

ASX announcement

28 March 2017

Nyungu Copper-Cobalt Update

Argonaut Resources NL (ASX: ARE) (*Argonaut* or the *Company*) is pleased to announce an updated Exploration Target for the Nyungu Copper-Cobalt deposit in Zambia. The estimation was updated to include target ranges for cobalt.

The Nyungu copper-cobalt deposit is part of the Lumwana West project located in north-western Zambia, 65km south of the DRC border.

Highlights

Exploration Target

The estimation of an Exploration Target including cobalt as well as copper was commissioned by Argonaut. The revised Exploration Target is:

Table 1: Nyungu March 2017 Exploration Target

Commodity	Tonnage Range (Mt)	Grade Range (%)	Contained Metal Range (kt)
Copper*	130 to 180	0.45 to 0.65	580 to 1,150
Cobalt	15 to 20	0.08 to 0.12	12 to 24

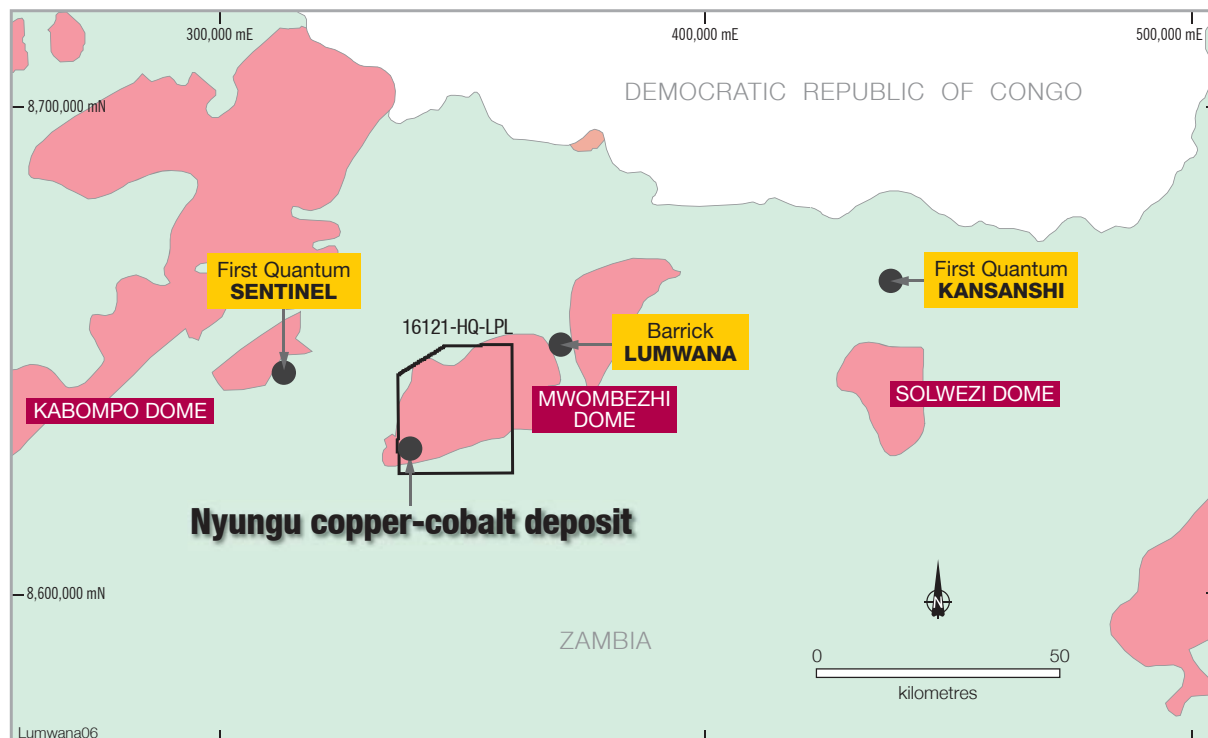
* *Copper Exploration Target announced to the ASX by Argonaut on 9 April 2013.*

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

- The March 2017 Exploration Target is estimated to JORC 2012 standards.
- Current cobalt prices have potential to transform the economics of Nyungu.
- Argonaut is planning to undertake a drilling program targeting cobalt of at least 3,000 metres as soon as possible.

Nyungu Copper-Cobalt Deposit

Cobalt occurs as an accessory mineral in many copper deposits located within the Central African Copperbelt. The Copperbelt straddles the border between Zambia and the Democratic Republic of Congo (DRC). Zambia remains a considerably safer and politically stable jurisdiction that benefits from strong mining law and courts.



Location



- Katanga (conglomerate, quartzite, argillite, arkose, shale, greywacke, dolomite, banded iron fm, mixite, limestone & schist)
- Pre-Katanga (schist, gneiss & granulite) & Basement Complex (granite, gneiss, migmatite, & granite)
- Licence boundary

Figure 1 Location of the Nyungu copper-cobalt deposit, North-western Province, Zambia.

Updated Exploration Target

The March 2017 Exploration Target for the Nyungu Copper-Cobalt deposit is shown in Table 1.

Level of Exploration Completed

The Exploration Target is based on actual samples from both reverse circulation and diamond drill holes. A total of 51 drill holes were completed at the Nyungu deposit (Nyungu Central) for a total of 10,319m. Drill samples were prepared for analysis in Zambia then analysed in Australia for a suite of elements suitable for base-metal exploration.

Tonnage and Grade Estimations

Tonnage: Cobalt tonnage ranges for the Nyungu deposit were estimated using three dimensional wireframes constructed by RungePincockMinarco (RPM) using a 200ppm cobalt cut-off grade. Wireframes were constructed using outlines interpreted from drill hole cross sections. These outlines were manually triangulated to form wireframes. Wireframes were terminated either in a position midway to the next drill section or to a position 100m from the previous outline. They were then adjusted to match the dip, strike and plunge of the zone.

Grade: These wireframes were then used to restrain a block model. Grade ranges were calculated based on the cobalt grades interpolated into the model from drill hole data using the Inverse Distance Squared method. The wireframes acted as hard boundaries to the block model.

A memorandum by RPM titled Nyungu Exploration Target is included as an appendix to this announcement.

Proposed Exploration Activities

Argonaut is planning to undertake a targeted drilling program as soon as funding permits, and in any event within two years, to define mineralisation extents on a drill spacing of 100m (along strike) by 50m (across strike) for approximately 3,000m of drilling.

The opportunity exists to drill further and better cobalt intercepts and to increase the tonnage and grade of cobalt mineralisation estimated to date. This is mainly due to the fact that previous drilling specifically targeted copper mineralisation, not cobalt.

Cobalt Exploration Highlights

Argonaut intercepted strong cobalt mineralisation from its first drill hole into the Nyungu deposit in 2011, NYU11RD001 (see below). Cobalt is intercepted predictably between drill traverses in a zone at or below the base of significant copper mineralisation.

Cobalt drilling highlights:

Table 1: Nyungu copper-cobalt deposit - Cobalt drill intercepts

Hole	From (m)	Interval (m)	Co (%)	Cu (%)
NYU11RD001	37	120.0	0.06	0.34
including	104	26.0	0.13	0.28
NYU11RD010	155	72.0	0.08	0.61
including	167	38.0	0.10	0.91
NYU11RD013	31	1.0	0.56	0.57
NYU11RD022	12	88.2	0.07	0.47
including	42	10.0	0.19	0.61
NYRD031	236	59.9	0.07	0.50
including	237	22.0	0.13	0.58
NYRD038	258	29.0	0.12	0.55
including	259	21.0	0.16	0.57
NYRD044	181.5	12.2	0.10	0.18
including	186.8	6.0	0.16	0.24
NYRD045	38.5	69.0	0.06	0.58
including	93	8.0	0.11	0.29
NYRD046	183.4	81.5	0.12	0.71
including	218.5	23.0	0.21	0.51
MM296	88	53.0	0.05	0.30
including	90	12.0	0.13	0.50

Detailed cobalt drill intercepts are shown in Appendix 1 of an announcement to the ASX dated 28 February 2017.

Acquisition of Antofagasta Interest

In February 2017, Argonaut and Antofagasta reached a preliminary and non-binding agreement of terms for the re-acquisition by Argonaut of a 25% beneficial interest in the Lumwana West project. Antofagasta's interest in the project was obtained under an earn-in style option agreement that ran from April 2014 to October 2015. Antofagasta spent \$3,900,000 on regional exploration at Lumwana West during this period.

The re-acquisition by Argonaut of the 25% interest is subject to the preparation and execution of definitive documentation. In the event this transaction is completed, Argonaut will hold 90% of the Lumwana West prospecting permit via subsidiary companies.

In exchange for Antofagasta's 25% beneficial interest, Argonaut will make the following commitments:

- pay Antofagasta US\$1,000,000 on the commencement of a feasibility study; and
- on development decision
 - pay Antofagasta US\$3,000,000; and
 - grant Antofagasta a 1.5% net smelter royalty on production.

Additionally:

- Argonaut will have the right to buy the net smelter royalty from Antofagasta for US\$4,000,000; and
- Argonaut will pay Antofagasta 25% of any sale proceeds in the event the project is divested.

About Argonaut

Argonaut is an Australia Securities Exchange listed exploration and development company. Argonaut operates the Torrens Iron Oxide Copper-Gold Joint Venture with Aeris Resources Ltd in South Australia, the Lumwana West copper-cobalt project with Chilean copper producer, Antofagasta plc, in north-western Zambia and the Crescent Lake lithium project in Ontario, Canada.

Lindsay Owler

Director and CEO

Argonaut Resources NL

Sections of information contained in this report that relate to Exploration Results were compiled or supervised by Mr Lindsay Owler BSc, MAusIMM who is a Member of the Australasian Institute of Mining and Metallurgy and is a full time employee of Argonaut Resources NL. Mr Owler holds shares and options in Argonaut Resources NL, details of which are disclosed in the Company's 2015 Annual Report. Mr Owler has sufficient experience which is relevant to the style of mineral deposits 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 Mineral Resources and Ore Reserves". Mr Owler consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Memorandum

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Re:	Nyungu Exploration Target
From:	Shaun Searle
To:	Tim Birt
CC:	Lindsay Owler
Date:	8 th March 2017

Introduction and Summary

RungePincockMinarco Limited (“RPM”) was contracted by Argonaut Resources NL (“ARE”) to assist with a high level Exploration Target for the Nyungu Copper-Cobalt deposit. The deposit forms part of the Lumwana West Project located in the Mwombezhi Dome, central Zambia. The initial Cu Exploration Target reported to the ASX in 2013 remains unchanged. In addition to the Cu Exploration Target, RPM has defined an Exploration Target for Co mineralisation contained within the deposit.

The Exploration Target was calculated based on a block model generated by RPM, ‘nyungu_id2_20170308.mdf’.

The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Nyungu Exploration Target, as at 8th March 2017, is summarised below in Table 1.

Table 1 – Nyungu March 2017 Exploration Target*

Commodity	Tonnage Range Mt	Grade Range %	Contained Metal Range kt
Cu [§]	130 to 180	0.45 to 0.65	580 to 1,150
Co	15 to 20	0.08 to 0.12	12 to 24

*The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

[§]Cu Exploration Target previously reported in 2013 by ARE.

IMPORTANT INFORMATION ABOUT THIS DOCUMENT

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This report has been produced by or on behalf of RungePincockMinarco Limited (“RPM”) solely for Argonaut Resources NL (the “Client” or “ARE”).

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5. Mining Unknown Factors

The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond RPM’s control and that RPM cannot anticipate. These factors include, but are not limited to, site-specific mining and geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalize the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any mining operation.

Co Exploration Target

A Co Exploration Target was calculated based on a block model generated by RPM, 'nyugnu_id2_20170308.mdf'.

The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Nyungu Exploration Target, as at 8th March 2017, is summarised below in Table 2.

Table 2 – Nyungu March 2017 Exploration Target*

Commodity	Tonnage Range Mt	Grade Range %	Contained Metal Range kt
Cu [§]	130 to 180	0.45 to 0.65	580 to 1,150
Co	15 to 20	0.08 to 0.12	12 to 24

**The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.*

§Cu Exploration Target previously reported in 2013 by ARE.

Cobalt tonnage ranges for the Nyungu deposit were calculated based on wireframes constructed by RPM using a 200ppm Co cut-off grade. Sectional outlines were manually triangulated to form wireframes. To form ends to the wireframes, the end section strings were copied to a position midway to the next section or to 100m and adjusted to match the dip, strike and plunge of the zone. The wireframed objects were validated using Surpac software and set as solids.

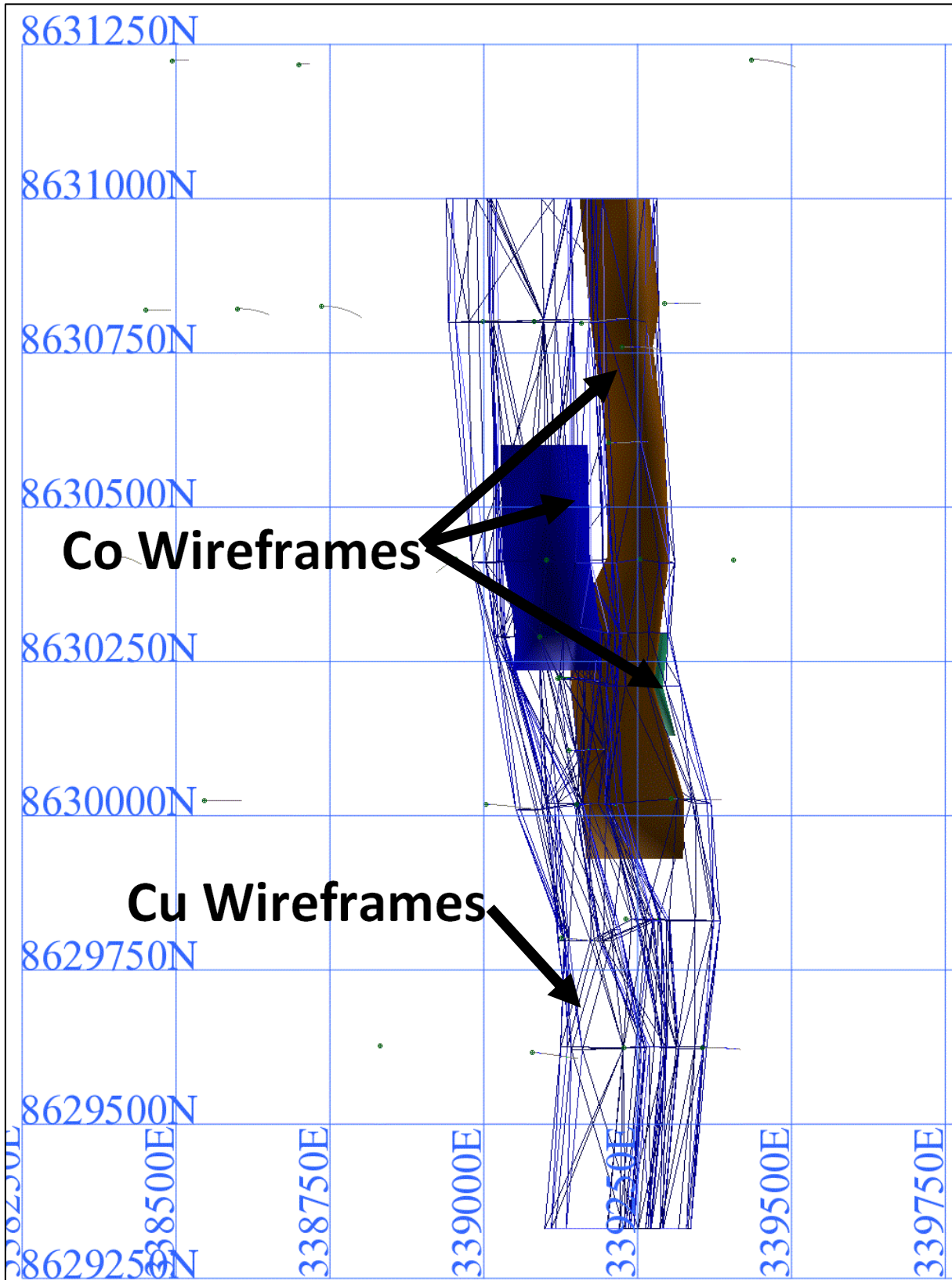
The wireframes were used to create a Surpac block model 'nyugnu_id2_20170308.mdf'. Grade ranges were calculated based on the Co grades interpolated into the model using Inverse Distance Squared ("ID²"), with the wireframes acting as hard boundaries to the estimate.

RPM considers the Exploration Target valid because ARE, subject to market conditions, currently intends to undertake a targeted drilling program over the next two years to define the mineralisation extents on a drill spacing of 100m (along strike) by 50m (across strike) for approximately 3,000m of drilling.

The location of the Nyungu Exploration Target is shown below in Figure 1 and Figure 2.

The Co Grade-Tonnage information is shown in Table 3 and Figure 3.

Figure 1 – Co Wireframes (Solid) Contained Within Cu Wireframes (Mesh) - Plan



Runge Pincock Minarco

Figure 2 – Co Wireframes (Solid) Contained Within Cu Wireframes (Mesh) – Long Section

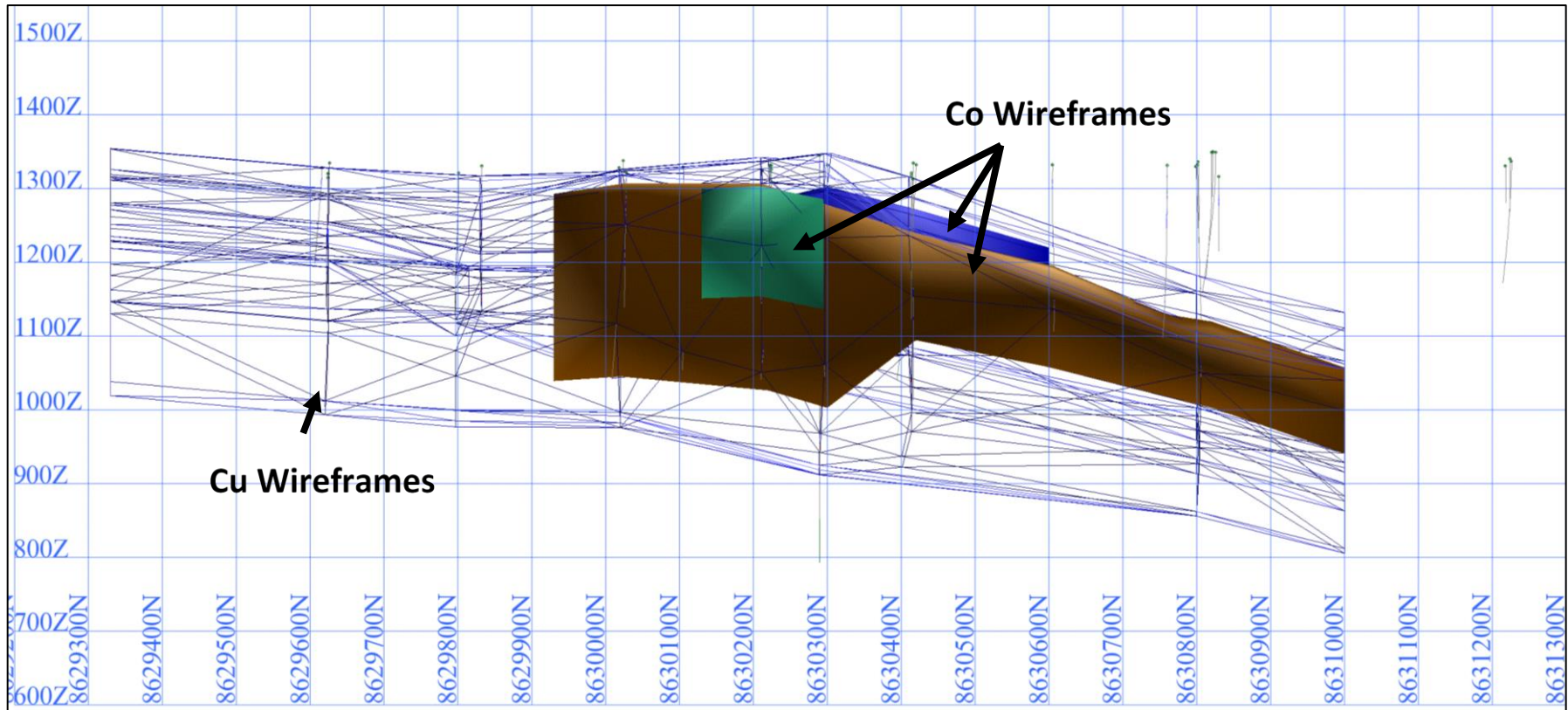


Table 3 – Nyungu Co Grade-Tonnage Information

Grade Range Co %	Incremental Mineralisation		Cut-off Grade Co %	Cumulative Mineralisation		
	Tonnage t	Co %		Tonnage t	Co %	Co Metal Tonnes
0.02 -> 0.04	23,203	0.04	0.02	17,653,671	0.10	18,315
0.04 -> 0.06	1,303,789	0.05	0.04	17,630,468	0.10	18,306
0.06 -> 0.08	2,167,578	0.07	0.06	16,326,679	0.11	17,612
0.08 -> 0.1	6,341,289	0.09	0.08	14,159,101	0.11	15,995
0.1 -> 0.12	4,415,898	0.11	0.10	7,817,812	0.13	10,288
0.12 -> 0.14	793,438	0.13	0.12	3,401,914	0.16	5,274
0.14 -> 0.16	687,578	0.15	0.14	2,608,476	0.16	4,230
0.16 -> 0.18	1,803,320	0.17	0.16	1,920,898	0.17	3,191
0.18 -> 0.2	117,578	0.18	0.18	117,578	0.18	215
Total	17,653,671	0.10				

Figure 3 – Nyungu Co Grade-Tonnage Curve

