	<0.001	<0.01	<0.01	<0.001	0.13
Nagrom	-29.1322142	119.8833826	270710	99.51	<0.01	0.18	<0.001	<0.01	<0.01	<0.001	0.01
Nagrom	-29.1329074	119.8835575	270711	98.69	<0.01	0.07	0.004	<0.01	<0.01	<0.001	0.06
Nagrom	-29.1329135	119.8835799	270712	99.62	<0.01	0.1	0.003	<0.01	<0.01	<0.001	0.07
Nagrom	-29.1250681	119.8890604	270713	99.51	0.01	0.13	0.003	<0.01	<0.01	<0.001	0.05
Nagrom	-29.1250681	119.8890604	270714	98.85	0.1	0.52	0.003	<0.01	0.01	<0.001	0.18
Nagrom	-29.1251461	119.8898982	270715	99.53	<0.01	0.09	0.005	<0.01	<0.01	<0.001	0.07
Nagrom	-29.1251635	119.8897887	270716	99.53	0.01	0.11	0.002	<0.01	<0.01	<0.001	0.08
Nagrom	-29.1275021	119.888748	270717	99.28	0.01	0.22	0.003	<0.01	<0.01	<0.001	0.1
Nagrom	-29.1274676	119.8887047	270718	99.32	0.02	0.18	<0.001	<0.01	<0.01	<0.001	0.14
Nagrom	-29.131761	119.8873037	270719	99.38	0.01	0.21	<0.001	0.01	<0.01	<0.001	0.1
Nagrom	-29.131742	119.887223	270720	98.96	0.03	0.47	0.007	<0.01	0.02	<0.001	0.09
Nagrom	-29.1325479	119.886811	270721	99.09	0.02	0.34	0.001	<0.01	<0.01	<0.001	0.11
Nagrom	-29.1325798	119.8868331	270722	98.9	0.02	0.54	0.003	0.01	0.01	<0.001	0.1
Nagrom	-29.1201516	119.8765241	280701	99.31	0.01	0.14	0.002	0.02	<0.01	<0.001	0.17

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Lab.	Latitude	Longitude	Sample ID	SiO ₂ %	Fe ₂ O ₃ %	Al ₂ O ₃ %	TiO ₂ %	CaO %	MgO %	MnO %	LOI %
Nagrom	-29.120161	119.8765576	280702	99.16	0.01	0.22	0.002	0.02	<0.01	<0.001	0.21
Nagrom	-29.1227813	119.8759284	280703	99.44	<0.01	0.09	0.005	<0.01	<0.01	<0.001	0.15
Nagrom	-29.1228074	119.8759755	280704	99.43	0.06	0.09	0.004	<0.01	<0.01	<0.001	0.11
Nagrom	-29.1193546	119.8831006	280705	99.47	<0.01	0.07	0.002	<0.01	<0.01	<0.001	0.16
Nagrom	-29.1193334	119.8830828	280706	99.5	<0.01	0.06	0.002	<0.01	<0.01	<0.001	0.14
Nagrom	-29.1193366	119.8830274	280707	99.47	<0.01	0.08	<0.001	<0.01	<0.01	<0.001	0.1
Nagrom	-29.1193544	119.8830374	280708	99.15	0.02	0.18	0.003	0.01	<0.01	<0.001	0.21
Nagrom	-29.115991	119.8850718	280711	99.45	0.01	0.07	0.001	<0.01	<0.01	<0.001	0.19
Nagrom	-29.1159817	119.8850729	280712	99.23	0.05	0.22	0.006	<0.01	<0.01	<0.001	0.14
Nagrom	-29.1115883	119.8846131	280713	99.62	<0.01	0.13	0.003	<0.01	<0.01	<0.001	-0.04
Nagrom	-29.1115422	119.8847665	280714	99.57	0.01	0.09	0.003	<0.01	<0.01	<0.001	-0.02
Nagrom	-29.08172	119.8833204	290701	99.41	0.01	0.13	0.003	0.01	<0.01	<0.001	0.09
Nagrom	-29.0817047	119.8833061	290702	99.39	0.03	0.12	0.004	0.01	<0.01	0.001	0
Nagrom	-29.0856593	119.883373	290703	99.66	<0.01	0.06	<0.001	<0.01	<0.01	<0.001	-0.02
Nagrom	-29.0856597	119.88337	290704	99.27	0.03	0.22	0.009	<0.01	<0.01	<0.001	0.06
Nagrom	-29.0866631	119.8833675	290705	99.23	0.04	0.21	0.003	0.01	<0.01	<0.001	0.17
Nagrom	-29.0911125	119.8823516	290706	99.43	0.01	0.12	0.002	<0.01	<0.01	<0.001	0.05
Nagrom	-29.0911083	119.8823436	290707	99.47	0.02	0.11	<0.001	<0.01	<0.01	<0.001	0.06
Nagrom	-29.0875536	119.8871604	290709	99.48	<0.01	0.15	0.003	<0.01	<0.01	<0.001	0.06
Nagrom	-29.0875585	119.8871335	290710	99.56	0.03	0.09	<0.001	<0.01	<0.01	<0.001	0.03
Nagrom	-29.0988801	119.8856543	290711	99.66	0.01	0.03	<0.001	<0.01	<0.01	<0.001	0.02
Nagrom	-29.0988729	119.8856628	290712	99.44	0.1	0.07	0.005	<0.01	<0.01	<0.001	0.09
Nagrom	-29.1002036	119.8850853	290713	99.64	0.01	0.03	0.002	<0.01	<0.01	<0.001	0.03
Nagrom	-29.1002058	119.8850878	290714	99.56	0.03	0.07	0.003	<0.01	<0.01	<0.001	0.05
Nagrom	-29.1054988	119.883694	290715	99.61	<0.01	0.06	0.003	<0.01	<0.01	<0.001	0.05
Nagrom	-29.1054766	119.8837242	290716	99.41	0.03	0.15	0.002	<0.01	<0.01	<0.001	0.1
Nagrom	-29.1064412	119.88467	290717	99.29	0.01	0.15	<0.001	<0.01	<0.01	<0.001	0.18
Nagrom	-29.106475	119.8846509	290718	99.28	0.04	0.16	<0.001	<0.01	<0.01	<0.001	0.24
Nagrom	-29.049693	119.88961	300701	99.41	<0.01	0.05	0.005	0.01	<0.01	<0.001	0.12
Nagrom	-29.049693	119.88961	300702	99.46	0.01	0.05	0.004	0.01	<0.01	<0.001	0.18
Nagrom	-29.0538217	119.8912966	300703	99.42	0.02	0.09	0.004	<0.01	<0.01	<0.001	0.14
Nagrom	-29.053831	119.891309	300704	99.38	0.01	0.08	0.014	<0.01	<0.01	<0.001	0.2
Nagrom	-29.0587769	119.8906908	300705	99.44	<0.01	0.08	0.005	<0.01	<0.01	<0.001	0.18
Nagrom	-29.0588554	119.8906691	300706	99.4	0.01	0.09	0.003	0.02	<0.01	<0.001	0.14
Nagrom	-29.0624005	119.890197	300707	99.4	0.01	0.08	0.004	<0.01	<0.01	<0.001	0.21
Nagrom	-29.0623864	119.8901587	300708	99.01	0.14	0.31	0.002	<0.01	<0.01	<0.001	0.26
Nagrom	-29.0622282	119.8899908	300709	99.35	0.1	0.14	0.004	<0.01	<0.01	<0.001	0.16
Nagrom	-29.056662	119.8818886	300710	99.53	0.01	0.06	<0.001	0.02	<0.01	<0.001	0.16
Nagrom	-29.056662	119.8818886	300711	99.43	0.02	0.09	0.001	0.02	<0.01	<0.001	0.17
Nagrom	-29.1140066	119.8924286	300712	99.57	0.01	0.05	<0.001	<0.01	<0.01	<0.001	0.08
Nagrom	-29.1140211	119.8924337	300713	99.57	0.01	0.06	<0.001	<0.01	<0.01	<0.001	0.05
Nagrom	-29.1156259	119.892383	300714	99.44	<0.01	0.05	0.003	<0.01	<0.01	<0.001	0.16
Nagrom	-29.1156281	119.8923564	300715	99.42	<0.01	0.07	0.003	<0.01	<0.01	<0.001	0.13
Nagrom	-29.1152788	119.8926794	300716	99.66	<0.01	0.06	<0.001	<0.01	<0.01	<0.001	0.05
Nagrom	-29.1152555	119.8927536	300717	98.22	0.01	0.08	0.002	<0.01	<0.01	<0.001	0.15
Nagrom	-29.1110828	119.8933352	300718	99.62	<0.01	0.04	<0.001	<0.01	<0.01	<0.001	0.09
Nagrom	-29.1110324	119.893348	300719	99.34	0.02	0.17	0.004	<0.01	<0.01	<0.001	0.18
Nagrom	-29.1105914	119.89361	300720	98.82	<0.01	0.06	0.003	<0.01	<0.01	<0.001	0.11
Nagrom	-29.1105647	119.8936425	300721	99.56	0.01	0.06	0.004	<0.01	<0.01	<0.001	0.05
Nagrom	-29.0969941	119.8949217	310701	99.59	<0.01	0.03	0.002	<0.01	<0.01	<0.001	0.06

Lab.	Latitude	Longitude	Sample ID	SiO ₂ %	Fe ₂ O ₃ %	Al ₂ O ₃ %	TiO ₂ %	CaO %	MgO %	MnO %	LOI %
Nagrom	-29.0969724	119.8948651	310702	99.53	0.01	0.06	0.001	<0.01	<0.01	<0.001	0.1
Nagrom	-29.0965884	119.8962805	310703	99.51	0.08	0.07	<0.001	<0.01	<0.01	<0.001	0.08
Nagrom	-29.1013072	119.8953384	310704	99.4	0.02	0.17	0.003	<0.01	<0.01	<0.001	0.07
Nagrom	-29.1013046	119.895342	310705	99.42	0.03	0.13	0.005	<0.01	<0.01	<0.001	0.13
Nagrom	-29.1027266	119.8949434	310706	99.46	<0.01	0.08	<0.001	<0.01	<0.01	<0.001	0.14
Nagrom	-29.1027764	119.8949567	310707	99.45	0.02	0.09	0.005	<0.01	<0.01	<0.001	0.16

Coordinates Datum: GDA94

Table 3: JORC Code Reporting Criteria

Section 1 Sampling Techniques and Data – Surface Rock Sampling

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. 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.	In the process of geological reconnaissance of the quartz units, the field geologist collected samples of outcrop using crack hammer and geologist pick. Material was broken off in-situ outcrops generally within a radius of 5m of the recorded sample point. At most sample locations two samples were collected: one being visually cleaner quartz and the second being visually dirtier quartz. Typically, dirtier samples came from areas where higher fracture density allowed iron oxides and other material to accumulate. Samples were placed in numbered sample bags and the sample location recorded with handheld GPS and georeferenced photo.
	Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems	Being semi-qualitatively selected, rock samples are not expected to be representative of any more than the area sampled. However, when the

Criteria	JORC Code explanation	Commentary
	used.	sample set is taken as a whole, low levels of variability in assays provides some indication of consistency within the sampled units.
	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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	The quartz units sampled are considered analogous to a bulk commodity where the primary mineral/metal of interest displays relatively low variability. In these cases, it is often contaminant minerals that may impact the ultimate quality of the target deposit. In the HPQ space various forms of beneficiation are applied to remove contaminants. For the Southern Panhandle samples industry standard beneficiation work is planned but not yet complete (refer to Next steps section of the report)..
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	Not applicable
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not applicable

Criteria	JORC Code explanation	Commentary
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not applicable
	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.	Not applicable
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.	Rock samples were photographed and areas sampled geologically described in the field.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging of chips/core/rock samples is qualitative by nature.
	The total length and percentage of the relevant intersections logged.	Not applicable
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Whole samples were used for analysis. Samples were collected dry. At the laboratory samples were logged, weighed, dried and then crushed to passing 3mm before 1/8 of the material was split off via rotary splitter. This was then pulverised. The 7/8 crushed material was re-bagged and

Criteria	JORC Code explanation	Commentary
		retained.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	While the crushing and pulverising process may introduce very low levels of contaminants via attrition. At the early stage of assessment this is not considered significant.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No quality control procedures aimed at maximising representivity were applied to the sub-sampling process. The industry standard particle size reduction prior to sub-sampling is highlighted in sample theory as being the most appropriate way to ensure representivity. By crushing the entire sample to - 3mm prior to splitting with a commercial splitter designed to deliver representative splits the Company is confident the process is suitable considering the stage of exploration.
	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.	Due to the nature of rock chip samples being chunks of rock broken off outcrop, with typical particle sizes from 30 to 150mm and the limited size of the samples (typically 1-3 kg), representative field duplication was not considered possible. Rather than collecting from a precise point, Samples were collected as multiple chunks of quartz taken from a radius at the sample location with the intention of creating samples that were more representative of the local quartz unit. As mentioned above both cleaner looking and dirtier looking areas of the quartz units were sampled.

Criteria	JORC Code explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered suitable for rocks sampled and analyses processes applied.
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.	The samples were analysed via XRF. Pulverised sample was fused in lithium borate flux with lithium nitrate additive. The resultant glass bead is analysed by XRF. XRF is suitable for the total analysis of a range of geological ores. XRF Suites are tailored to specific ore types, using predefined inter-element and matrix corrections. Loss on Ignition (LOI) is also determined to allow the determination of oxide totals. This method is considered a total analysis for the elements measured.
	For geophysical tools, spectrometers, handheld XRF instruments (fpXRF), etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Not applicable
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Being early stage work standards, and duplicates inserted at the laboratory were relied upon. No issues were identified.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	All reported mineralised results have been reviewed by 2 qualified persons.
	The use of twinned holes.	Not applicable

Criteria	JORC Code explanation	Commentary
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data was recorded in field notebooks and handheld electronic devices and later compiled with the sample assays. Data is stored on local computers and Company Cloud server.
	Discuss any adjustment to assay data.	No adjustments have been made.
Location of data points	Accuracy & quality of surveys used to locate drill holes (collar & downhole) or surface samples.	Handheld GPS co-ordinates expected accuracy 3-5m, which is suitable for the current purpose.
	Specification of the grid system used.	GDA94 Latitude and Longitude
	Quality and adequacy of topographic control.	Handheld GPS, which is suitable for the stage of exploration.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	For rock chip data spacing was controlled by available outcrop and observations of the field geologist.
	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.	Not applicable
	Whether sample compositing has been applied.	No sample compositing completed
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.	The nature of the tabular quartz units sampled suggests biased sampling is unlikely. It was noted that where the quartz units are cut by structures the brittle nature of the quartz results in a higher density of

Criteria	JORC Code explanation	Commentary
		fractures, and at the surface at least, the fractures are coated with iron oxides and potentially other contaminants. These areas were considered to represent 'dirtier' quartz and were specifically sampled along with 'cleaner' areas of quartz.
	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.	Not applicable
Sample security	The measures taken to ensure sample security.	Samples double bagged in the field and delivered directly to the site office by company personnel. Here sample numbering was checked and polywaeve bags sealed with cable ties prior to transport by Company personnel directly to the laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews completed.

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.	Reported results all from 100% Toucan Gold Pty Ltd tenements at Perrinvale WA, which may include E29/929, E29/938, E29/946, E29/986, E29/987, E29/989, E29/990 & E29/1017. Toucan Gold Pty Ltd is a subsidiary (100% owned) of Cobre Ltd. FMG Resources Pty Ltd retains a 2% net smelter royalty on any future metal

Criteria	JORC Code explanation	Commentary
		production from three tenements E29/929, 938 and 946. All samples were taken on Crown Land covered by a Pastoral Lease. No native title exists. The land is used primarily for cattle grazing.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The tenements are in good standing, and all work has been conducted under specific approvals from Department of Energy, Mines, Industry Regulation & Safety where required.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No results are relied on from other parties in this report.
Geology	Deposit type, geological setting and style of mineralisation.	The Perrinvale Project area includes parts of the Illaara and Panhandle Greenstone Belts (GB) located in the northern Southern Cross Domain of the Younami Terrane, in the Central part of Western Australia's Yilgarn Craton. The lower units in the stratigraphy are a series of quartzites and quartz-mica schists. In some places where these units are proximal to later intruded granites the quartzites are interpreted to have been further metamorphosed resulting in development of pegmatitic and amorphous textures with no visible accessory minerals. These units are the focus of the High Purity Quartz exploration.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the	Not applicable

Criteria	JORC Code explanation	Commentary
	following information for all Material drill holes: - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole length and interception depth If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 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 metal equivalent values should be clearly	Not applicable

Criteria	JORC Code explanation	Commentary
	stated. These relationships are particularly important in the reporting of Exploration Results.	
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Not applicable
Diagrams	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.	Included within the report (or as appendices)
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All assay results are included on the plans and/or cross-sections and tables in this report, including reference to location.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater,	Exploration of significance completed prior to December 2019 is detailed in the Cobre Ltd Prospectus that can be accessed via the Company website http://www.cobre.com.au/ . Similarly exploration completed from January 2020 has been reported and is available from the same company website.

Criteria	JORC Code explanation	Commentary
	geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Further work is discussed in the document.