

17 January 2013

ASX ANNOUNCEMENT

Drilling confirms a major copper-cobalt deposit at Lumwana West in Central African Copperbelt

Argonaut Resources NL (ASX: ARE) is pleased to confirm the delineation of a major copper-cobalt deposit at the Nyungu Central prospect on the company's Lumwana West licence in Zambia following the receipt of initial 2012 drilling results.

The confirmation of the copper-cobalt mineralisation at Nyungu Central was accompanied by assay results from drilling at the Nyungu South prospect revealing the first significant copper intersection, confirming the potential for satellite copper deposits proximal to Nyungu Central.

Highlights

NYUNGU CENTRAL

- Coherent copper/cobalt deposit
- Mineralisation covers an area of 250m (E-W) and 1,400m (N-S), open to the north and south
- High grade cobalt intercepted up to 0.41% Co
- Preliminary results from analytical batches for Nyungu Central drilling include:
 - NYRD030: 22m at 0.51% Cu from 143m
 - NYRD031: 32m at 0.48% copper from 26m
 - and **78m at 0.59% copper** from 217m
 - including 22m at 0.13% cobalt from 237m
 - NYRD038: **31m at 0.53% copper and 0.12% cobalt** from 258m
 - including **7m at 0.27% cobalt**
- Exploration Target range to be estimated to JORC standards by independent consultant by March 2013

NYUNGU SOUTH

- Initial significant intercept received from within broad zone of elevated copper at the Nyungu South prospect
- Preliminary results from initial analytical batches for Nyungu South drilling include:
 - NYRD040: **29m at 0.53% copper** from 27m
 - Results for the potential continuation of the above intercept are pending

Argonaut Resources Director, Lindsay Owler, commented: "Results from the Lumwana West project represent a milestone in the history of Argonaut Resources as an exploration company. Recent results from Nyungu Central outline a poly-metallic deposit with continuity and significant potential for continued growth, with preliminary results from Nyungu South presenting potential for regional copper deposits."

"The company is very pleased to have enjoyed immediate exploration success at Nyungu and looks forward to advancing towards a maiden JORC resource and preliminary feasibility."

"It's a rare and rewarding experience to receive drilling results that transform an exploration prospect into a justifiable development project."

Nyungu Central Deposit¹

Exploration activity undertaken at Nyungu Central has greatly increased the company's confidence that the deposit is robust and predictable in nature. Disseminated copper sulphide mineralisation is primarily hosted in tightly folded biotite-kyanite-garnet schists (the 'Host Schist').

Drilling to date shows the north-south oriented deposit occurs over at least 1,400m with a width of approximately 250m. Mineralisation has been intercepted from shallow depths (<10m) and as deep as 435m from surface.

The folded host unit is interpreted to thicken near fold hinges and varies in true thickness from approximately 25m to 80m. A higher-grade, graphitic unit is interpreted to persist through the centre of the broader Host Schist. Due to the tight folding, **the host unit appears to be repeated 3-4 times across a typical section** (Figure 1). The folded package plunges to the north.

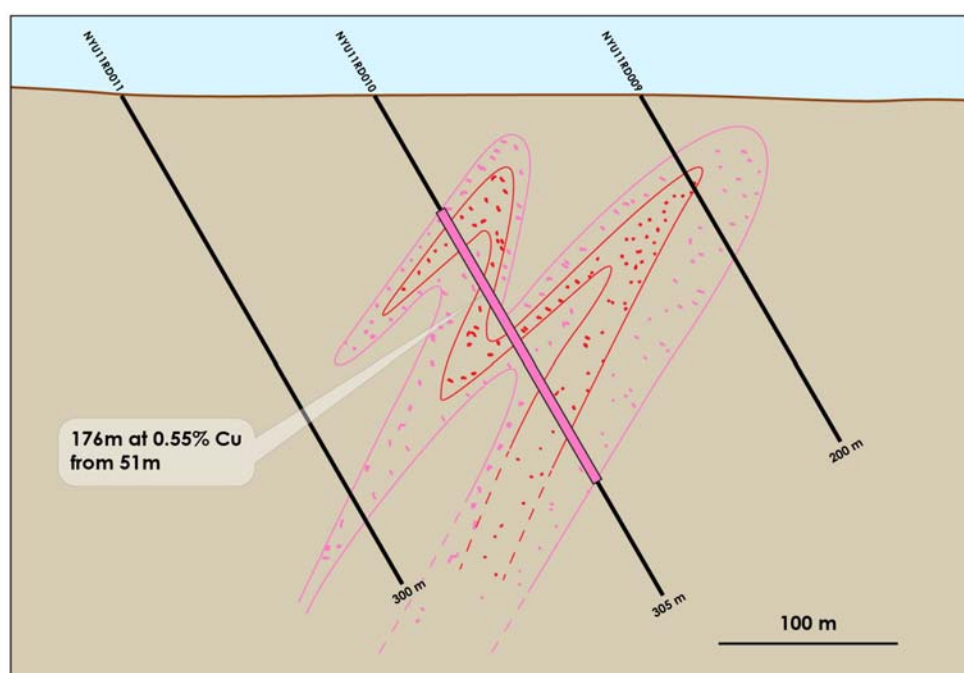


Figure 1: Schematic cross-section at 8,630,000mN looking north, showing interpreted tight folding of the Host Schist with the higher-grade graphitic unit (red stippling) and the lower-grade (0.1 to 0.7% Cu) non-graphitic schist (pink stippling). Section location shown on Figure 4.

¹ There has been insufficient exploration to define a Mineral Resource calculated in accordance with JORC Code and it is uncertain if further exploration will result in the determination of a Mineral Resource.

Cobalt and gold contents vary within the Host Schist; however, copper grades are relatively predictable. Cobalt grades within the Host Schist vary from below detection to 0.41% Co. Gold grades vary from below detection to 1.5g/t Au.

Nyungu Central Drilling

Argonaut, via its 51% owned Zambian subsidiary, Mwombezhi Resources Ltd, drilled nine RC/diamond holes for a total of 2,100m at Nyungu Central between August and November 2012. The holes succeeded in determining the orientation of northerly extensions to the mineralisation and in outlining the geometry of mineralisation via follow-up infill holes.

Northerly Extension

Drill holes NYRD032, 033, 038 and 043 (see Figure 4) targeted the orientation of the northern extension of the Nyungu Central deposit.

Drill hole NYRD038 succeeded in intercepting the mineralised Host Schist and confirmed the mineralised package was plunging gently to the north. Preliminary assays indicate that NYRD038 intercepted **31m at 0.53% copper and 0.12% cobalt from 258m**, including **7m at 0.27% cobalt**. NYRD038 was drilled to 300m and terminated in copper-cobalt mineralisation.

Results for NYRD043 are pending. Drill logs note the hole intersected the Host Schist.

Follow-up Infill Drilling

Drill holes NYRD030, 031 and 045 targeted the Host Schist geometry in areas adjacent to 2011 drill intercepts.

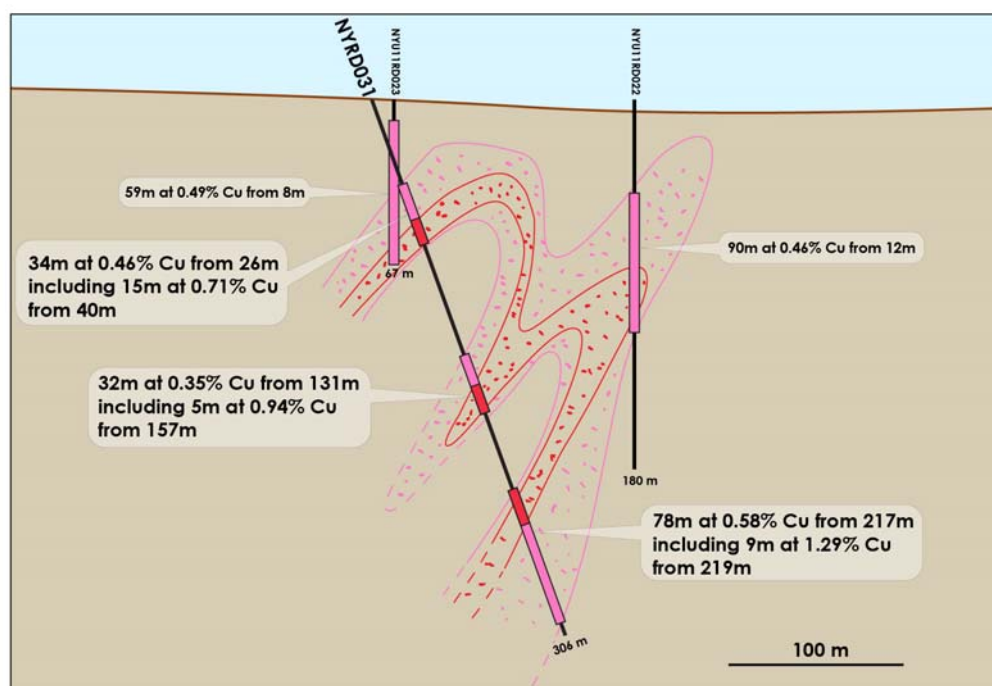


Figure 2: Schematic cross-section at 8,630,200mN looking north showing drill intercepts and interpreted folding of the Host Schist with the higher-grade graphitic unit (red stippling) and the lower-grade (0.1 to 0.7% Cu) non-graphitic schist (pink stippling) Section location shown on Figure 4.

Drill hole NYRD030 targeted the eastern extent of mineralisation reported in drill hole NYU11RD021. NYU11RD021 intercepted 14m at 0.65% copper from 147m and 31m at

1.57% copper from 174m. NYRD030 was drilled to 200m and intercepted the targeted host unit. Preliminary assays returned **22m at 0.51% copper from 143m**.

Figure 2 shows NYRD031 drilled to the east at an angle of 70 degrees between two existing intercepts. This hole succeeded in intersecting significant copper and cobalt mineralisation and better defined the folded structure via measurements taken from orientated drill core.

Preliminary assays indicate that NYRD031 intercepted 32m at 0.48% copper from 26m and **78m at 0.59% copper from 217m**, including 22m at 0.13% cobalt from 237m.

Nyungu South Drilling

Mwombenzi Resources drilled 10 holes at the Nyungu South target for a total of 1,728m (Figure 5) across four 400m broadly spaced traverses.

The target at Nyungu South is a broad IP anomaly (Figure 3) with associated surface geochemistry. The incomplete and preliminary results received to date show that at least 6 of the 10 holes intercepted elevated copper (Figure 5). Importantly, several drill holes intercepted the Host Schist.

Preliminary results for the RC pre-collar of drill hole NYRD040 returned **29m at 0.53% copper from 27m**. Results for the diamond tail are pending.

Given this initial significant intercept and the **potential for satellite mineralisation** proximal to the Nyungu Central deposit, detailed structural interpretation of existing drill core and further geophysical modelling is warranted for the targeting of future drill holes at Nyungu South.

Nyungu North and Far North Drilling

The company drilled two holes at Nyungu North and two holes at Nyungu Far North for a total of 410m (Figure 3). RC pre-collars did not intersect the targeted geology; consequently diamond tails were not drilled.

Despite the less favourable host rocks, drill hole NYRC37 intersected 9m at 0.17% copper from 70m at Nyungu North, indicating modest potential.

Preliminary assays

Of the assay results received to date, five batches were determined to have QA/QC inconsistencies. All five batches are currently undergoing further check analysis.

General

The Company is also aware that potential exists for additional discoveries outside of the Nyungu area but within the Lumwana West licence. To accompany the planned exploration program at the priority prospects, the Company will devote the required financial resources to the exploration of additional regional targets in 2013.

- ENDS -

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Sections of information contained in this report that relate to Exploration Results and Mineral Resources 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 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 2004 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.

Lumwana West Project Background

Lumwana West area, Mwombezi Dome, North Western Zambia

The Mwombezi Dome is located in the western extension of the Lufilian Arc which is host to the Central African Copperbelt. The Mwombezi Dome is comprised of two northeast-southwest trending basement inliers, and is one of several domes in an area of the Copperbelt known as the 'Domes Region'.

The Domes Region is host to the new generation of Zambian Copperbelt mines including Barrick's Lumwana Mine on the eastern lobe of the Mwombezi Dome plus First Quantum's Kansanshi Mine and Trident Deposits.

The Lumwana West licence area covers numerous prospects, as defined by regional soil geochemistry and airborne radiometrics. The Nyungu prospect was selected by Argonaut as the first area for intensive investigation.

2011 RC/diamond drilling program

Highlights of 2011 drilling at Nyungu Central included:

- **176m at 0.55% copper** and 0.04% cobalt from 51m
 - including **33m at 1.04% copper** and 0.1% cobalt from 166m in drill hole NYU11RD010
- **31m at 1.57% copper** and 0.02% cobalt from 173m
 - including **17m at 2.44% copper** and 0.03% cobalt from 174m
 - and **6m at 5.51% copper** and 0.07% cobalt and 0.3g/t gold from 174m in drill hole NYU11RD021
- **90m at 0.46% copper** and 0.07% cobalt from 12m in drill hole NYU11RD022
- **59m at 0.49% copper** and 0.02% cobalt from 8m
 - including 47m at 0.57% copper and 0.02% cobalt from 20m in drill hole NYU11RD023

Mineralisation at Nyungu Central has been intersected over significant widths, depths and strike extent. The company is content that intercepts cited are representative of the mineralised body.

Lumwana West Joint Venture

The Lumwana West Joint Venture involves large scale prospecting licence 16121-HQ-LPL. The grant of 16121-HQ-LPL was approved by the Mines Advisory Committee, a majority independent committee, in July 2011. The licence was registered in the Zambian 'Flexicadastre' system in the same month.

Under the terms of the Joint Venture, Argonaut's 100% held subsidiary, Lumwana West Resources Ltd, can earn up to 85% of Mwombezhi Resources Ltd which holds 16121-HQ-LPL. The Joint Venture is in three phases.

In earning the initial 51%, Lumwana West paid a USD300,000 signing fee and funded USD1.8 million in exploration works prior to 31 December 2012. Argonaut paid USD600,000 to the original shareholders on the first allotment of shares.

To earn a further 24%, for a total of 75%, Lumwana West must spend an additional USD2.4 million on exploration and make a final cash payment of USD1.1 million to the original shareholders. This is expected to occur in the 2013 calendar year.

Lumwana West can take a further 10% interest in the licence for a total of 85%, by completing a Feasibility Study.

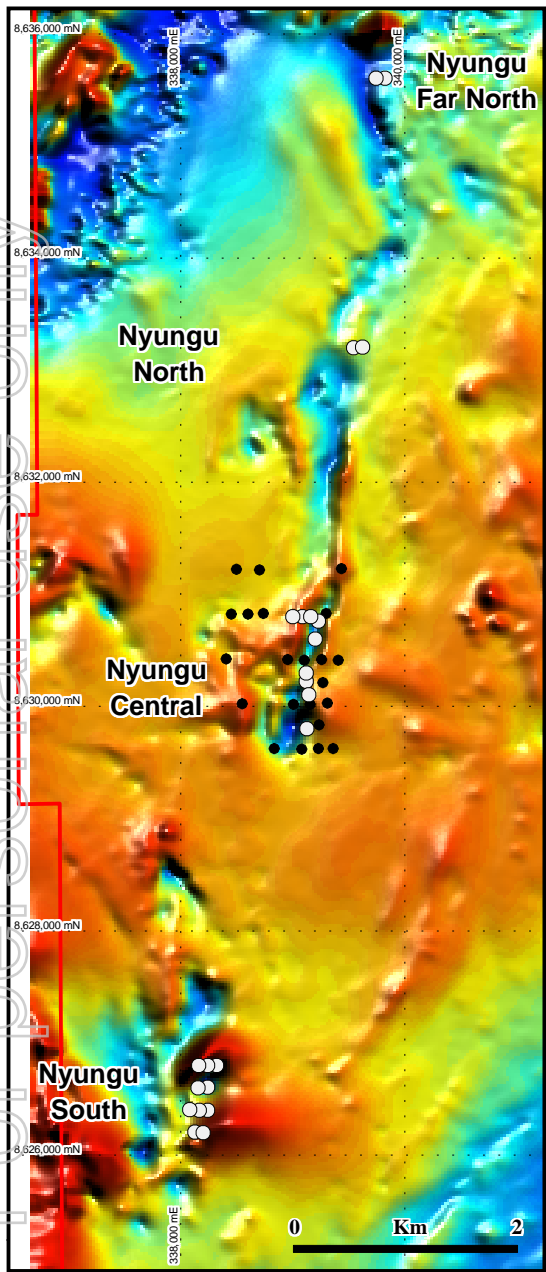
About Argonaut

Argonaut is an Australian Stock Exchange listed mineral exploration and development company with projects in South Australia, Queensland, Laos and Zambia. Argonaut's projects are in the advanced exploration and feasibility stages.

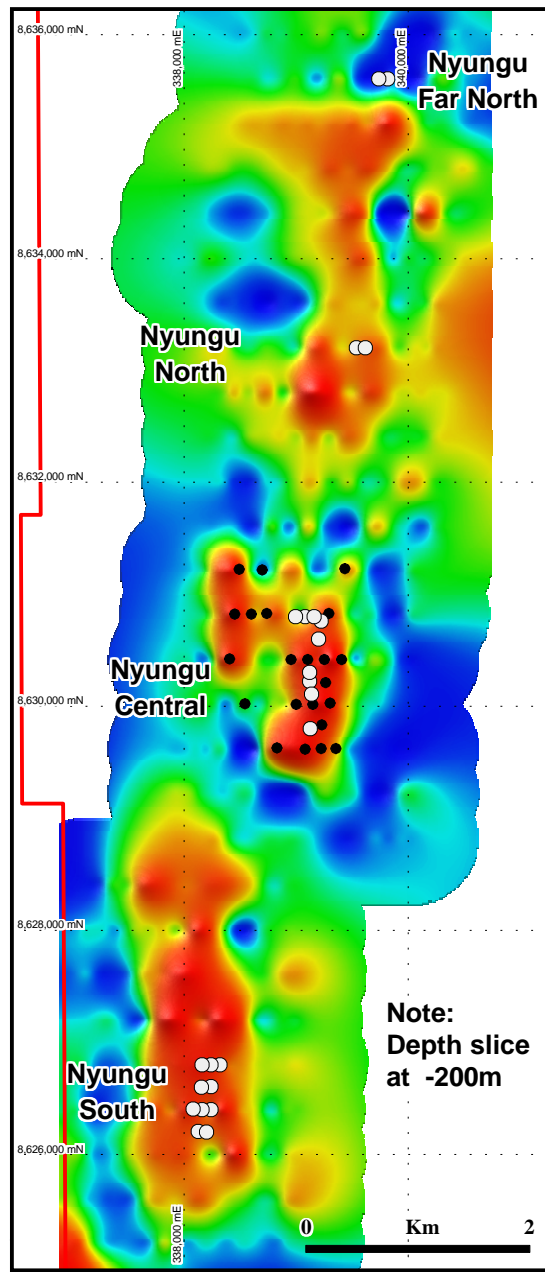
The company is exploring for gold and copper at its Alford and Torrens projects in South Australia, zinc-copper at Mt Kroombit in Central Queensland, gold in Laos and copper at the flagship Lumwana West Project in Zambia.

Argonaut has a significant investment in Cuesta Coal Ltd which listed on the Australian Stock Exchange in May 2012.

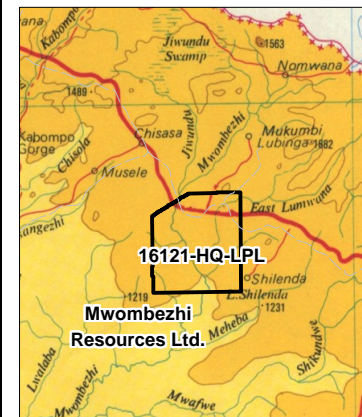
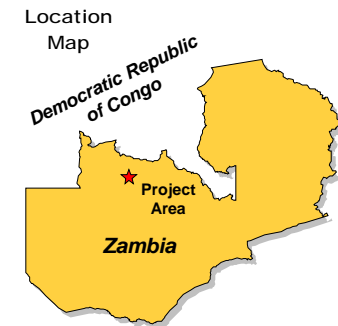
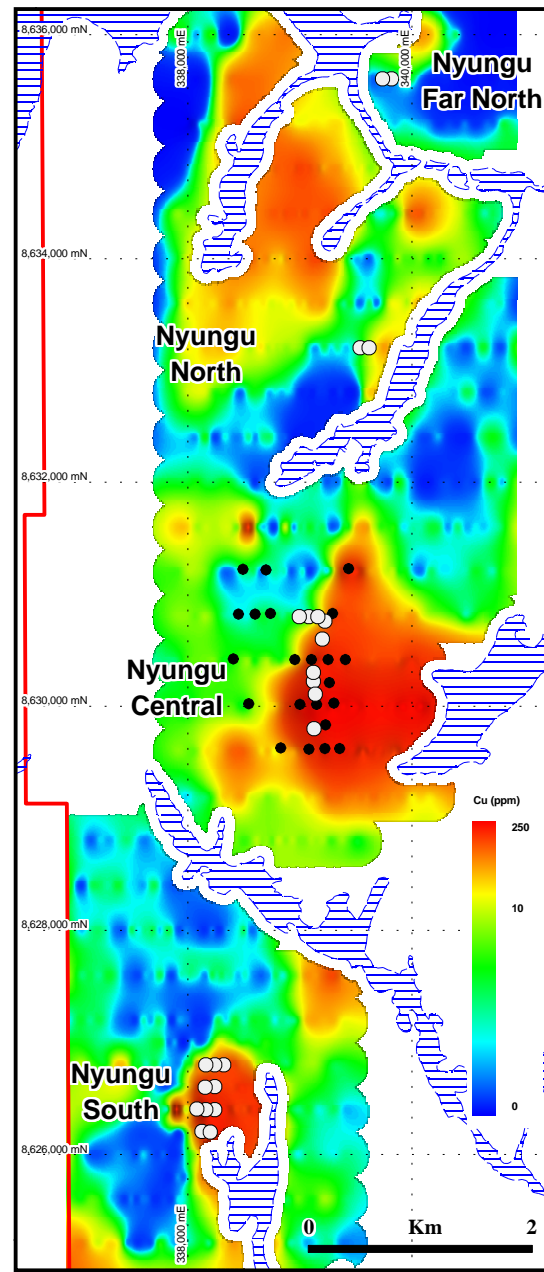
Magnetics (RTP)



IP Chargeability



Cu Soil Geochemistry (ppm)



NB. Cu soil geochemistry by handheld XRF. Approximate values only.

- Tenement Boundary
- Hydromorphic Feature (Dambo)
- Drill Hole Collar 2011
- Drill Hole Collar 2012



Nyungu Shear Zone
Magnetics (RTP), IP Chargeability,
Cu Soil Geochemistry (ppm)

Figure 3

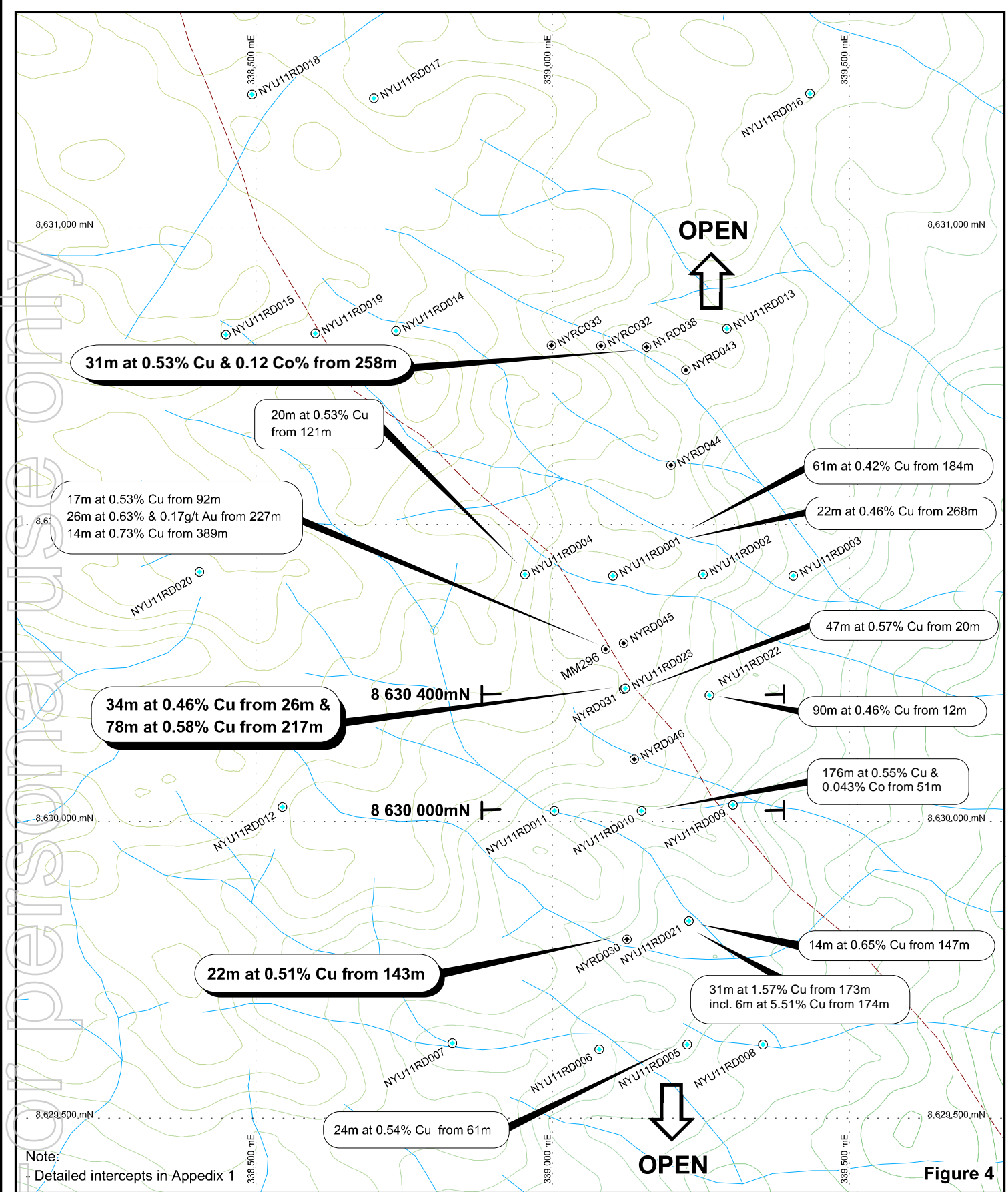
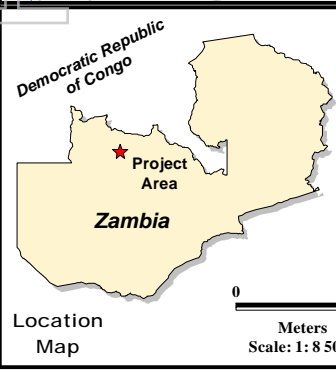


Figure 4

Note:
- Detailed intercepts in Appendix 1



- Completed Drill Hole 2012 Program
- Completed Drill Hole 2011 Program
- 24m at 0.5% Cu** New Intercept
- 24m at 0.5% Cu Previously reported intercept
- Road
- Drainage
- 2m Contour



Nyungu Central Prospect Drill Collars showing Intercepts

Author: Lindsay Owler/Tim Birt	Date: Dec 2012
Drawn: Delta GIS	Revised: .
Dwg No.: ARE_12_154	Report No.: .
Projection: WGS 84 Z35S	Scale: 1 : 8 500

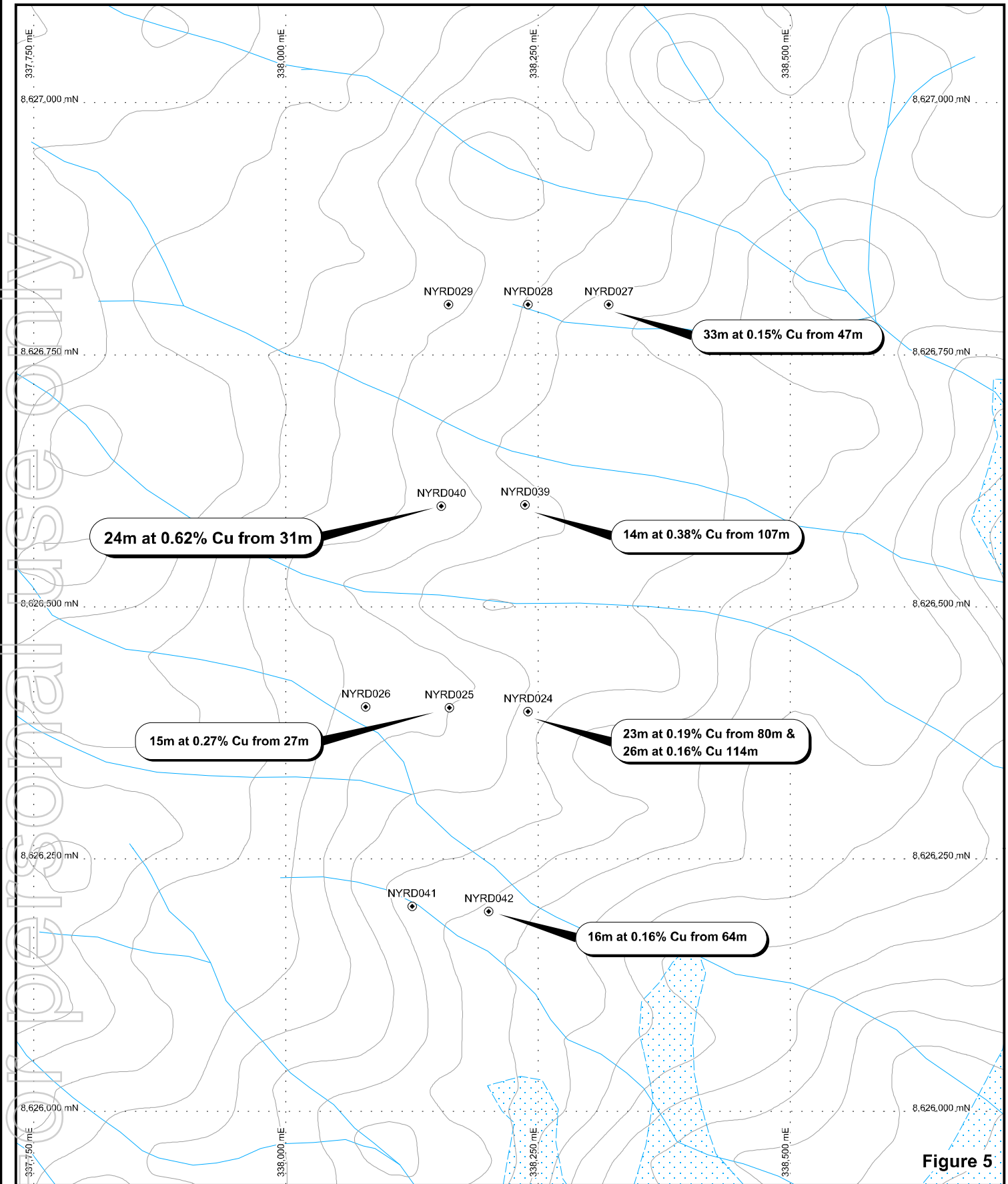


Figure 5



Location Map

	Completed Drill Hole 2012 Program
24m at 0.5% Cu	New Intercept
	Drainage
	Hydrographic Feature (Dambo)
	2m Contour

Meters
 Scale: 1:5,000



Nyungu South Prospect Drill Collars showing Intercepts

Author: Lindsay Owler/Tim Birt	Date: Dec 2012
Drawn: Delta GIS	Revised: .
Dwg No.: ARE_12_155	Report No.: .
Projection: WGS 84 Z35S	Scale: 1 : 5 000

Hole	East	North	RL	Dip	Azimuth	Total Depth	From	To	Interval	Cu (%)	Co (%)	Comment
NYRD024	338,240	8,626,396	1,307	-70	90	216.00	80	103	23	0.19		RC
including							94	96	2	0.62		RC
							114	140	26	0.16		DD
including							121	124	3	0.44		DD
NYRD025	338,162	8,626,400	1,310	-70	90	186.15	27	42	15	0.27		RC
including							28	36	8	0.35		RC
							62	81	19	0.14		RC/DD
							87	90	3	0.35		DD
NYRD026	338,079	8,626,401	1,311	-70	90	113.65						RC/DD, NSI
NYRD027	338,320	8,626,800	1,307	-70	90	198.65	47	80	33	0.15		RC
							161.75	169.00	7.25	0.11		DD
NYRD028	338,240	8,626,800	1,310	-70	90	201.15	135.55	139	2.95	0.11		DD
NYRD029	338,161	8,626,800	1,312	-70	90	149.65						RC/DD, NSI
NYRD030	338,126	8,629,801	1,321	-70	90	200.65	143	164.82	21.82	0.51		DD
including							143	145	2	1.30		DD
NYRD031	338,120	8,630,222	1,332	-70	90	305.65	26	58	32	0.48	0.04	RC
including							40	55	15	0.71	0.04	RC
							77.00	83.10	6.10	0.66	0.04	preliminary, DD
							131.45	163.45	32	0.35		preliminary, DD
including							157	162.35	5.35	0.94		preliminary, DD
							188.65	193	4.35	0.68		preliminary, DD
							216.90	295	78.10	0.59	0.05	preliminary, DD
including							216.90	252	35.10	0.77	0.07	preliminary, DD
including							219	228	9	1.15		preliminary, DD
including							237	259	22	0.58	0.13	preliminary, DD
NYRC032	339,082	8,630,801	1,332	-70	90	133.00						RC, no DD tail, NSI
NYRC033	338,998	8,630,802	1,337	-70	90	85.00						RC, no DD tail, NSI
NYRC034	339,820	8,635,601	1,268	-70	90	100.00						RC, no DD tail, NSI
NYRC035	339,742	8,635,601	1,272	-70	90	127.00						RC, no DD tail, NSI
NYRC036	339,540	8,633,199	1,294	-70	90	91.00						RC, no DD tail, NSI
NYRC037	339,621	8,633,203	1,289	-70	90	91.00	70	79	9	0.17		RC, no DD tail
NYRD038	339,159	8,630,799	1,330	-70	90	300.00	246	295	49	0.39	0.08	preliminary, DD
including							258	289	31	0.53	0.12	preliminary, DD
including							259	267	8	0.93	0.12	preliminary, DD
and							273	280	7	0.40	0.27	preliminary, DD
NYRD039	338,237	8,626,601	1,309	-70	90	216.45	72	80	8	0.19		preliminary, DD
							107	124	17	0.38		preliminary, DD
NYRD040	338,154	8,626,600	1,311	-70	90	159.55	18	22	4	0.13		preliminary, RC

Hole	East	North	RL	Dip	Azimuth	Total Depth	From	To	Interval	Cu (%)	Co (%)	Comment
NYRD041	338,125	8,626,203	1,311	-70	90	116.46	27	56	29	0.53		preliminary, RC
							47	54	7	1.24		preliminary, RC
							61	159.55				DD, AP
							0	80				preliminary, RC, NSI
NYRD042	338,201	8,626,198	1,312	-70	90	170.55	80	116.46				DD, AP
							25	36	11	0.14		preliminary, RC
							64	80	16	0.16		preliminary, RC/DD
							105	111	6	0.28		preliminary, DD
NYRD043	339,225	8,630,760	1,332	-70	90	242.65	118	132	14	0.14		preliminary, DD
							0	242.65				DD, AP
NYRD044	339,200	8,630,600	1,332	-70	90	239.75	0	239.75				DD from surface, AP
NYRD045	339,120	8,630,300	1,331	-70	90	302.55	0	302.55				DD from surface, AP
NYRD046	339,138	8,630,105	1,329	-70	90	290.25	0	290.25				DD from surface, AP

Notes

- 1 Pre collars by Reverse Circulation drilling
- 2 1m and 2 to 4m composite sample interval in RC drilling
- 3 1m and 2m composite sample interval in Diamond Core drilling
- 4 Calculated using 0.1% Cu lower cut threshold, no upper cut threshold
- 5 Analysis by Intertek Genalysis - Methods 4A/OES and 4A/MS, FA25/AAS for Au
- 6 Coordinate System: WGS84, Zone 35 South
- 7 NSI = No Significant Intercepts
- 8 RC = Reverse Circulation intercept
- 9 DD = Diamond Core intercept
- 10 EOH = End of Hole
- 11 AP = Assays Pending