ASX.PSC FRA.5E8

# ASX ANNOUNCEMENT 26 November 2024

# Further strong intercepts returned from drilling at Nyungu Central Deposit

#### **HIGHLIGHTS:**

- Phase 1 diamond drilling has continued to produce wide, high-tenor intersections of significant copper mineralisation at the key Nyungu Central deposit.
- New intersections from the current drilling include:
  - 47.3m @ 0.63% Cu from 232.3m and 10m @ 0.76% Cu from 87.0m (NCDD007)
  - 13.4m @ 0.53% Cu from 81.3m (NCDD005)
- These results continue to demonstrate down dip extensions of sulphide mineralisation at Nyungu Central westwards, and increase the deposit's strike length plunging northwest.
- Widths and copper grades from Prospect drilling have strongly validated and extended the historical Mumbezhi data sets, increasing confidence in overall prospectivity to significantly grow the Nyungu deposits.
- Four drill rigs remain on site, to ensure full completion of the Phase 1 drilling ahead of the pending wet season in Zambia.
- Ground-based Induced Polarisation (IP) surveys now completed over five prospective regional targets, with initial follow-up scout drilling nearing completion at Kabikupa.
- Pipeline of Phase 1 drill programme assays expected well into Q1 2025, with eight holes still pending for Nyungu Central and five holes pending for Kabikupa.
- Initial Mineral Resource estimate declaration for Nyungu Central deposit on track for Q1 2025, with just over 21,000 metres of drilling now completed.
- Broader development activity workstreams in progress ahead of planned Mining Licence application submission later this year.

## Prospect's Managing Director and CEO, Sam Hosack, commented:

"The results from these further diamond drill holes at Nyungu Central again deliver us intercepts with the appealing combination of strong width and robust tenor. They demonstrate that the sulphide mineralisation we are targeting at Nyungu Central continues to extend down dip to the west, as well as delivering additional strike and north-west plunge continuity. We are also excited about the potential of the drilling being undertaken at Kabikupa, and the opportunity to test some of the other identified regional IP targets, particularly Nyungu North, during our Phase 2 drilling campaign next year."

### Mumbezhi Phase 1 drilling progress

Prospect Resources Limited (ASX:PSC) (**Prospect** or the **Company**) advises of further significant assay results from its Phase 1 drilling programme (in progress) at the Mumbezhi Copper Project (85% Prospect) (**Mumbezhi**).

Mumbezhi is situated in the world-class Central African Copperbelt region of north-western Zambia (refer Figure 1) and located on a single Large Scale Exploration Licence (30426-HQ-LEL), covering an area of approximately 356 km<sup>2</sup>. Several major mines lie proximate to Mumbezhi and are hosted in very similar geological settings, including the Lumwana Copper Mine, operated by Barrick Gold, centred approximately 40km to the northeast (refer Figure 2).



Figure 1. Location Map for Mumbezhi Copper Project in Zambia

The Phase 1 programme (~9,000m drilling) is aimed at extending the mineralised footprint for the key Nyungu Central deposit, along strike, down dip to the west and down plunge of the historically defined, sedimentary-hosted copper mineralisation. The Phase 1 work has progressed well, with four diamond drill rigs still on site to complete the programme, ahead of the pending wet season.

The new assays returned from Phase 1 are very positive, further validating the growth potential of the significant endowment of copper mineralisation at Nyungu Central. They also deliver further confidence in the potential for Mumbezhi to develop into a high-calibre discovery capable of underwriting a large-scale, open pit mining operation in an attractive, mining-friendly African jurisdiction.

A maiden JORC-reportable copper Mineral Resource estimate for Nyungu Central will be completed in Q1 2025 and will be informed by just over 21,000 metres of drilling.

The remaining assays for the Phase 1 drill programme will be reported into Q1 2025, with eight holes currently pending results for Nyungu Central and five holes for Kabikupa.

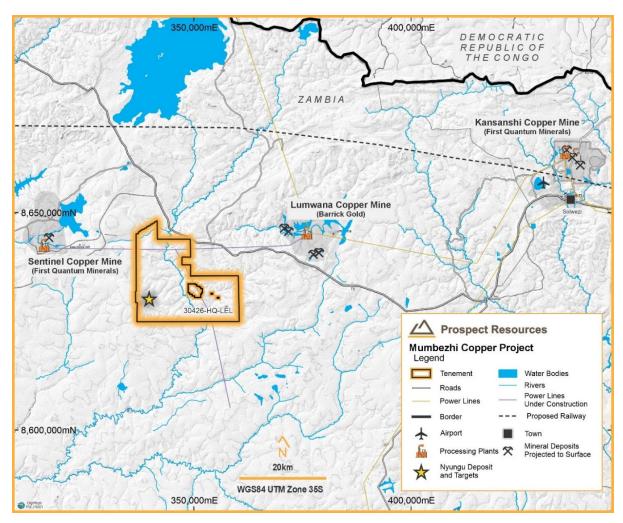


Figure 2. Mumbezhi Copper Project and surrounds in north-western Zambia

## Phase 1 drilling further extends copper mineralisation

Prospect's Phase 1 drilling programme commenced at Mumbezhi in July 2024, with 46 mixed RC and diamond drill holes for a total of 8,921 metres having now been completed as at 20 November 2024. There are four diamond drill rigs on site completing an extended Phase 1 programme, with two rigs targeting the Nyungu Central deposit and two rigs targeting the Kabikupa Prospect. The Nyungu Central holes are shown in green in Figure 3. No results are being reported from Kabikupa in this current ASX Announcement

Drill assay results are reported in this release for a number of new diamond holes at Nyungu Central since the Company's previous ASX release for the Mumbezhi Project on 4 November 2024. Drill collar locations and hole data are tabulated in Appendix 1.

A full set of significant new copper drilling intersections returned from the Phase 1 programme described in this release, are tabulated in Appendix 2.

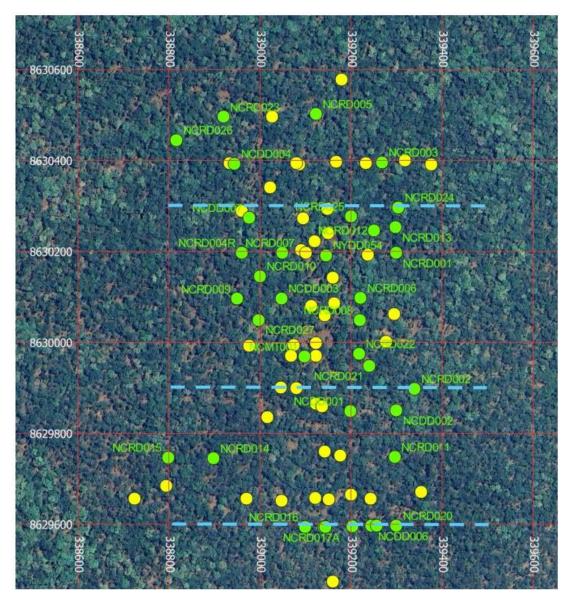


Figure 3. Nyungu Central drill hole collar plan showing Phase 1 drill holes (green), historical holes (yellow) and drilling sections targeted in this release (dashed blue lines)

# **Nyungu Central**

Drill hole **NCDD007** on drilling cross section 8630300mN returned two exceptional intersections and has extended the copper sulphide mineralisation down dip and importantly, extended the strike by an additional 100m north from drill hole **NCRD004R**, which was reported by Prospect on 4 November 2024.

In addition, a wide, westerly horizontal extension to the transitional ore zone was recorded higher up in this same drill hole **NCDD007** (see Figure 4).

Newly returned drilling intercepts include:

- 47.3m @ 0.63% Cu from 232.3m; and
- 10.0m @ 0.76% Cu from 87.0m

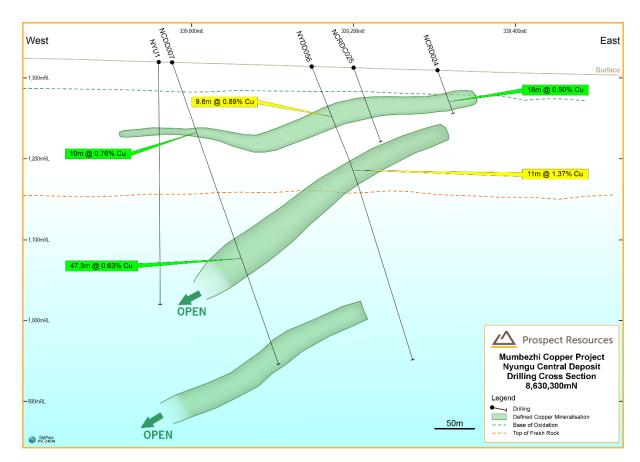


Figure 4. Drilling cross section at 8630300mN

An extension to historical drill hole NYDD056 (from 246.0m to 383.0m) was unsuccessful in extending the lower ore zone up dip and intersected unmineralised amphibolite. However, the lower ore zone remains open at depth to the west and along strike/plunge to the north (Figure 4).

The termination of the lower ore zone intersected within the NYDD056 re-entry is interpreted as being caused by block faulting (east side up), which emplaced unmineralised amphibolite in this area of the Nyungu Central deposit.

At the far southern end of the deposit (8629600mN), Prospect recently drilled two diamond holes (**NCDD005-006**) to test the continuity of near-surface oxide and transitional copper mineralisation (and sulphide zones), with **NCDD006** reporting narrow intervals of:

- 2.1m @ 0.30% Cu from 27.0m oxide
- 1.5m @ 0.44% Cu from 33.6m oxide; and
- 2.2m @ 1.89% Cu from 128.8m fresh

NCDD005 was drilled ~100m west of NCDD006 and returned 13.4m @ 0.53% Cu (from 81.3m) at the transitional-fresh rock boundary (see Figure 5) and represents a 70m down-dip western continuity to a similar 13m @ 0.49% Cu (from 22.0m) oxide intersection returned from the RC precollar NCRD018, previously reported by Prospect on 4 November 2024.

This mineralised zone remains open at depth and further exemplifies the extensive copper endowment of the Nyungu Central deposit, with this drilling section being located 900m south of the northernmost cross section completed by Prospect to date at 8630500mN, where strong copper mineralisation was intersected.

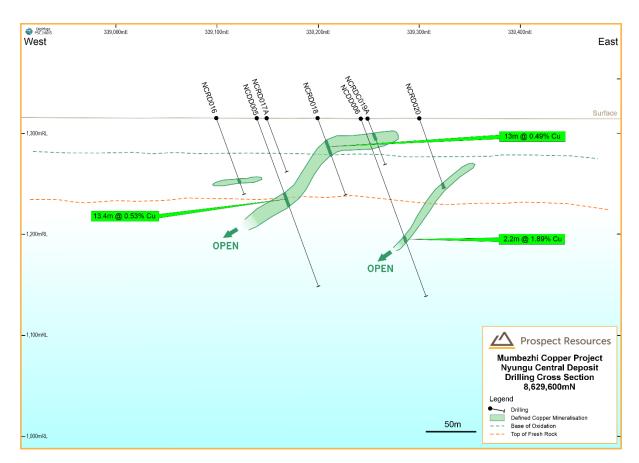


Figure 5. Drilling cross section at 8629600mN

### **Update on Geophysical IP surveys**

In addition to the drilling programmes currently underway at Nyungu Central (and Kabikupa), ground-based Induced Polarisation (**IP**) geophysical surveys have now completed on site and covered five regional prospect areas outside the main Nyungu series of deposits (see Figure 6) – including Kabikupa.

A number of these regional prospects were drilled lightly in the mid-2010s as exploration targets by Argonaut Resources NL, with some returning anomalous copper intersections that have never been followed up in the period since, as the main focus was primarily on Nyungu Central.

Preliminary interpretations are now available for the remaining four IP surveys (Kabikupa IP survey results and interpretation were reported by Prospect in ASX Announcement 4 November 2024), completed across the Mumbezhi Project, with new chargeable anomalies being identified for all regional areas targeted, except Nyungu West.

Follow-up, surface termite hill geochemical sampling is also underway to determine the potential copper prospectivity of the IP anomalies identified from the survey work, and will form the basis for prioritising regional drill targeting at Mumbezhi in the field season of 2025.

The interpreted results of these remaining four IP surveys are discussed in more detail below.



Figure 6: Mumbezhi exploration licence showing grid locations of IP surveys in relation to Nyungu Central location and footprint size

### **Nyungu North IP Survey**

This large geophysical survey was conducted over 6 km in the Nyungu "Corridor", covering the area directly on strike to the north-northeast of the Nyungu Central deposit and juxtaposed to the northern end of the current Phase 1 drilling programme. This corridor follows the thrusts that are interepreted from the high-quality airborne aeromagnetics undertaken by the previous operator, Argonaut Resources NL in 2012 (see Argonaut Resources NL Annual Report 2012).

The interpreted results from the IP survey data captured are considered very encouraging with <a href="https://example.com/the-encouraging-unitarian-encouragin-encouraging-unitarian-encouragin-encou

Two impressive chargeable IP anomalies are interpreted to form up at about 200m depth and located in the south and centre of the surveyed area, with both having low resistivity responses (see Figure 7).



The **Southern** anomaly is directly adjacent and to the north of the current drilling at Nyungu Central (near 8630500mN) - see Figure 8, whilst the **Central** anomaly exists between 8632750-8633750mN.

Two wide-spaced shallow historical holes (NYRC036-037) were reportedly drilled in the vicinity of this central anomaly (on cross section 8633200mN), with one hole reporting weak Cu anomalism at about 65m vertical depth.

Both the **Southern** and **Central** IP anomalies interpreted from the Nyungu North IP survey are considered very prospective targets for Phase 2 drilling in 2025, particularly, as the **Southern** anomaly co-joins the current drilling focus in the northwest region of the Nyungu Central deposit and is interpreted as an <u>extension</u> of it in 3D, based on continuity of the interpreted plunge of the ore zones (see Figure 8 for interpretation).

The northernmost of the three chargeable IP anomalies at Nyungu North forms up at about 100m depth and also has a high resistivity signature, implying it may be closer to the gneissic basement rocks at Mumbezhi and/or potentially have sulphide mineralisation at or within the geological contact with the overlying meta-quartzite rock sequences. It appears to be a compelling drilling target, south of a major WNW-ESE trending fault interpreted around 8636000mN.

Only two historical holes (NYRC034-035) were reportedly drilled in the area of this **Northern** IP anomaly, with both sited slightly north of it (on cross section ~8635600mN), and therefore more adjacent to the interpreted fault zone, and were reported to be unmineralised.

Prospect has verified the locations of the four above-mentioned drill holes (NYRC034-037), which were reported by Argonaut Resources NL in an ASX Announcement dated 28 February 2017 for direct reference.

#### West Mwombezhi IP Survey

The relatively small IP survey covered an historical geochemical anomaly and structurally interesting geological feature ~13 km north-northeast of the Nyungu Central deposit, at the far end of the Nyungu "Corridor".

Four (4) historical diamond holes (WMDD001-003; WMDD006) were completed by Argonaut Resources NL in the general area of the survey in 2014 (see Argonaut ASX Announcement 19 December 2014 for details), with two holes (WMDD001-002) on drill section ~8643000mN returning anomalous copper intersections in the 0.2-0.3% Cu grade range.

Encouragingly, the IP survey conducted by Prospect produced a single chargeable anomaly in the vicinity of these two holes and forms up from about 100m depth. Interestingly, the survey also indicated a distinctive resistivity anomaly from about 300m depth, potentially indicating a 200m slice of prospective rock sequences for copper mineralisation above basement rocks (possibly an unmineralised gneiss).

The 400m long NNE-trending chargeable anomaly recorded remains open to the south (see Figure 9) and clearly requires follow up drill targeting to ascertain potential for further copper deposition at West Mwombezhi, if supported by coincident surface geochemical results.

#### **Sharamba IP Survey**

This small survey was completed 3.5 km to northwest of Kabikupa and produced two chargeable IP anomalies forming at 300m depth (see Figure 10).

Prospect is currently completing surface geochmical termite sampling across both anomalies to ascertain potential, with the results of that work likely to determine the prospectivity of subsurface drill targeting at Sharamba next year.

### **Nyungu West IP Survey**

This short IP survey was conducted 2 km to the west of Nyungu Central near the licence boundary, where an anomalous clustering of historical, surface geochemical copper assays had been noted.

The survey work produced no discernable chargeable IP anomaly over the area and no further work was recommended. The indications are that the copper soil anomalies were simply a surface feature derived from the capillary action of copper from possibe extensions of the Nyungu Central deposit mineralisation at depth, exacerabted by the high mobility of copper in a supergene environment.

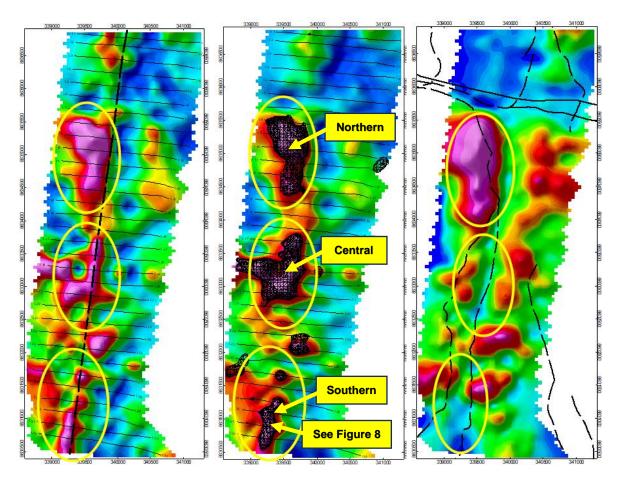


Figure 7: Nyungu North IP Survey Interpretations – Chargeability anomaly (200m depth) – left, Chargeability anomaly (300m depth) – middle and Resistivity anomaly (200m depth) with interpreted structures – right

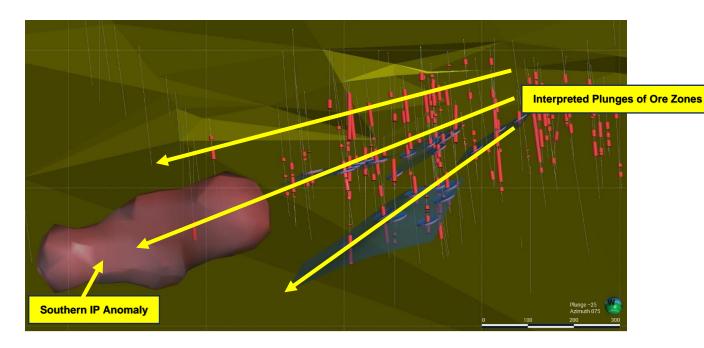


Figure 8: Oblique Section looking southeast showing locations of current drillholes at Nyungu Central (copper mineralisation in red) and the interpreted plunge of mineralised zones in relation to Southern Nyungu North IP

Anomaly

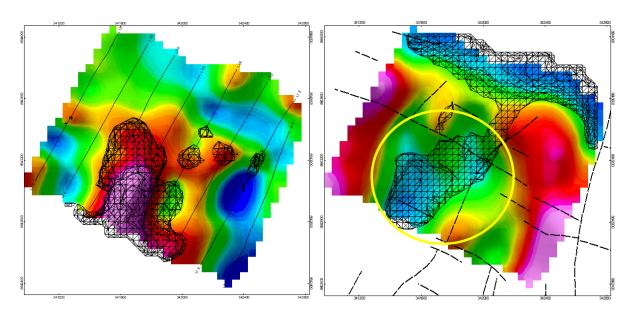


Figure 9: West Mwombezhi IP Survey Interpretations – Chargeability anomaly (200m depth) – left and Resistivity anomaly (300m depth) - right

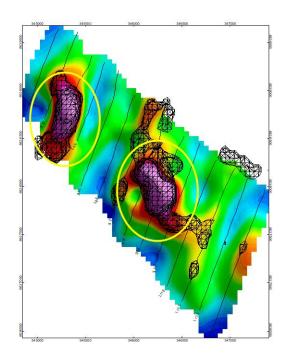


Figure 10: Sharamaba IP Survey Interpretation – Chargeability anomaly (300m depth)

This release was authorised by Sam Hosack, CEO and Managing Director.

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## About Prospect Resources Limited (ASX: PSC, FRA:5E8)

Prospect Resources Limited (ASX: PSC, FRA:5E8) is an ASX listed company focused on the exploration and development of mining projects, specifically battery and electrification metals, in Zimbabwe and Zambia and the broader sub-Saharan African region.

# **About Copper**

Copper is a red-orange coloured metallic element in its pure form and is highly conductive to heat and electricity and is physically soft and malleable. Copper has been used for various purposes dating back at least 10,000 years. Today, it is mostly used by the electrical industry to make wires, cables, and other electronic components and is the key component. The metal is widely seen as a green-energy transition material, in part because of the wiring needed for electric cars. EVs can use as much as 80kg of copper, four times the amount typically used in combustion engine vehicles. It is also used as a building material or can be melted with other metals to make coins and jewellery.

#### **Competent Persons Statement**

The information in this announcement that relates to Exploration Targets and Exploration Results, is based on information compiled by Mr Roger Tyler, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy and The South African Institute of Mining and Metallurgy. Mr Tyler is the Company's Chief Geologist. Mr Tyler has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person (CP) as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Tyler consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Prospect confirms it is not aware of any new information or data which materially affects the information included in the original market announcements. Prospect confirms the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

## **Caution Regarding Forward-Looking Information**

This announcement may contain some references to forecasts, estimates, assumptions, and other forward-looking statements. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved. They may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein. All references to dollars (\$) and cents in this announcement are in Australian currency, unless otherwise stated. Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.

# APPENDIX 1: Drill collar locations and drill hole details for the Mumbezhi Project (Datum is *UTM\_WGS84\_35S*)

Hole_ID	Drill Type	Deposit	DH_East	DH_North	DH_RL	Datum	DH_Dip	DH_Azimuth	DH_Depth
NCDD005	DD	Nyungu Central	339141	8629594	1307	UTM_WGS84_35S	-70	90	177.00
NCDD006	DD	Nyungu Central	339245	8629597	1305	UTM_WGS84_35S	-70	90	188.00
NCDD007	DD	Nyungu Central	338976	8630274	1319	UTM_WGS84_35S	-70	90	395.00
NCRD002	RCD	Nyungu Central	339340	8629898	1305	UTM_WGS84_35S	-70	90	180.50

# APPENDIX 2: Significant drill hole intersections for the Mumbezhi Copper Project

Hole ID	Deposit		From (m)	To (m)	Width (m)	Cu%
NCDD005	Nyungu Central		81.26	94.70	13.44	0.53
NCDD006	Nyungu Central		27.00	29.10	2.10	0.30
		and	33.60	35.10	1.50	0.44
		and	128.78	131.00	2.22	1.89
NCDD007	Nyungu Central		87.00	97.00	10.00	0.76
		and	232.34	279.62	47.28	0.63
		and	289.20	291.00	1.80	1.02
		and	346.00	348.00	2.00	0.50
NCRD002	Nyungu Central		36.00	41.00	5.00	0.53
			93.00	97.33	4.33	0.70
			105.00	107.00	2.00	0.43



# JORC Code, 2012 Edition - Table 1

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

#### Criteria JORC Code explanation Commentary Sampling Nature and quality of sampling (eg The initial part of Prospect techniques cut channels, random chips, or Resources' on-going Phase specific specialised industry drilling programme was aimed at standard measurement tools verifying parts of the existing model, appropriate to the minerals under and testing the potential for eastern investigation, such as down hole oxide- transition and western downgamma sondes, or handheld XRF dip sulphide extensions. A total instruments, etc). These examples 6,894m of DD and 2,027m RC have been completed. 46 holes diamond should not be taken as limiting the broad meaning of sampling. and tailed holes. Results are available for diamond drill holes Include reference to measures taken to ensure sample representivity and NCDD001-007 and tailed holes NCRD001 -NCRD025 and the appropriate calibration of any NCRD027. measurement tools or systems used. Aspects of the determination of DD was completed using a Morooka mounted Boart Longyear LM75, and mineralisation that are Material to an LF90 operated by Leo's Drilling. the Public Report. In addition, two extra LF90s were In cases where 'industry standard' work has been done this would be operated by Ox Drilling Drill core size was PQ. Initially, drilling through relatively simple (eg 'reverse the transitional zone normally 60 circulation drilling was used to obtain 80m depth, thereafter NQ size was 1 m samples from which 3 kg was used. Most holes in this programme pulverised to produce a 30 g charge were actually drilled by 50 - 70 m for fire assay'). In other cases more long pre-collars, and then tailed with explanation may be required, such diamond drilling to a maximum depth as where there is coarse gold that of 476m. For the RC pre-collaring has inherent sampling problems. through the oxide zone, a Leo's Unusual commodities or Drilling Truck mounted Reger Finley mineralisation types (eg submarine rig, with a 4.5" bit diameter was nodules) may warrant disclosure of used. detailed information. In addition to this recent Prospect Resources drilling, samples were taken from previously un-sampled portions of three holes drilled by local partners GDC in 2023 (drill holes DD23-1, 3 and 4). RC chip samples were collected in plastic bags on a one metre basis, weighed, checked for moisture and split using a multi-layered riffle with a reference sample stored and a sample set aside for dispatch to the

certified laboratory, ALS Ndola. Handheld XRF measurements were

- taken on RC samples, using an Innovx Vanta C with composite sampling conducted on non-mineralised material (cut-off grade <0.1% Cu) and single metre sampling of mineralised material (cut-off grade >0.1% Cu). These composited and single metre samples were then dispatched to the certified laboratory, as required.
- Half drill core was sampled based on observed mineralisation and intervals of one metre or less determined by geological contacts within mineralised units.
- Drill core cut at a consistent distance relative to solid orientation line or dashed mark up line.
- RC and diamond core samples dispatched in batches to ALS Ndola, for preparation and blind standard insertion. Samples were dried, crushed to 85% (-5mm), spilt up to 1.2kg, pulverised to 85% (-75µm).
- The pulps were then collected by courier and delivered to SGS Kalulushi for analysis.
- AAS42S analysis conducted was standard 4-acid digestion (HNO3/HCIO4/HCI/HF) using a 0.4g pulp. Digestion temperature is set at 200°C for 45 minutes AAS finish on bulked up solution to produce Total Cu and Co analyses.
- AAS72C "single acid" (5% H2SO4 + Na2SO3) cold leach using a 0.5g pulp, followed by AAS gives Acid Soluble Cu, Co.
- A total of 2,197 DD and 1,067 RC pre-collar samples have been analysed to date for Cu & Co as batches THNCD001-011 & OLNCD001 5 for core and THNCR001 and OLNCR001 5 for RC chips.
- Samples from zones defined as lying with Cu-Co ore body have also been dispatched for multi-element assay

- at ALS- Johannesburg by ICP-ME61 method.
- Concurrently with the drilling exercise at Nyungu Central, Induced polarisation surveys were taken on five target areas; Kabikupa, Nyungu North, Nyungu West, Sharamba and West Mwombezhi. The Zambian subsidiary of South African based geophysical contractor Geo Focus undertook the work. The survey is being done as a 50m pole-dipole IP/RES survey, with 200m spaced lines and 50m spaced stations.
- Instruments being used are Zonge GDP-32 multi-function receivers and Zonge GGT-10 transmitter, as well as a 5kVa GDD IP transmitter backup.
- Lines had been pre cut at 200m intervals by a PSC team at varying strike directions, aimed at being perpendicular to the perceived lithology strike.
- Areas of high chargeability have been targeted for follow-up termite hill geochemical sampling. 3kg of material was pre-sieved to -5mm in the field, and then to -1mm in the camp. Resultant samples were tested by the handheld Vanta XRF.

# 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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).
- At Nyungu Central, a total of 2,027 metres of RC drilling was conducted by Leo's Drilling using a face sampling bit, to drill 29 pre-collars. A total of 3,505m diamond drilling was conducted by the same company, 3.389m by Ox Drilling. Orientation determined by Axis Mining orientation instrument. Down surveying is TruShot hole by TMV7R7.

# Drill sample recovery

- Method of recording and assessing core and chip sample recoveries and results assessed.
- Measures taken to maximise sample
- Initial geotechnical logging recording core recoveries and RQD. Recoveries exceeded 95%.
- For RC chips, samples are weighed



recovery and ensure representative
nature of the samples.

- 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.
- and weights recorded to estimate recovery.
- No observed relationship between core loss and grades.

### 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.
- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.
- The total length and percentage of the relevant intersections logged.

# For Mumbezhi, logging of drill core incorporated the following details: from-to depths, colour and hue, stratigraphy, weathering, texture, structure, structure orientation; type, mode and intensity of alteration and ore minerals, zone type for mineralised rock (oxide, transitional, sulphide), geological notes and % estimate of ore minerals present.

- Logging of RC chips was conducted on a metre-by-metre basis whilst for the diamond drill core, criteria for unit boundaries were based contrasting lithologies, absence or presence of mineralisation; sudden changes of weathering — usually associated with structures, plus changes in major rock forming or alteration minerals such as the presence of large garnets. A guide to core logging was written to provide uniformity of interpretations and consistent data entry.
- 100% of all drilling was geologically logged, using standard Prospect Resources codes.
- All core was photographed wet and dry, photographs digitally named and organised.

# Sub-sampling techniques and sample preparation

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.
- For all sample types, the nature, quality, and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.
- Measures taken to ensure that the sampling is representative of the in situ material collected, including for

- For Mumbezhi, all core cut with core saw. Half core sampled in mineralised units; quarter core sampled in non-mineralised units.
- RC samples were checked for moisture. If wet or damp, allowed to dry for several days and then split using a multi-layered riffle.
- High quality sampling procedures and appropriate sample preparation techniques were followed.
- Several standards (commercial certified reference material (CRM)) were inserted at intervals of 1 in 20 in rotation. Immediately following a



- instance results for field duplicate/second-half sampling.
- Whether sample sizes are appropriate to the grain size 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.
- 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.
- 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.

- standard, a blank was inserted.
- RC reference sample in storage and half to three quarter core retained if further analysis required. Field duplicates taken at rate of 1 in 33 samples for RC samples.
- Sample size (approximately 2kg in mass) considered appropriate to the grain size of material being sampled.
- For the Nyungu Central drilling, certified laboratories (SGS and ALS) were used. The AAS techniques are considered appropriate for the type of mineralisation being assayed.
- standards (commercial Several certified reference material) were inserted at intervals of 1 in 20 in rotation. Immediately following a standard, a blank was inserted. QA/QC monitored on each batch and re-analysis conducted where errors exceeded set limits. The 15 CRMs inserted were AMIS 0795 (0.40%Cu), AMIS 0622 (3.33% Cu), AMIS 0623 (3.1% Cu), AMIS 0873 (0.96% Cu), AMIS 0858 (2.94%Cu), AMIS 0842 (1.05% Cu), AMIS 0847 (1.05% Cu), AMIS 0873 (0.67% Cu), AMIS 0795 (0.34% Cu), AMIS 0830 (0.24% Cu), AMIS 0844 (0.14% Cu), AMIS 0856 (1.56% Cu), AMIS 0857 (0.96%), AMIS 0247 (4.13% Cu), AMIS 0829 (0.46% Cu), AMIS 0249 (0.37% Cu), AMIS 0795 (0.35% Cu), AMIS 0858 (2.92% Cu) & AMIS 0249 (0.37% Cu).
- For the recent drilling samples, 76 blank types were inserted and all returned satisfactory to inconclusive results. 80 of the different CRM types lie within 2std deviations of the theoretical values. One sample T04180 CRM 0795 is just beyond 3 std deviations, and two with slight (AMIS 249). This overreads CRM0795 will be monitored in subsequent batches. The correlation factor on the 99 fine and coarse duplicates inserted was almost 99%.
- In conclusion, the sample preparation procedures at ALS and the accuracy and precision of SGS



# Verification of sampling and assaying

- The verification of significant intersections by either independent or alternative company personnel.
- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to 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.
- Specification of the grid system
  used
- Quality and adequacy of topographic control.

# Data spacing and distribution

- Data spacing for reporting of Exploration Results.
- 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.
- Whether sample compositing has been applied.

## Kalulushi are adequate for purpose.

- For Mumbezhi, all the significant intersections and the majority of drill core were inspected by numerous geologists including Prospect's Chief Geologist and Competent Person.
- All the core from Argonaut's 2011 and 2014 drilling is stored at Kitwe based geological consultants; AMC.
- All data has now been transferred to Access Database, in preparation for a migration to GeoSpark.
- 63 of the historical drill collars were located and surveyed using DGPS by survey consultants, SurvBuild Ltd. Only eight of the historic holes were not located. Holes from the current Phase 1 work were initially located by handheld Garmin 62. Once the programme is completed, the new collars will be surveyed by DGPS. The co-ordinate system used is WGS UTM Zone 35S.
- For Nyungu Central the original data spacing was generally 200 metre traverses with 160 metre drillhole spacing, some traverses have 80 metre drillhole spacing.
- Additional drilling to a nominal 100 metre traverse by 80 metre drill spacing has been estimated geostatistically as being sufficient to establish geological and grade continuity.
- Samples from within the mineralised wireframes were used to conduct a sample length analysis. The vast majority of samples were 1m in length. Surpac software was then used to extract fixed length 1m down hole composites within the intervals coded as mineralisationintersections.
- Current drill spacing and density for Nyungu Central and Nyungu South is considered sufficient to report to JORC (2012) standard, but no Mineral Resource or Ore Reserves are being reported in this release.
- Prospect Resources' Phase 1 drilling programme is focused on expanding the existing resource footprint of Nyungu Central both to the east and

		west. Priority has been placed though in deeper holes testing the westward down-dip extension of the stacked mineralised thrust sheets to the west, and in addition an apparent NW of the ore body at its northern extremity.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>For Nyungu Central, the current drillholes were orientated to intercept normal to the strike of mineralisation and were inclined to the east, at -70°. Mineralisation is interpreted to strike 015° true, dip moderately to steeply to the west and plunge moderately to the north.</li> <li>Due to the dip attitude of the mineralisation, 70° inclined drillholes do not intersect the mineralisation completely perpendicular. This is not considered to have introduced any significant bias.</li> <li>Geological mapping was undertaken at prospect scale to refine local structural fabric and thus to drill perpendicular to the interpreted deposit's strike.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>For Nyungu, all reference RC samples and retained drill core are stored in secure sheds in Kitwe at the geological contractor's AMC's facility.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No recent audits.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

(Criteria li	sted in the preceding section also appl	ly to this section.)
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The initial Large Scale Prospecting Licence, 16121-HQ-LPL, for Mumbezhi, (formerly Lumwana West) is located approximately 100 km west of Solwezi, Zambia. The licence was due to expire on 20/07/2018 and was subsequently renewed as Large-Scale Exploration Licence, 22399-HQ-LEL on 29/12/2017, which was due to expire on 28/12/2021.</li> <li>This latter tenement was revoked, and a similar ground position is now covered by 30426-HQ-LEL, granted for 4 years to Global Development Corporation (GDC) Consulting Zambia Limited on 02/12/2021, expiring on 01/12/2025.</li> </ul>



•	GDC held 100% of the 30426-HQ-LEL
	(now 356 sq km). The licence excludes
	the northeast portion of the former
	licence, which incorporated the historic
	LMW and Kavipopo prospects.

Following the signing of the deal on 29<sup>th</sup>
May 2024, PSC has acquired 85% of the
project from GDC, with the licence now
held under the name Osprey Resources
Limited (85% PSC, 15% GDC).

# Exploration done by other parties

 Acknowledgment and appraisal of exploration by other parties.

- Roan Selection Trust (1960's-1970's) completed regional soil sampling, augering, wagon drilling and diamond drilling. Drilling completed at Nyungu (Drillholes MM295 and MM296).
- AGIP-COGEMA JV (1982-1987) -Systematic regional radiometric traversing, soil and stream sediment sampling, geological mapping, pitting and trenching, largely targeting the uranium potential. No drilling was completed.
- Phelps Dodge (1990's) Soil sampling and drilling. Drilling completed at Nyungu (Drillholes NYU1 and NYU2).
- ZamAnglo (2000 2003) Regional and infill soil sampling. Geological mapping, IP/CR/CSAMT geophysical surveys. Three phases of RC drilling, two programmes at Mumbezhi (MBD00RC001-011 and MBD01RC001-009) and one regional programme (MBD02RC001-007; 012).
- Equinox (2003 2008) unknown but some drill collars located are presumably from this phase of work.
- Orpheus Uranium Limited (previously Argonaut Resources NL (2011-2021), various phases of intermittent drilling in JV with Antofagasta of Nyungu, Kabikupa and Lumwana West (LMW) prospects.
- Further drilling and exploration works (including geophysics and geochemical surface sampling) were conducted between 2012-2021 on the Nyungu (Central, South, East and North), West Mwombezhi, Kabikupa, Kamafamba, Mufuke, Sharamba and Luamvunda prospects by Orpheus Uranium Limited both internally and under a JV with Antofagasta plc. As part of this UTS flew a high resolution aeromagnetic and radiometric survey in 2012, which was

		audited by Earth Maps. This was accompanied by a detailed Landsat structural interpretation and in addition induced polarization programmes were initiated with mixed results at Nyungu Central and North.
Geology	Deposit type, geological setting, and style of mineralisation.	<ul> <li>The style of copper and cobalt mineralisation being targeted is Lumwana Mine style, structurallycontrolled, stacked mineralised shears and thrusts hosting Cu +/- Co (+/- U and Au), which are developed within interleaved deformed Lower Roan and basements schists and gneisses. The predominant structural tend is controlled by north-south. Thrust sheets. Southeast – northwest and to a lesser extent southwest-northeast crosscutting structures have also affected the ore body.</li> </ul>
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	See Appendix 1.
Data aggregation methods	<ul> <li>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.</li> <li>Where aggregate intercepts</li> </ul>	<ul> <li>For Nyungu (Central and South), the interpreted mineralisation envelopes were based on a nominal 0.2% Cu cut-off grade for low grade material and 0.7% Cu cut-off grade for high grade material, with a minimum down hole length of 2m.</li> <li>Statistical analysis of the assay values indicated a natural cut-off for low grade at</li> </ul>

	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 stated.	<ul> <li>0.1% Cu and between 0.6 and 0.8% Cu for high grade.</li> <li>No upper limit to Cu grades has been applied and all metal grades are reported as single element (Cu and Co).</li> <li>Samples from within the mineralisation wireframes were used to conduct a sample length analysis. The majority of samples were 1m in length.</li> <li>Surpac software was used to extract fixed length 1m downhole composites within the intervals coded as mineralisation intersections.</li> <li>Following a review of the population histograms and log probability plots by Orpheus Uranium Limited (and noting the low coefficient of variation statistics for Cu), it was determined that the application of a high-grade cut was not warranted.</li> <li>See Appendix 2 of this announcement regarding significant copper and cobalt (respectively) drill hole intersections reported for the Nyungu deposits only.</li> </ul>
Relationship between mineralisatio n widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>For Nyungu, due to the dip attitude of the mineralisation, 70° inclined drillholes do not all intersect the mineralisation completely perpendicular.</li> <li>Drilling is normal to strike of the mineralisation but not completely perpendicular to the dip.</li> <li>Down hole length is being reported, not the true width.</li> </ul>
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.	Location maps are attached in the body of the release.
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.	<ul> <li>Aggregate reporting is appropriate since the mineralisation is disseminated through the host unit and is considered balanced by the Competent Person.</li> </ul>



# 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, geotechnical and rock characteristics; potential deleterious or contaminating substances.

#### Further work

- The nature and scale of planned further work (eg 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.

- For Nyungu Central, a coincident IP chargeability anomaly is apparent with the copper mineralisation and hence considered a useful exploration targeting method.
- Coincident Cu surface geochemical anomaly to greater than 200ppm Cu.
- No bulk density information is available.
- Limited metallurgical test work
  programmes have been conducted on
  fresh sulphidic mineralisation from
  Nyungu, with encouraging preliminary
  results producing a copper concentrate
  at 25.6% Cu and showing 87% recovery.
- The Company proposes to undertake Scoping Studies and Feasibility Studies and seek to bring the Mumbezhi Project into commercial copper production as soon as is practicable, if economic to do so.
- Prospect will also review all other copper anomalies defined on the existing licence as potential satellite open pit feed options to a central mining and processing facility hub, situated proximal to the prospective Nyungu series of deposits, which are presently considered the flagship assets at the Project.
- Induced polarisation (IP) surveys were completed over five prospect areas (totaling 102 line kms) outside Nyungu Central, which had been subject to limited exploration previously Argonaut. The deposits are Kabikupa. Sharamba. North. West Nyungu Mwombezhi, and Nyungu West. The Kavipopo and LMW prospects formerly drilled by Argonaut, now lie outside the current licence boundary.
- Impressive chargeability anomalies have been identified at Kabikupa, Nyungu North, West Mwombezhi and to a lessor extent Sharamba.
- Follow up termite hill geochemical sampling of these anomalies is well underway, and initial results indicate the presence of sub-outcropping copper mineralisation in a number of locations, which will require drill testing in 2025
- Three phases of exploratory and development drilling are planned for Nyungu Central, with at least three of the



satellite bodies (including Kabikupa) to be targeted with scout exploratory drill testing in H1 2025, for approximately 17,500m