ASX RELEASE

1 May 2023

CASPIN

Exploration Underway at Mount Squires Project

HIGHLIGHTS

- **Geochemical and geophysical crews mobilised to Mount Squires Project; surveying of new nickel, copper and gold targets underway**
- **RC drilling to commence in June to test several prospects**
- **WA Government EIS co-funding of $220,000 awarded to Caspin for drill testing of Handpump IP anomaly**

Caspin Resources Limited **(ASX: CPN) ("Caspin" or "the Company")** is pleased to announce the commencement of exploration activities for the 2023 field season at the Company's wholly owned Mount Squires Project in Western Australia. The Company has a large exploration program of geochemistry, geophysics and drilling planned which will continue through the coming months.

Figure 1. Geochemical sampling at the Mount Squires Project, April 2023.

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Exploration for new Nickel, Copper and Gold Deposits Underway

The Company identified numerous new nickel, copper and gold targets during the 2022 exploration program, primarily through the application of Ultrafine Fraction (UFF) soil geochemistry. Some of the more prominent or advanced targets are the Sienna (Cu), Auburn (Ni-Cu) and Regal (Au) Prospects (Figure 2).

There are many more anomalies that require infill sampling of the broad 400m x 200m initial spacing to define a more discrete target prior to drill testing. Prospects such as the Vermillion Prospect (PGE-Au-Ag anomalism) are a priority for the current geochemical sampling program. This program has now commenced and is expected to take 4-6 weeks to complete.

More advanced prospects such as Sienna and Auburn have already been infilled but are still large and extensive anomalies with strikes of greater than 500m. The Company is applying ground based moving loop electromagnetic surveys (MLEM) across these prospects to potentially identify conductors that could represent massive sulphide accumulations. Any conductors identified would present discrete targets for subsequent drill testing.

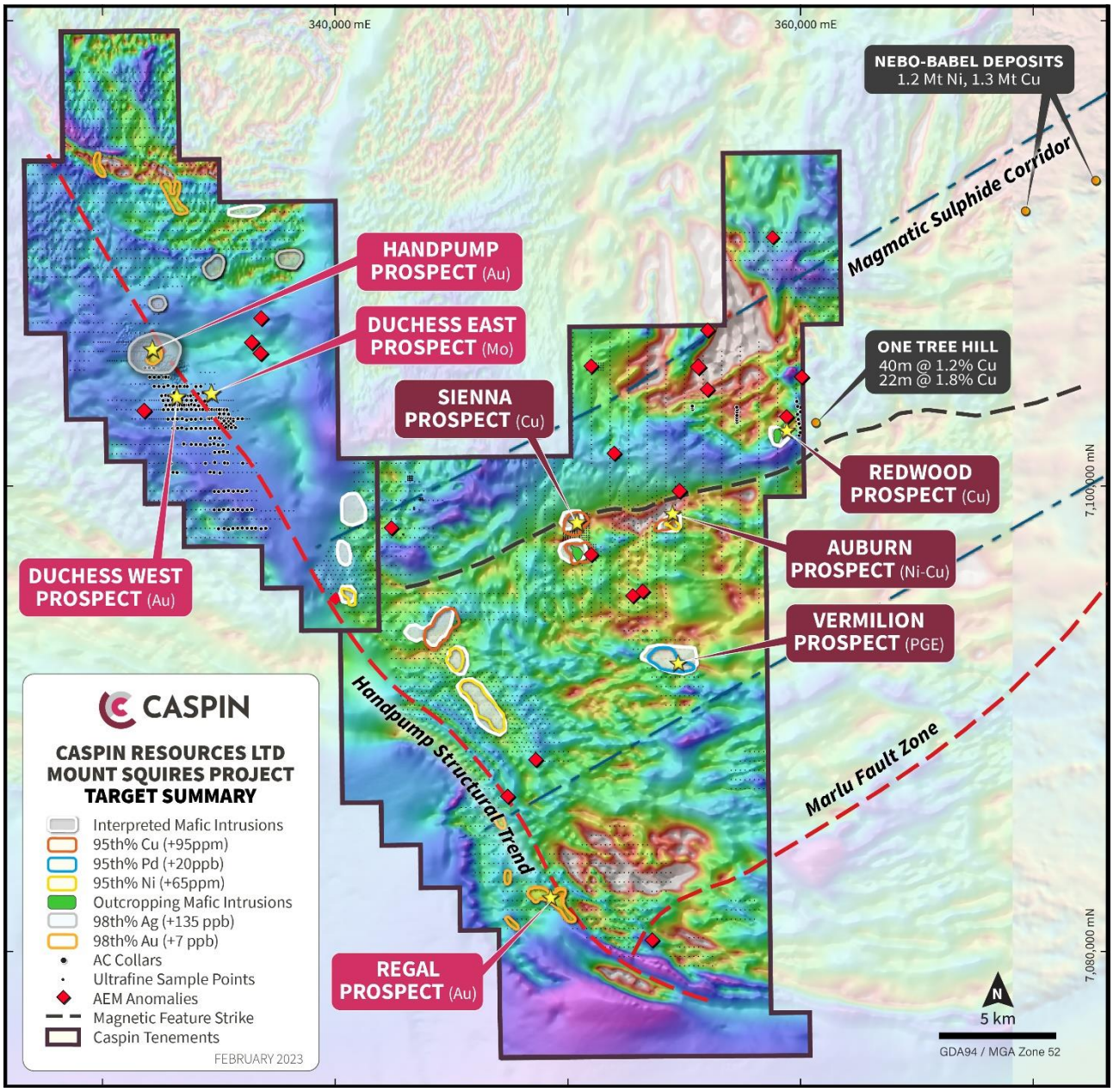

Figure 2. Summary of precious and base metal targets at the Mount Squires Project.

The Company notes that nickel and copper mineralisation in the West Musgrave region is often a disseminated style which may not be easily identified by MLEM techniques, therefore a reconnaissance-style drill program at both Sienna and Auburn will be conducted if the MLEM program is inconclusive.

The MLEM program will also test several airborne electromagnetic (AEM) anomalies derived from surveys conducted in 2022 (refer to ASX announcement from 15 November 2022). AEM anomalies have been prioritised based on the magnitude of anomalism, presence of coincident soil anomalism and consistency with geological models.

The Company has engaged a contractor for this program with surveying due to commence in the second week of May and taking approximately 4 weeks to complete.

EIS Co-funding Awarded for Drilling the Handpump IP Target

The Company has been awarded an Exploration Incentive Scheme (EIS) co-funded drilling grant of up to $220,000 to test the Handpump IP anomaly. The Company acknowledges the on-going support of the WA Government to the EIS. RC Drilling is currently scheduled for June and will comprise approximately 2,000m across all targets.

The Induced Polarisation (IP) anomaly is located immediately to the south of the Handpump Prospect, which has returned many significant gold intersections, and is coincident with a magnetic feature. IP is a geophysical technique well-suited for targeting disseminated-sulphide mineralisation, which characterise intrusive related systems such as porphyry copper orebodies.

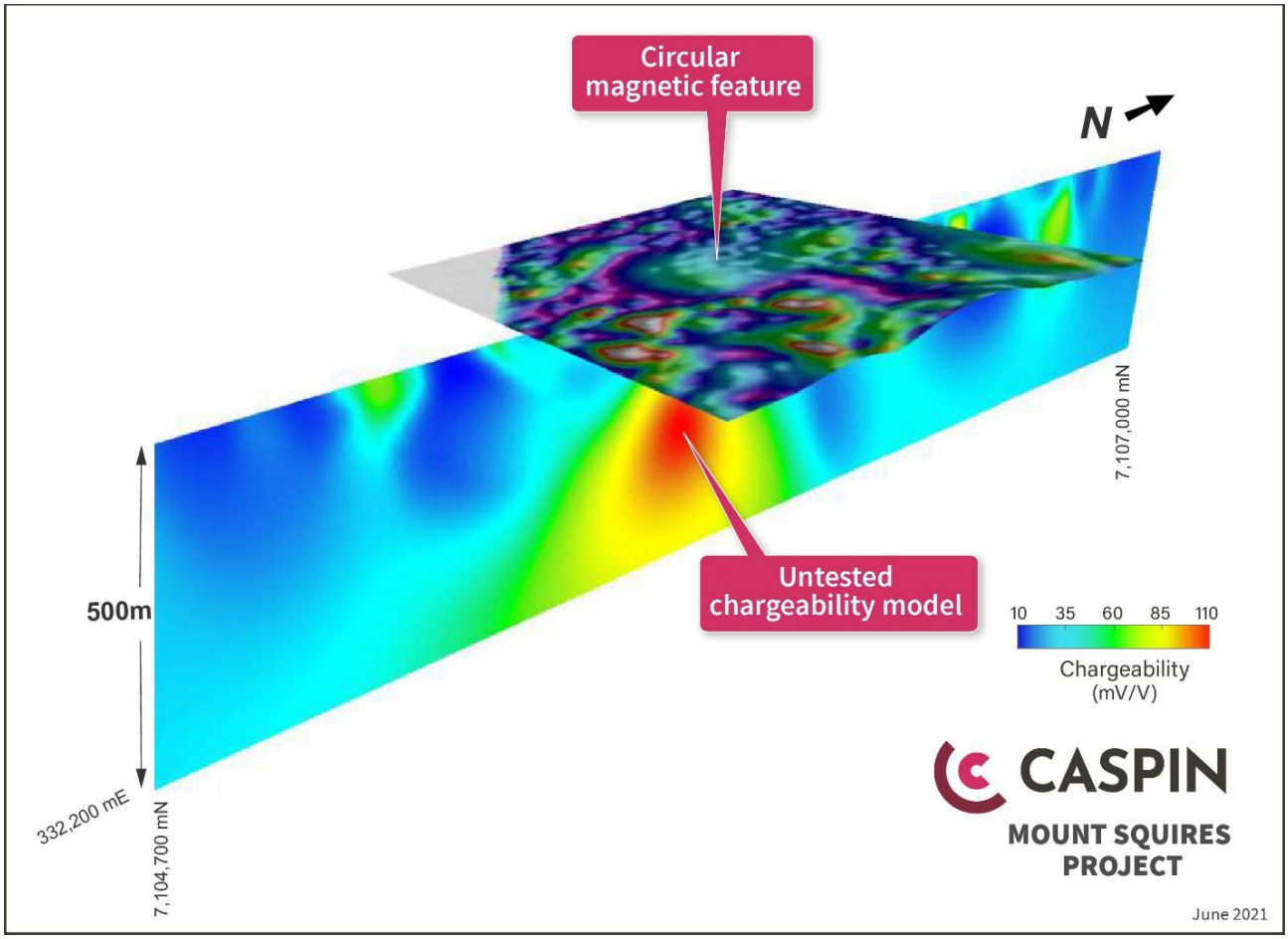

Figure 3. Oblique view of Handpump Dipole-Dipole IP Inversion and magnetics showing relationship between IP anomaly and circular magnetic feature.

An IP survey was completed across the Handpump Prospect by previous explorers in 2010, consisting of a gradient array grid to map shallow IP/resistivity, and a single line of Dipole-Dipole IP to add some depth constraints to the anomalies seen in the gradient array data. The Company has re-processed the Dipole-Dipole data and generated a new inversion model, extending below the 200m depth limit of the historical model.

The new model confirms a zone of shallow chargeability, coincident with the historical gradient array anomaly, closely associated with the known gold mineralisation at the Handpump Prospect. Very significantly, however, a second feature has emerged from this reprocessing that appears to represent a deeper chargeability anomaly below the depth of investigation of the gradient array survey. This deeper anomaly is a consistent feature in all recent inversion model iterations. This deeper anomaly could potentially represent sulphide mineralisation and has not been drill tested.

Detailed magnetic data for the Handpump area provides further support for this deeper IP anomaly. The anomaly occurs on the margin of a well-developed circular magnetic feature, closely associated with the Handpump Prospect (see Figures 3 and 4). The Company considers that this magnetic feature might represent a magmatic intrusion associated with the Handpump mineralised system.

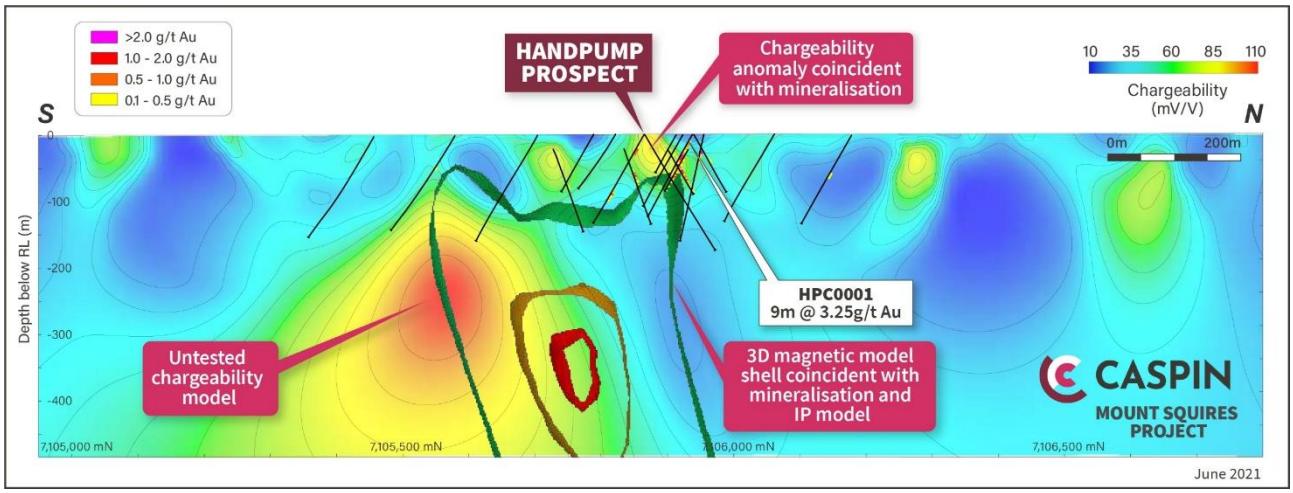

Figure 4. Handpump Dipole-Dipole IP Inversion section showing IP anomaly, drill holes, gold mineralisation and association with 3D magnetic inversion model.

RC Drilling of the Duchess and Handpump Prospects

Deeper testing of the Duchess West, Duchess East and Handpump Gold Prospects will be conducted within the same drill program.

At Duchess West, aircore drill hole MSAC0121 returned a standout result of 1m @ 6.04g/t Au and 4.0g/t Ag associated with quartz veining encountered from 12m, in the last metre of the hole (Refer ASX announcement of 29 November 2022 and Figures 5 and 5a). Subsequent infill drilling and further mapping has recognised that gold mineralisation is hosted in quartz veining, likely controlled by east-northeast, west-southwest trending structures, or possibly the intersection of this structural orientation with the regional-scale northwest-southeast trending Handpump Structural Trend.

Additional rock chip sampling of outcropping quartz veining at Duchess West returned an assay of 8.26g/t Au and 85g/t Ag, approximately 50m along strike from previous rock chip results of 2.46g/t Au and 49.7g/t Ag (refer ASX announcement of 29 September 2022). Anomalous silver mineralisation (>0.5g/t) is commonly found at Duchess West and appears to form a halo around gold mineralisation making it a useful pathfinder element, particularly for regional soil and rock chip sampling. Silver may also provide a small economic by-product benefit to any potential gold discovery.

The drill program will also include deeper testing of highly significant molybdenum mineralisation intersected in aircore drilling at Duchess East. The molybdenum market has seen increased demand and accompanying supply issues, forcing the price to jump over 100% in early 2023. This target presents a unique opportunity for Caspin to pursue.

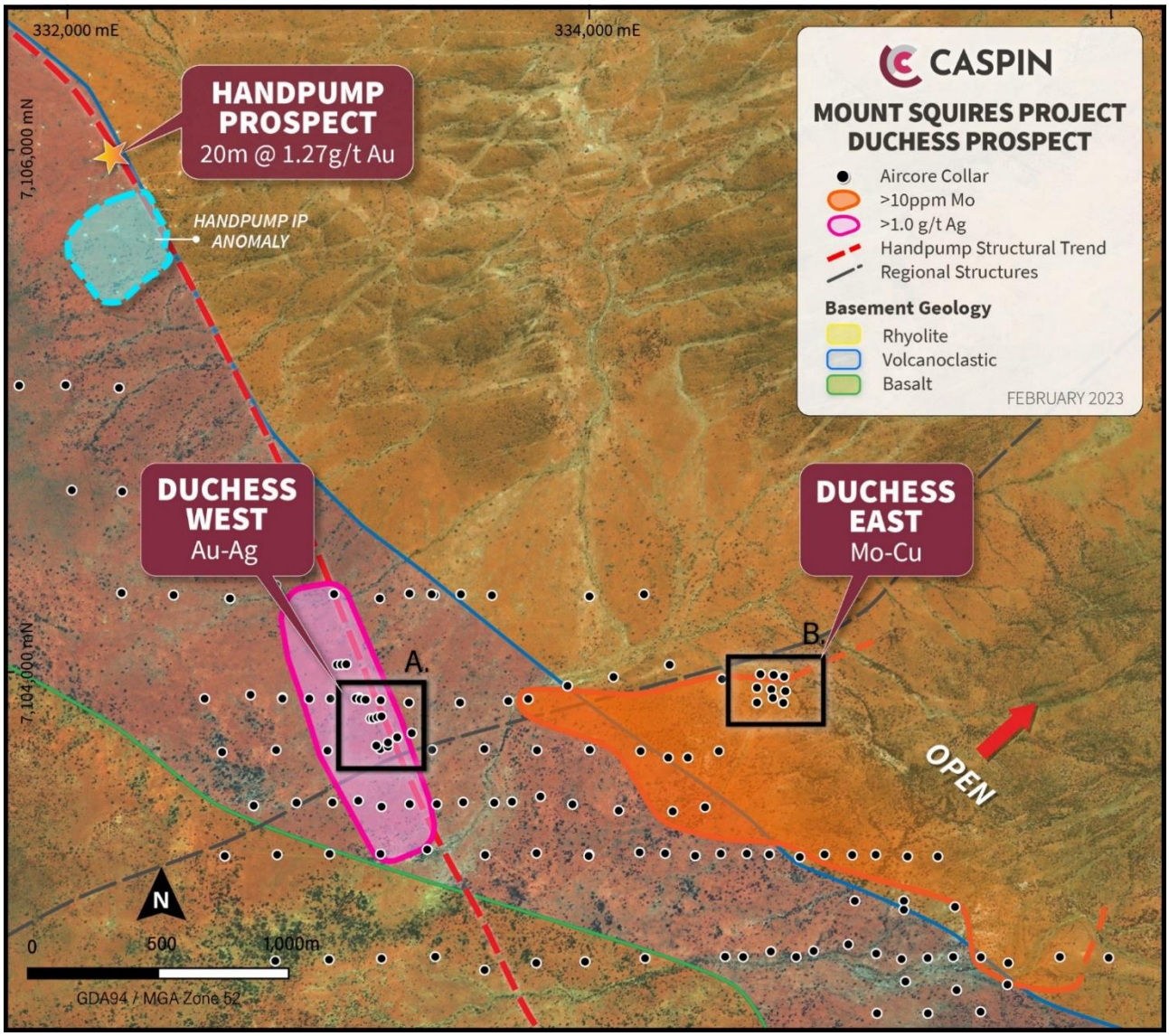

Figure 5. Duchess Prospect drilling results and interpretation, also showing locations of the Handpump Prospect and IP anomaly.

Previous aircore drilling returned significant results include 7m @ 902ppm Mo, including 1m @ 3,220ppm from 5m in MSAC0130 and 10m @ 268ppm Mo in MSAC0222 and 19m @ 233ppm Mo in MSAC0224 (refer ASX announcement of 13 February 2023). Drilling has defined an 80m wide corridor of +100ppm molybdenum mineralisation, which strikes east-northeast, west-southwest and is coincident with the orientation of interpreted regional controlling structures (Figure 5b). Encouragingly, all significant results were recorded from surface to end of hole (limited by the capability of the rig), with mineralisation within this corridor remaining open at depth and along strike.

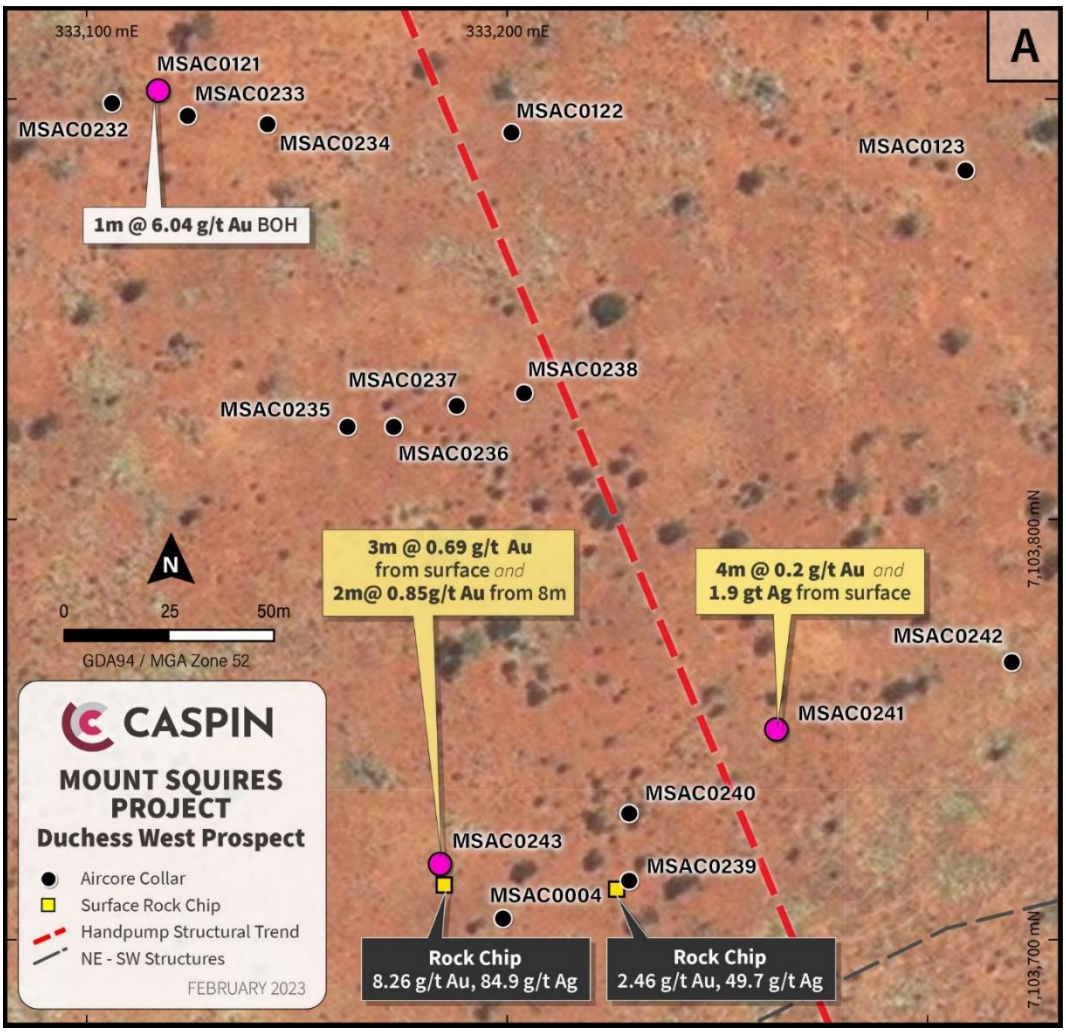

Figure 5-A. Inset of Duchess West

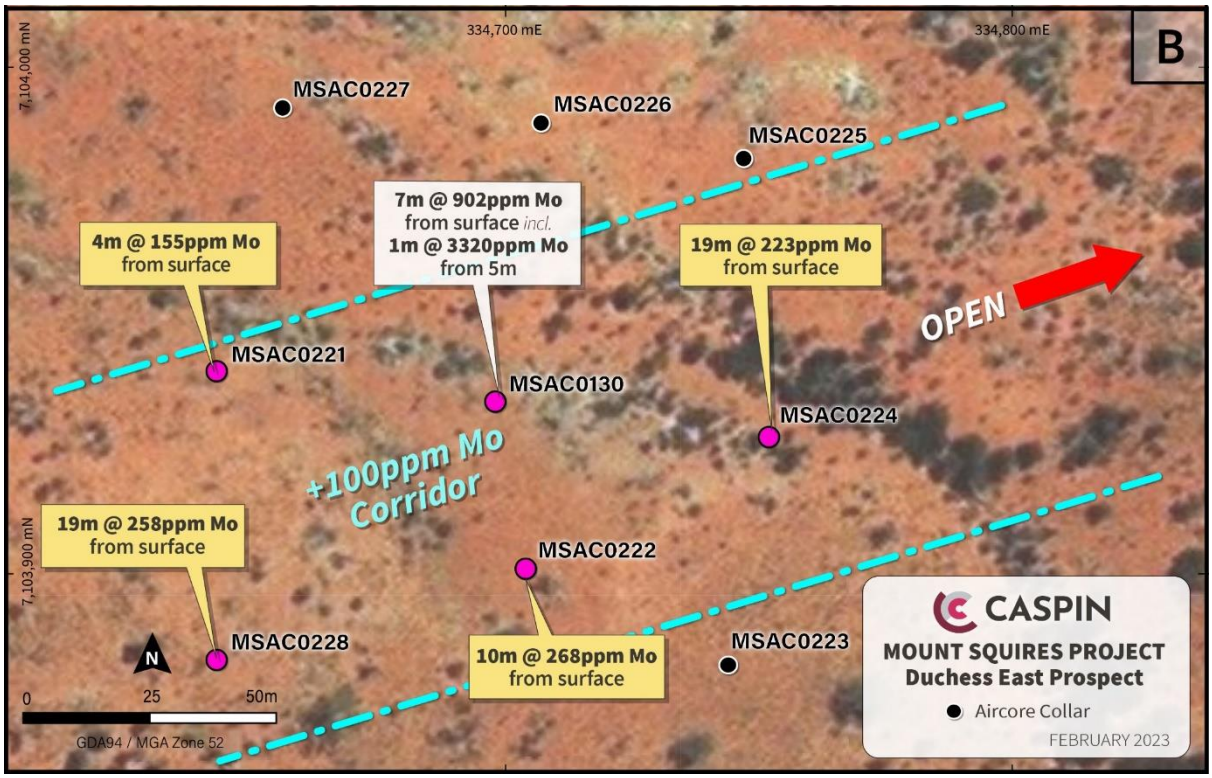

Figure 5-B. Inset of Duchess East.

Further north of Duchess, the Handpump Prospect is the original site of gold discovered within the project. Numerous significant drill intersections have been returned by previous explorers, generally less than 100m below surface. Mineralisation is constrained within a rhyolite breccia and open along strike and down dip at shallow depths. The Company intends to test some of these extensions during the upcoming program.

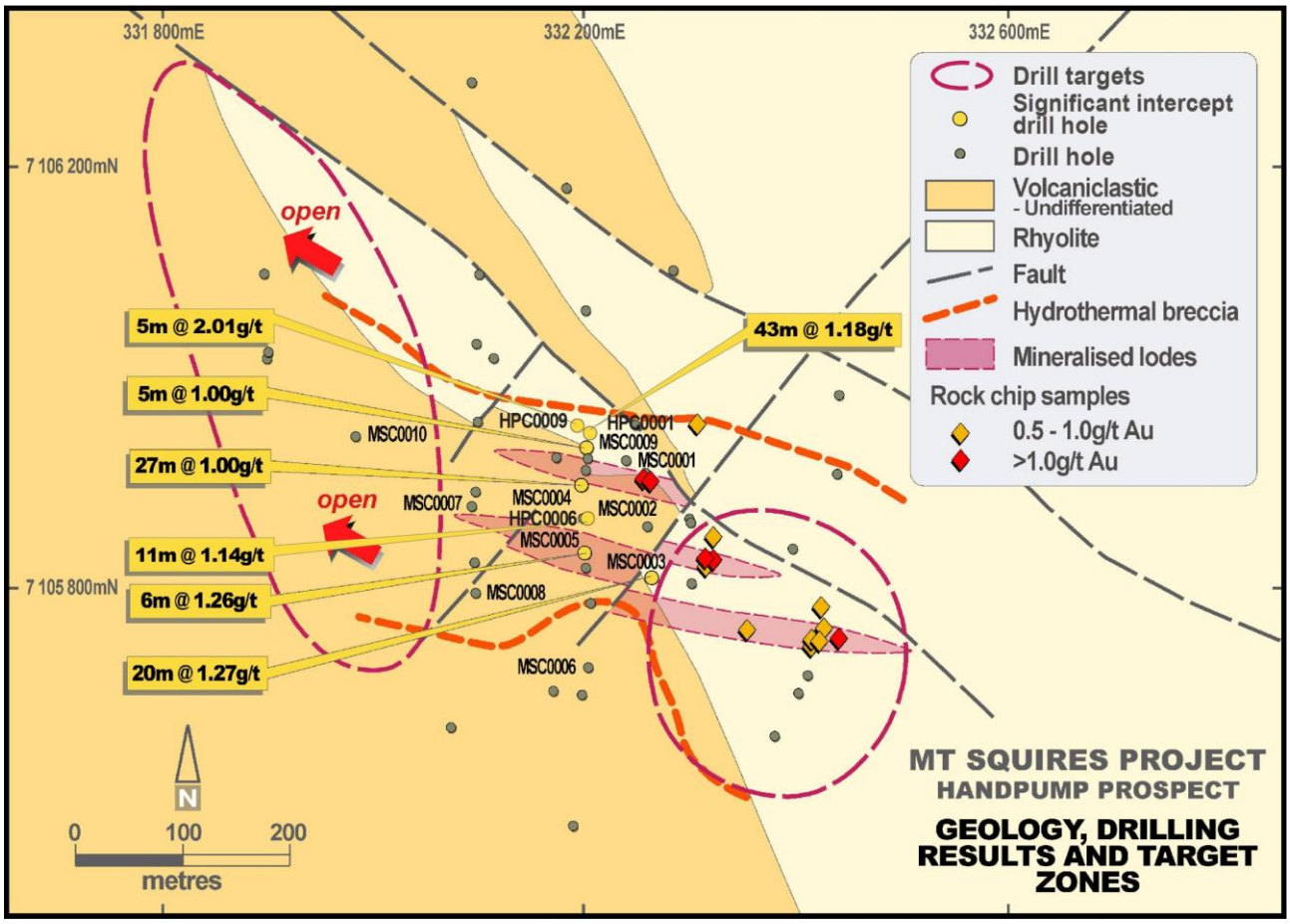

Figure 6. Drill plan of the Handpump Prospect, geology and significant intercepts.

This announcement is authorised for release by the Board of Caspin Resources Limited.

-ENDS-

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Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Mr Greg Miles, a Competent Person who is an employee of the company. Mr Miles is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Miles consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the Exploration Results information included in this report from previous Company announcements, including Exploration Results extracted from the Company's Prospectus announced to the ASX on 23 November 2020 and the Company's subsequent ASX announcements of 29 September 2022, 29 November 2022 and 13 February 2023.

ABOUT CASPIN

Caspin Resources Limited (ASX Code: **CPN)** is a new mineral exploration company based in Perth, Western Australia. Caspin has extensive skills and experience in early-stage exploration and development. The Company is actively exploring the Yarawindah Brook Project in Australia's exciting new PGE-Ni-Cu West Yilgarn province and the Mount Squires Project in the West Musgrave region, one of Australia's last mineral exploration frontiers.

At the Company's flagship Yarawindah Brook Project, recent drilling campaigns at Yarabrook Hill have made new discoveries of PGE, nickel and copper sulphide mineralisation. Meanwhile, the Company continues to bring new targets to drill readiness by collecting geophysical and geochemical data across the project.

At the Mount Squires Project, Caspin has identified a 40+km structural corridor with significant gold mineralisation as well as a 17km extension of the West Musgrave Ni-Cu corridor which hosts the One Tree Hill Prospect and Nebo-Babel Deposits along strike. The Company is conducting further soil sampling, geophysics and reconnaissance drilling along both mineralisation trends.

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