

ASX announcement

8 November 2013

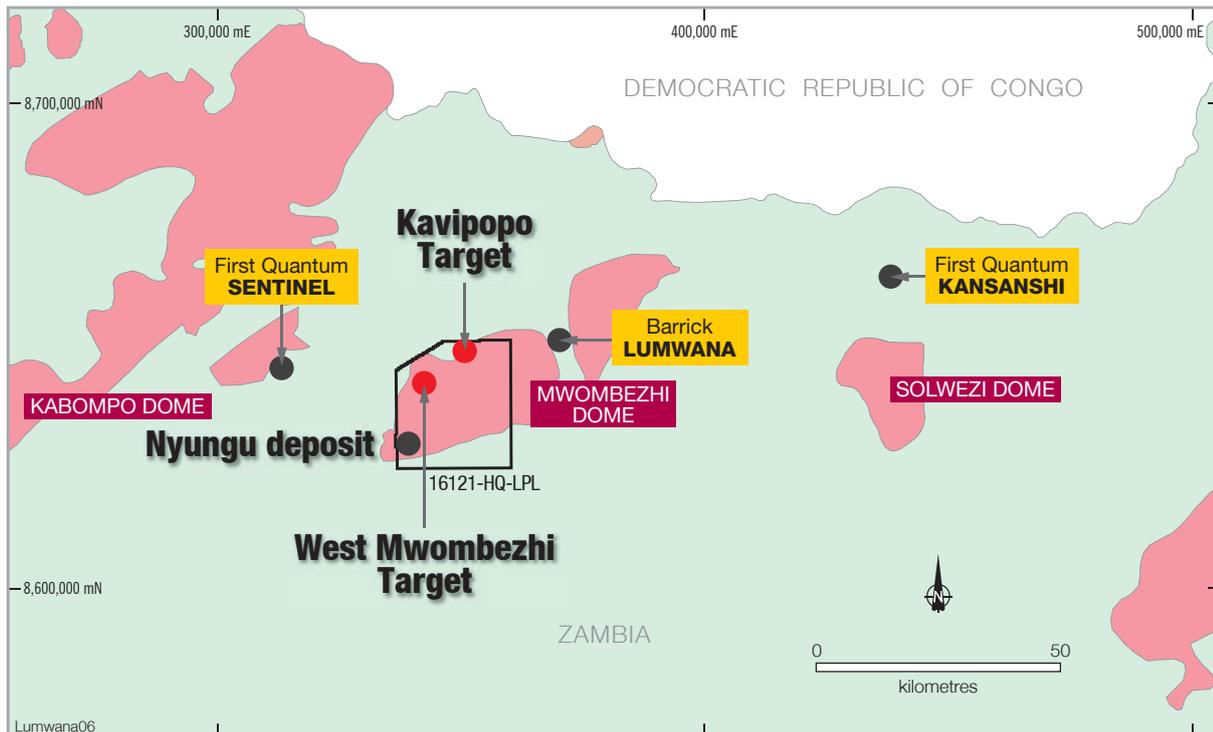
1.9km strike length copper target confirmed at Kavipopo, Lumwana West, Zambia

Highlights

- 1.9 kilometre strike length IP chargeability, copper in soil and uranium radiometric anomaly – the exploration signature for the targeted mineralisation.
- Large, robust geochemical and geophysical exploration target.
- Kavipopo is a high priority drill target for the May 2014 drilling program at Lumwana West.
- Building on an inventory of copper deposits and large, high-priority drill targets at the Lumwana West Project.
- Revised Kavipopo Exploration Target to JORC 2012 standards to be released next week.

Argonaut Resources NL (ASX: ARE) ('Argonaut' or the 'Company') is pleased to announce that exploration over the Kavipopo target at the Lumwana West Project in Zambia has returned a large, robust geochemical and geophysical target.

The copper target measures over 1.9 kilometres (km) striking west-northwest as defined by Induced Polarisation (IP chargeability) geophysical survey, copper in soil sampling and airborne uranium radiometric survey.



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 The Domes Region, Zambia showing the Lumwana West Project location with priority exploration targets and surrounding mines.

Argonaut has selected two primary exploration methods for the spatial definition of drill targets at Lumwana West:

1. Geochemical soil sampling in areas where soils are not prone to secondary chemical concentrating effects or major transportation from the soil's source; and
2. IP chargeability anomalism at subsurface depths with reasonable potential for open-pit access to mineralisation.

When soil geochemistry and IP chargeability anomalies are coincident (occur together) and geologists can interpret from three dimensional IP models the basic geometric properties of the targeted mineralisation, then an effective drilling program can be planned and implemented. This technique is the principal exploration tool for the discovery and brownfield development of deposits in the Domes Region.

Additionally, the Kavipopo target features a strong uranium radiometric anomaly which is a feature of major copper deposits nearby at the Lumwana Mine.

Argonaut completed a soil sampling survey comprising 332 soil samples. The resultant anomaly is exactly coincident to the IP chargeability anomaly, indicating a strong correlation between datasets and steeply dipping interpreted mineralisation.

Soil samples were analysed by handheld XRF analyser. The soil anomaly is in single west-northwest trending lobe (Figure 3). The peak copper in soil value is 556ppm.

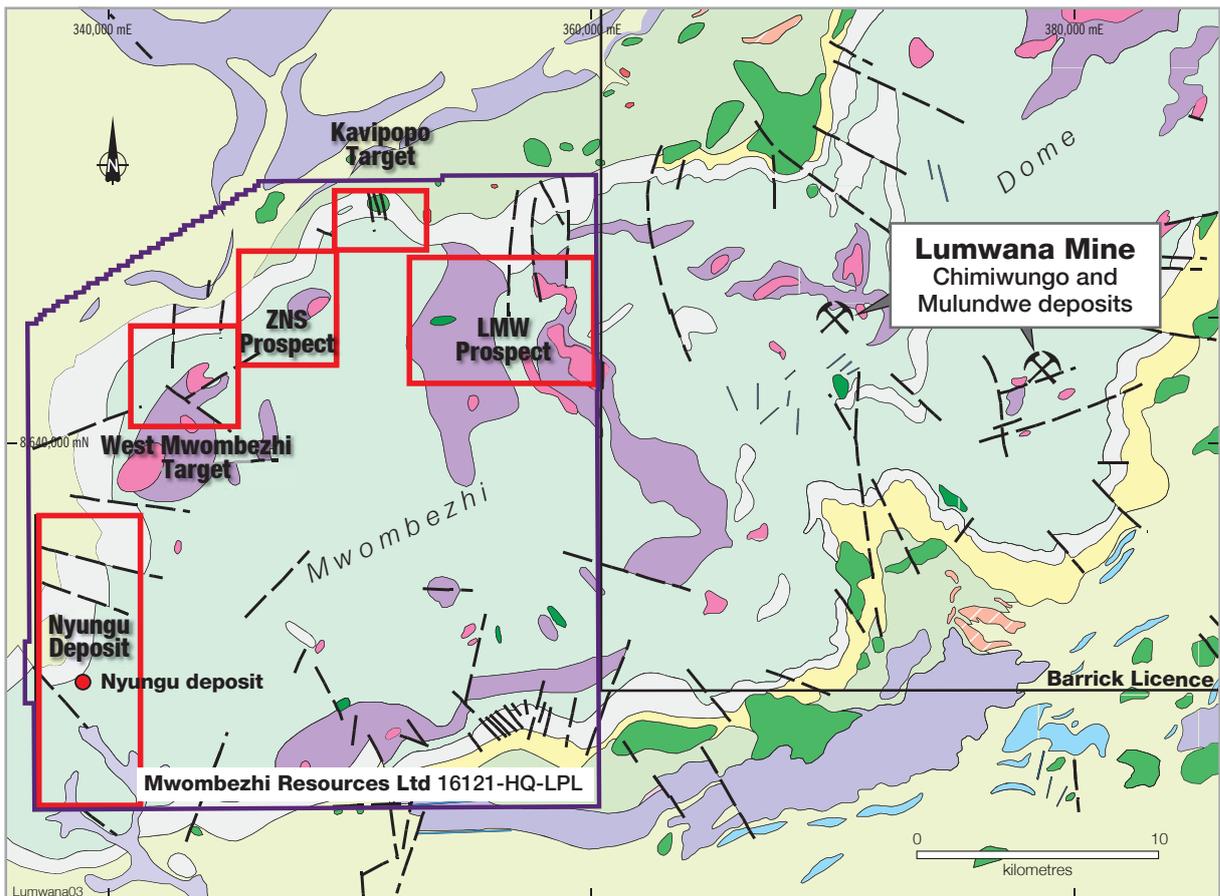


Figure 2 Lumwana West Project showing priority exploration targets and major deposits.

	Nyungu Deposit	West Mwombezhi Target	ZNS Prospect	Kavipopo Target	LMW Prospect
Priority	1	1	3	1	2
Anomaly	41 drill holes plus IP chargeability and soil geochem	IP chargeability and soil geochemistry	Soil geochemistry, major faulting shown in IP and aeromagnetics	IP chargeability, soil geochemistry and uranium radiometrics	IP chargeability and soil geochemistry
Strike Length	1,700m + >1,000m	2,500m	3,500m	1,900m	1,200m + >800m
Exploration Target	130 to 180Mt at 0.45 to 0.65%	Maiden estimation in pending	Additional exploration works required	Exploration Target revision pending	Additional IP required
Exploration Program	9 holes for 3,000m commencing May 2014	10 holes for 2,500m commencing May 2014	Target definition modelling plus geological mapping	8 holes for 2,400m commencing May 2014	8 holes for 2,050m commencing May 2014

In 2012, Argonaut completed an IP chargeability survey over the Kavipopo target. This survey covered an area with an historical surface geochemistry anomaly and succeeded in defining a strong IP chargeability anomaly with a strike length of 1.9km, open to the north and east (Figure 3). The chargeability anomaly dips steeply to the north.

The Kavipopo target is hosted in basement biotite-kyanite schists similar to the host schist at Argonaut's Nyungu deposit to the southwest. Mineralisation is assumed to be copper (+/- cobalt, gold and uranium) associated with basement shearing or thrusting.

The targeted mineralisation style at Kavipopo is Lumwana-style, shear-hosted, copper (+/- cobalt and gold) mineralisation in biotite-kyanite schists. The anomaly is in the vicinity of a decollement (detaching fault) which separates the basement terrain (which hosts the targeted mineralisation) from the overlying, sedimentary Roan Group.

Given the Company's increased understanding of the geological and geophysical properties of basement hosted copper deposits in the Lumwana West area, the Argonaut board has decided to revise the Exploration Target estimation for Kavipopo, announced on 9 April 2013, to meet the standards of the 2012 JORC Code. This revised Exploration target estimation for Kavipopo is scheduled for release during the week commencing 11 November 2013.

Between May and October 2013, the Company also undertook soil geochemistry surveys and IP surveys at ZNS and LMW prospects (Figure 2). The results of these surveys will be released on completion of data modelling and interpretation.

A program of reverse circulation and diamond drilling is planned, subject to board approval, for 2014. The planned drilling at Kavipopo involves eight holes for 2,400m in two rounds. The initial round would test the anomaly on three 400m spaced traverses with drill holes spaced at 160m along traverses. The second round would seek to extend along strike and infill along traverses in the areas of copper mineralisation.

Argonaut director, Lindsay Owler, commented: "The Kavipopo target continues to impress us on a technical level. The tight IP, soil and radiometric anomalies present an extremely compelling exploration target. Plus, Kavipopo has the scale to deliver significant tonnages."

"The Kavipopo IP anomaly is still open to the north and the east and the target is flanked by additional major anomalies at ZNS and LMW. Kavipopo is high priority drilling target for the 2014 drill program at Lumwana West."

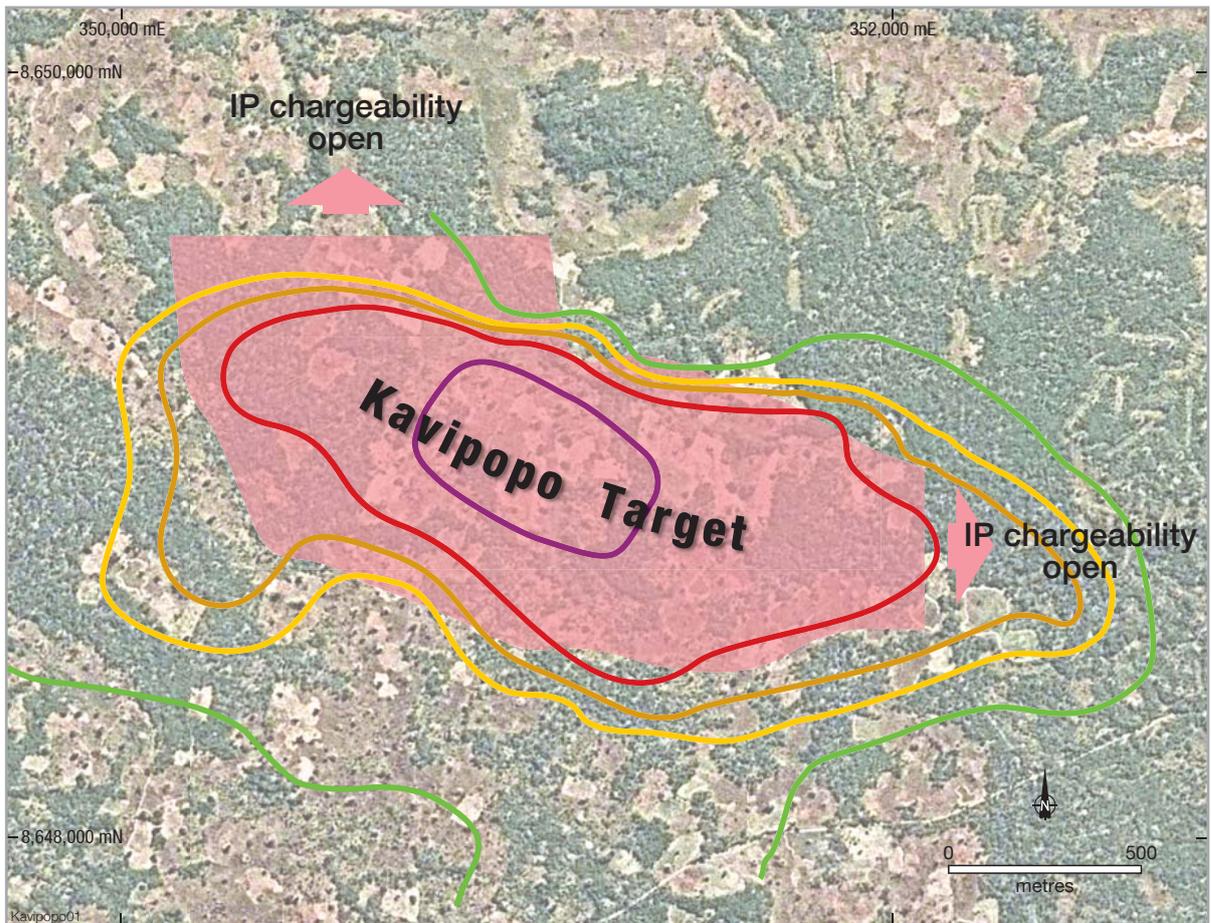
About the Lumwana West Project, Zambia

The Lumwana West Joint Venture involves large scale prospecting licence 16121-HQ-LPL. Under the newly varied terms of the joint venture, Argonaut's 100% held subsidiary, Lumwana West Resources Ltd, can earn up to 90% of Mwombezhi Resources Ltd which holds 16121HQ-LPL.

The Joint Venture is now in two phases.

- In earning an initial 51%, LWR paid a US\$300,000 signing fee and funded US\$1.8 million in exploration works prior to 31 December 2012. The Company paid US\$600,000 to the initial shareholders on the first allotment of shares.
- To earn a further 39%, for a total of 90%, LWR must spend an additional US\$2.4 million on exploration and make a final cash payment of US\$1.1 million to the initial shareholders prior to 31 December 2014.

The Mwombezhi Dome is located in the western extension of the Lufilian Arc which is host to the Central African Copperbelt. The Mwombezhi 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 Mwombezhi Dome as well as First Quantum's Kansanshi Mine and Sentinel Project (Figure 1).



Location



Soil geochemistry Cu (XRF)

- 200 ppm
- 100 ppm
- 60 ppm
- 40 ppm
- 20 ppm

IP chargeability

- >20ms at -200mRL



ZAMBIA
LUMWANA WEST

KAVIPOPO PROSPECT

Soil geochemistry Cu contours,
IP chargeability and Google Earth image

Figure 3 Kavipopo target showing copper in soil contours and IP chargeability depth slice at -200mRL over a Google Earth image.

On 9 April 2013, Argonaut announced that RungePincockMinarco Limited (RPM) had been contracted to carry out an estimate of the Exploration Target for the Nyungu copper-cobalt (Cu-Co) deposit.

RPM estimated the Nyungu Exploration Target has the potential to host between 130 to 180Mt at a grade range of 0.45 to 0.65% copper. The Exploration Target estimate complies with recommendations in the Australasian Code for Reporting of Mineral Resources and Ore Reserves (2012) by the Joint Ore Reserves Committee (JORC). The potential quantity and grade 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.

About Argonaut

Argonaut is an Australian Securities Exchange listed mineral exploration and development Company focussed on large Copper targets 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 copper at its flagship Lumwana West project in Zambia and copper (+/- gold and silver) at its Alford and Torrens projects in South Australia. The Company also owns a zinc-copper deposit at Mt Kroombit in Central Queensland and a 70% interest in a gold exploration project in Laos.

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

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, as described on page 10 of the Company's 2013 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.

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