ASX RELEASE

14 December 2022

CASPIN

Plus 10% Copper at Surface, Mount Squires Project

HIGHLIGHTS

- **High-grade copper mineralisation up to 10.6% confirmed in outcrop – now known as the *Sienna Prospect***
- **Includes highly anomalous values of gold, platinum, palladium and silver, common accessory metals in magmatic sulphide systems**
- **Additional significant copper rock chips identified outside copper-palladium soil geochemistry anomaly, 7km along strike from Sienna prospect**
- **Results confirm the copper potential of the West Musgrave Ni-Cu Extension, within the Mount Squires Project**
- **Drilling results from the One Tree Hill area and regional soil geochemistry still pending**

Caspin Resources Limited **(ASX: CPN) ("Caspin" or "the Company")** is pleased to provide further results from the West Musgrave Ni-Cu Extension at the Mount Squires Project in the West Musgrave region of Western Australia. The Company has recently completed extensive exploration programs of drilling, soil and rock chip sampling as well as airborne geophysics.

High-Grade Surface Copper Defines New Sienna Prospect

The Company reported a significant discovery of surface copper mineralisation along an 8km copper geochemical anomaly on 15 November 2022. This prospect is now known as the *Sienna Prospect*.

Assays from these samples have returned high-grade copper values up to 10.6% from a small malachite-rich outcrop within a broader area of mafic outcrop covering an area of approximately 2.5km^2. Malachite is a copper carbonate mineral commonly formed through the weathering of copper sulphide. A total of four samples were collected from this outcrop, averaging 7.1% Cu. These samples also returned elevated levels of gold (up to 0.1g/t) and silver (up to 6.9g/t).

A separate sample of mafic rock within the prospect also returned 0.12g/t platinum and 0.11g/t palladium. Elevated platinum and palladium are a common mineralisation association with copper deposits in the West Musgrave region, for example the Succoth Deposit (owned by OZ Minerals Limited (ASX: OZL)).

Figure 1. Caspin geologist Ben Kimpton, with samples averaging 7.1% Cu from the Sienna Prospect

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The Sienna Prospect is at the eastern end of a large, 8km long copper-palladium anomaly (Figure 2). The Company has also found elevated copper (up to 1,015ppm) in mafic rock chip samples from over 7km along strike from the Sienna Prospect and outside of the current extent of the soil geochemistry sampling. This is further evidence that the Company is in the early stages of defining a significant magmatic sulphide system prospective for copper, and potentially also nickel and PGE's.

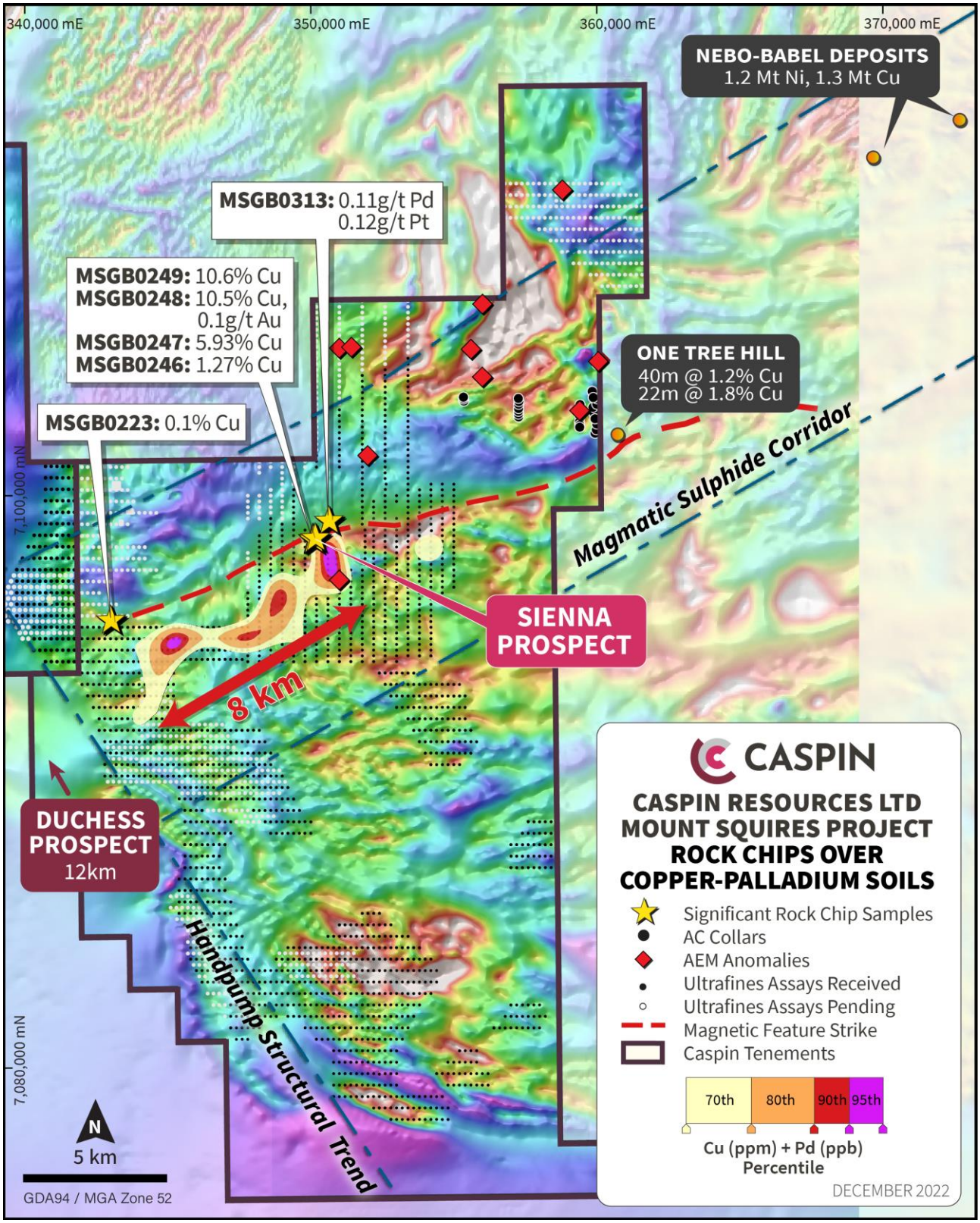

Figure 2. West Musgrave Ni-Cu mineralisation trend showing significant rock chip results as well as the copper-palladium geochemistry anomaly.

Caspin's Chief Executive Officer, Mr Greg Miles, commented *"It is fantastic to have confirmation of high-grade copper mineralisation at the newly proclaimed Sienna Prospect. But just as important is to see the association of other metals such as platinum and palladium that are commonly associated with magmatic sulphide deposits in the West Musgrave region. More important still, is that we're also seeing anomalous copper and PGE mineralisation in rock chips on several locations along the strike of a large 8km-long copper and palladium anomaly.*

"This gives us confidence that we've identified a new mineralised intrusion, or suite of intrusions, with the potential for a discovery or discoveries of significant scale".

The spatial association of this large Cu-Pd geochemical anomaly with a strong NE lineament in magnetic data is also considered further evidence of the potential of this anomaly to host mineralisation. This magnetic lineament potentially represents a deep-seated structure that has provided a conduit for the emplacement of mineralised magmatic intrusions. Importantly, this lineament occurs sub-parallel to, and central to, the NE-trending structural corridor that hosts the Nebo-Babel and Succoth deposits along strike (owned by OZL). The Company is continuing to interpret results and develop its geological models.

It is worth noting that the Nebo and Succoth (~1Mt contained Cu) deposits have no surface expression at all, lying beneath shallow sand cover and the Babel Deposit has only a very small subcrop of approximately 5 square metres, which also displays malachite. Therefore, any surface expression of mineralisation in this region is highly encouraging.

More Exploration Results to Follow

The Company is eagerly awaiting results from a further 1,200 soil samples along the West Musgrave Ni-Cu corridor remain pending. These results will assist the Company evaluate additional copper (and nickel) anomalies along this trend and possibly define drill targets or additional geophysical surveying for the 2023 field campaign.

Results are also awaited from aircore drilling in the One Tree Hill area near the eastern tenement boundary as well as the Duchess Prospect, which has recently returned significant grades of gold, silver, copper and molybdenum.

Planning for the 2023 field season at Mount Squires is well advanced.

Whilst the Company waits for these results, exploration continues at the Yarawindah Brook Project with a third rig recently arriving on site to accelerate delineation drilling at the Serradella Prospect. The Company anticipates initial results to be available early in the New Year.

TABLE 1: Significant Rock Chip Assays (>500ppm Cu, 0.1g/t Pt or Pd and associated elements)

Sample ID	Easting GDA 94 Zone 52	Northing GDA 94 Zone 52	RL	Cu %	Cu ppm	Pd g/t	Pt g/t	Au g/t	Ag g/t	MgO %
MSGB0223	343227	7095582	526	**0.1**	**1015**	NA	NA	BD	1.7	0.04
MSGB0224	343227	7095583	528	0.05	501	NA	NA	BD	1.1	0.08
MSGB0225	343226	7095582	532	0.07	762	NA	NA	BD	1.0	0.08
MSGB0246	350132	7098415	505	**1.27**	**12700**	0.01	0.01	0.01	1.0	4.99
MSGB0247	350131	7098415	505	**5.93**	**59300**	BD	BD	0.03	3.6	3.86
MSGB0248	350132	7098416	505	**10.5**	**105000**	0.01	BD	**0.10**	5.8	3.03
MSGB0249	350132	7098415	505	**10.6**	**106000**	0.01	BD	0.06	6.9	2.80
MSGB0313	350179	7098451	501	0.02	247	**0.11**	**0.12**	BD	BD	6.23

NA = Not Assayed. BD = Below Detection.

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 28 June 2021, 3 August 2022, 31 August 2022, 29 September 2022 and 15 November 2022.

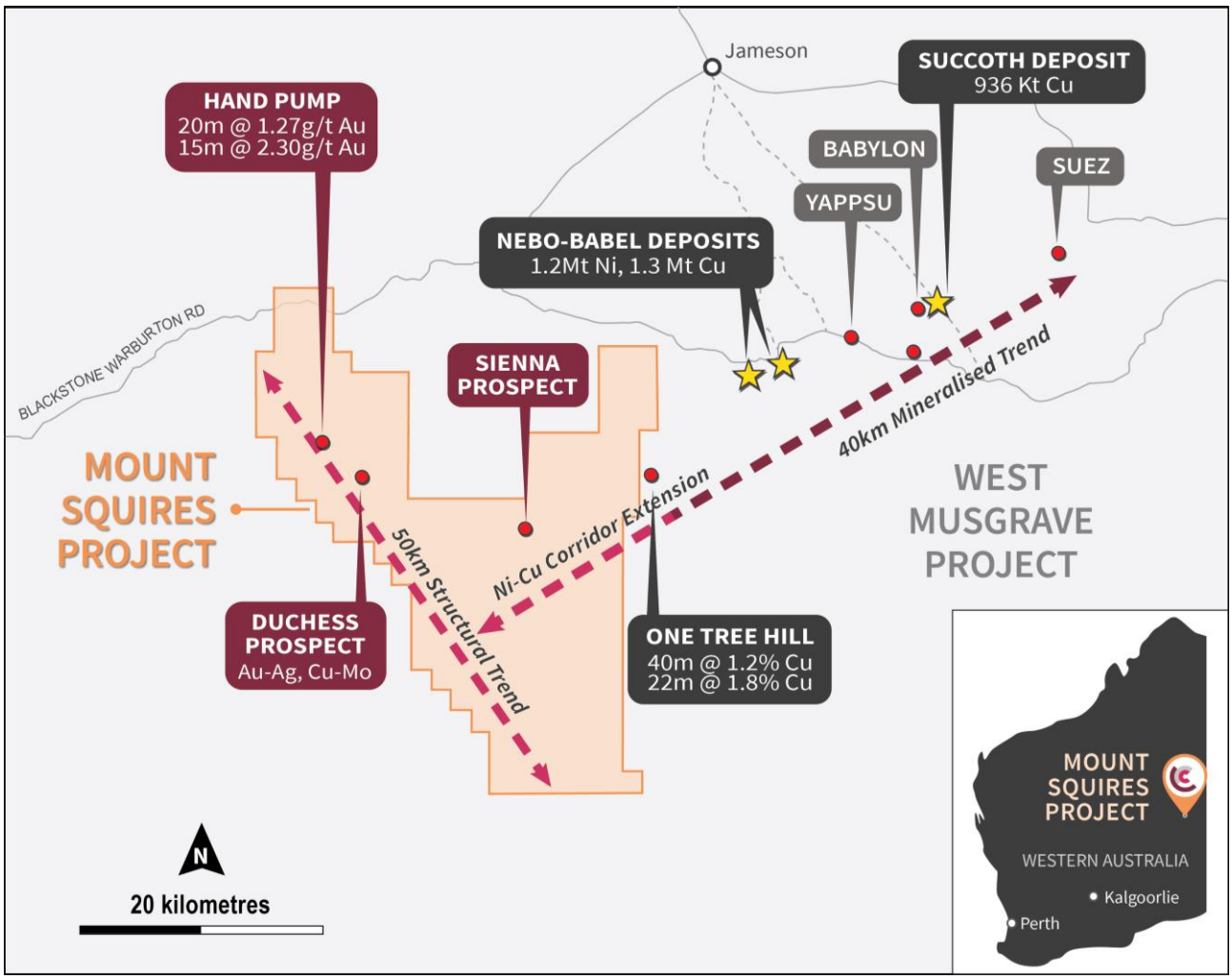

Figure 3. Mount Squires Project with prospect locations.

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 50km structural corridor with significant gold mineralisation and potential copper porphyry prospects. The Company will conduct further soil sampling and reconnaissance drilling along this trend. Caspin will concurrently continue to evaluate the potential for Ni-Cu mineralisation along strike from the One Tree Hill Prospect and Nebo-Babel Deposits.

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ANNEXURE 1:

The following Tables are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of the Exploration Results at the Mount Squires Project.

SECTION 1: **Sampling Techniques and Data** (Criteria in this section apply to all succeeding sections)

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	*Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	Surface Rock chips were collected at surface exposures at areas of geological interest or anomalism identified in soil sampling campaigns. Samples were retrieved using a geopick and stored in calico bags. Sample sizes ranged from 500 grams to 2 kilograms. Portable hand-held XRF analysis was conducted on outcrops of interest and guided sampling selection. Soil sampling discussed in this announcement is detailed in the 15/11/2022 ASX announcement 'Surface Copper Mineralisation and Large Soil Anomaly at Mount Squires'.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sampling has been carried out under Caspin protocols and QAQC procedures as per industry best practice. Rock chip locations were surveyed by handheld GPS units which have an accuracy to ±5 metres.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Rockchip samples were submitted to ALS Laboratories Perth for ME-IPC61 Four Acid Digest followed by a PGM-ICP24 finish.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	N/A as drill results are not reported.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	N/A as drill results are not reported.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	N/A as drill results are not reported.
	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.	N/A as drill results are not reported.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation,*	Rock chip samples are described geologically, focusing on host lithologies, alteration, mineralisation and structure.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	mining studies and metallurgical studies.	
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging records lithology, mineralogy, mineralisation, weathering, colour and other relevant features of the samples. Logging is both qualitative (e.g. colour) and quantitative (e.g. mineral percentages).
	The total length and percentage of the relevant intersections logged.	All rock chips were geologically logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Not applicable as no core was collected.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Surface rock chip samples were collected dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Preparation techniques are laboratory standard and considered appropriate for the accuracy of assaying methods.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Caspin QC procedures involve the use of duplicates and certified reference material (CRM) as assay standards.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	The sampling of duplicates was completed for surface rock chip sampling.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for the methods of sampling and stage of exploration.
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.*	Rock chip samples were analysed by ALS Laboratories Perth using the ME-IPC61 Four Acid Digest and ME-IPC61 Four Acid Digest followed by a PGM-ICP24 finish. Samples were pulverised to 75 microns prior to digest. The assay technique is considered appropriate and 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.	Not applicable as no geophysical activity was completed.
	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.	Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in-house procedures. Repeat or duplicate analysis for samples did not highlight any issues.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Results were verified by alternative company personnel but not independent contractors.
	The use of twinned holes.	Not applicable as no drilling results reported.
	Documentation of primary data, data entry procedures, data verification, data storage (physical	Primary data related to rock chips was recorded in field logging computers. Data was then sent to

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	and electronic) protocols.	Geobase Australia for validation and compilation into a SQL database server.
	Discuss any adjustment to assay data.	No assay data has been adjusted.
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.*	The location of rock chips were recorded using handheld GPS, the accuracy of which are reliable to ±5 metres. RL readings were later calculated via a DTM layer.
	Specification of the grid system used.	The grid system for the Mt Squires Project is GDA94 MGA Zone 52.
	Quality and adequacy of topographic control.	Topographic data was obtained from public download of the relevant 1:250,000 scale map sheets. The area exhibits subdued, low relief with undulating sand dunes and topographic representation is considered sufficiently controlled.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Rock chip sampling was conducted on an opportunistic basis where interesting lithologies or mineralisation was noted.
	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.	Not applicable as no Mineral Resource and Ore Reserve reported.
	Whether sample compositing has been applied.	No data compositing was applied.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The current stage rock chip sampling represents early-stage exploration. The relationship between mineralisation and structures is yet to be established.
	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.	The current stage of rock chip sampling represents early-stage exploration. The relationship between mineralisation and structures is yet to be established.
Sample security	*The measures taken to ensure sample security.*	Sample chain of custody is managed by Caspin Resources. Rock chips samples were transported to Warburton by Caspin staff and then onwards to Perth by NATS transport services.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Company geologists continue to review the data, no external reviews have been completed.

Section 2: Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*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.*	The project area comprises two contiguous Exploration Licences, E69/3424 and E69/3425. Both Licences are held by Opis Resources Pty Ltd, a wholly owned subsidiary of Caspin Resources Limited. The tenements are located within Crown Reserve 17614, which is within the jurisdiction of the Ngaanyatjarra Land Council within Reserve 40783 for the Use and Benefit of Aboriginal Inhabitants.
	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.	Both tenements are currently live and in good standing. A Mineral Exploration and Land Access Agreement was signed with the Ngaanyatjarra Land Council in Feb 2017. No Mining Agreement has been negotiated.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Portions of the project area discussed in this announcement were explored by WMC in the late 1990s and focused on regional soil and lag sampling, which resulted in the discovery of the Nebo and Babel Deposits. Some of the areas presently covered by Mt Squires project were also explored by Anglo American and Traka Resources. The work mostly included geochemical sampling and auger and vacuum drilling, but no significant geochemical anomalies were identified. Diamond drilling was completed at the Periscope prospect by Anglo American in 2012. Drilling reconciled a geophysical conductive anomaly as barren sedimentary sulphides. Caspin reviewed all existing historical exploration data and has defined several additional targets which have been previously reported.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Mt Squires Project is located in the West Musgrave Province of Western Australia, which is part of an extensive Mesoproterozoic orogenic belt. The Giles Event in the West Musgrave Province included emplacement and eruption of mafic to felsic magmas, all of which are grouped into Warakurna Supersuite. Bimodal volcanic rocks form the main component of the Bentley Supergroup. The Mt Squires Project area is south and southeast of the Mt Palgrave Intrusive Complex. The project is dominated by the bimodal Bentley Supergroup rhyolites, basalts and siliciclastic and volcaniclastic rocks, all of which were unconformably deposited on the amphibolite to granulite facies pre-Giles basement rocks. The Mt Palgrave Group is stratigraphically the lowest preserved unit of the Bentley Supergroup. The style of mineralisation is interpreted to be either epithermal or intrusion-related Au hosted within Bentley Supergroup.

Drill hole Information	*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:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.*	Drill hole collar information is published in the body of the report.
	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.	Results of the full 38 element assay suite are not tabulated. The relationship between elements not listed and their relationship to listed elements is currently unknown and not considered material in nature.
Data aggregation methods	*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.*	Minimum detection limits as per the Labwest UFF-PE method were utilised.
	Where aggregate intercepts 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.	No aggregated results are reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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').*	Results discussed in this announcement represent early-stage exploration. The relationship between intercept width and true basement geometries are unknown.
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.*	Refer to Figures in body of text.
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.*	Rock chip results significant to the progression of exploration activity are detailed in this report.
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.*	All relevant exploration data is detailed in text, figures and in Annexure 1.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-*	Caspin has continued the progress of exploration with further assay results of aircore drilling and soil sampling be completed before the end of

	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.*	2022. Results of these programs will guide exploration activities in 2023 and beyond.