

ASX RELEASE

16 DECEMBER 2020

New Targets Identified at Yarawindah Brook

HIGHLIGHTS

- Review of legacy database highlights significant PGE rock chip results at the new Aries Prospect
- Review upgrades significance of conductors on Brassica Trend from 2018 survey, along strike from XC-29 (refer announcement dated 14 December 2020)
- Recent soil geochemistry supports geophysical (magnetic) target at the Yenart Prospect
- Soil geochemistry program continuing

Caspin Resources Limited ('Caspin' or 'Company') (ASX: **CPN**) is pleased to announce that both new soil geochemistry results and a reassessment of existing data support several new targets within the Yarawindah Brook Project in Western Australia.

The Company has now opened three exploration fronts at the Yarawindah Brook Project (Figure 1):

- Targeting several priority airborne electromagnetic (AEM) conductors including XC-29
- The Aries Prospect with significantly anomalous PGE results from rock chip samples
- The Yenart Prospect with anomalous PGE & Cu in soils with a coincident magnetic anomaly

Caspin Chief Executive Officer, Mr Greg Miles, said "These results demonstrate that we have rapidly developed a pipeline of prospects at Yarawindah Brook. Our target mineralisation styles range from massive nickel and copper sulphide to low sulphide PGE-rich mineralisation. We are still in the process of collecting new data, so we could potentially generate more targets over the coming weeks and months. We're in a great position with multiple pathways to discovery".

New Prospect – Aries PGE

Considering the recent identification of the XC-29 anomaly along the "Brassica Trend", the Company has reviewed past exploration in this area. Whilst historical exploration has been limited, of particular interest is an area of rock chip sampling and prospecting with elevated rock chip values up to 149ppb of combined palladium and platinum now known as the Aries Prospect (Figure 2). This is considered extremely significant in the context of the recent nearby Julimar PGE discovery by Chalice Gold Ltd. Gold is also anomalous in these samples; however, nickel and copper are generally at background levels which initially obscured the significance of the results (Table 1).

Caspin Resources Limited ABN 33 641 813 587

- Ground Floor, 16 Ord Street
 West Perth WA 6005, Australia
- PO Box 558, West Perth WA 6872

ASX Code: CPN www.caspin.com.au

E admin@caspin.com.au T +61 8 6373 2000



Figure 1. Summary of Yarawindah Brook exploration targets, including priority conductor targets.

This prospect is potentially an example of a low-sulphide, PGE dominant style of mineralisation which is unlikely to be conductive and not detected in an AEM survey. The Company intends to infill and expand the sampling coverage with a systematic soil geochemical sampling grid across the prospect, before evaluating potential drill targets.

Re-evaluation of conductors on the Brassica Trend

As previously reported (ASX release 14 December 2020), the Company has identified an outstanding AEM target known as XC-29. XC-29 consists of three separate conductors over a strike of 1.3km on what is known as the Brassica Trend, a sequence of magnetic anomalies likely mapping a package of near-surface mafic and ultramafic intrusive rocks.

The recognition of XC-29 has drawn attention to additional AEM anomalies along strike that were identified during the 2018 AEM survey but were considered medium to low priority compared to other targets at the time. These anomalies, XC-07 to XC-09 (Figures 1 and 2), now have greater significance considering their proximity and stratigraphic alignment with XC-29. XC-07 also has encouraging PGE results from nearby rock chip samples.

Page 2



Figure 2. Aries Prospect with significant rock chip results and EM anomalies over magnetics

Anomalous PGE-Cu at the Yenart Prospect

The Yenart Prospect was initially a conceptual target based on a circular magnetic feature that could represent a mafic/ultramafic intrusion. The feature is also plausibly down dip from mineralised mafic intrusive rocks exposed at Yarabrook Hill adding further weight to the target.

The company has completed a reconnaissance traverse of soil sampling along a road on the margin of the Yenart magnetic anomaly which has returned elevated levels of palladium and platinum up to 13ppb whilst background is typically <1ppb. Copper values are also anomalous. These are encouraging results that not only support the inference that a mafic/ultramafic intrusion is present but also possibly suggests the presence of magmatic sulphide mineralisation.



Figure 3. Yenart Prospect showing magnetic anomaly and soil sampling locations with palladium + platinum results.

These results have provided sufficient encouragement for the Company extend soil geochemistry programs over the entirety of the Yenart magnetic anomaly with the program well underway.

With exploration continuing on a number of fronts, the Company expects to be able to generate additional targets as results come to hand over the coming weeks whilst also continuing to advance existing targets to drill testing as soon as possible.

TABLE 1. ARIES PROSPECT ROCK CHIP RESULTS

Easting	Northing	Pd ppb	Pt ppb	Au ppb	Ni ppm	Cu ppm
428656	6556303	8	7	2	19	3
428879	6556079	3	9	4	16	6
428699	6556289	26	10	4	20	4
428699	6556309	BD	23	12	BD	19
428469	6556409	55	67	29	BD	11
428689	6556569	86	63	37	BD	9
428539	6556559	45	45	23	BD	6
428889	6556209	42	24	40	BD	25
428339	6556399	47	34	17	BD	8
428229	6556419	41	60	40	BD	BD
428489	6556419	15	37	19	BD	6
428469	6556199	30	29	18	BD	12
428214	6556219	38	27	14	BD	10
428209	6556154	39	19	8	BD	8
428519	6556154	7	13	4	BD	14
428639	6556129	24	20	5	BD	14
429099	6555959	BD	BD	BD	BD	23
429209	6556019	BD	BD	BD	BD	13
428949	6556249	1	2	BD	BD	248
428439	6556109	BD	BD	BD	9	6
428529	6556114	BD	BD	BD	BD	2
428674	6556014	BD	2	BD	1	107
428814	6555939	BD	BD	BD	BD	21
428894	6555814	1	BD	BD	2	22
428180	6555814	1	BD	BD	18	10
428057	6556024	BD	1	BD	1	31
428129	6556084	BD	1	BD	BD	16
429139	6555964	BD	1	BD	12	12
429059	6556069	BD	1	1	BD	35
429039	6556164	BD	BD	BD	BD	28
428704	6555784	BD	BD	BD	9	16
428209	6556719	BD	BD	BD	BD	15
428199	6556629	BD	BD	BD	BD	41
428144	6555849	1	BD	BD	BD	93

* BD = Below Detection

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

-ENDS-

For further details, please contact:

Greg Miles Chief Executive Officer <u>admin@caspin.com.au</u> Tel: +61 8 6373 2000

ABOUT CASPIN

Caspin Resources Limited (ASX Code: **CPN**) is a new mineral exploration company based in Perth, Western Australia. Caspin's strategy is to explore and progress its mineral resource projects, and where appropriate, generate, earn into, or acquire new projects with the aim of creating value for Caspin shareholders.

At the Yarawindah Brook Project, Caspin will be exploring Australia's newest Ni-Cu-PGE province, advancing exploration on multiple fronts using soil geochemistry and Airborne EM in search of new Ni-Cu-PGE sulphide deposits. Caspin will then test the most prospective targets with drilling programs.

At the Mount Squires Project, Caspin has identified a 50km structural corridor with significant gold mineralisation. The Company will conduct further soil sampling and reconnaissance drilling to identify new targets along strike from the Handpump Prospect. Caspin will concurrently continue to evaluate the potential for Ni-Cu mineralisation along strike from the One Tree Hill Prospect and Nebo-Babel Deposits.

FOLLOW US

LinkedIn: <u>https://www.linkedin.com/company/caspin-resources-limited</u> Twitter: <u>https://twitter.com/CaspinRes</u>



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 Yarawindah Brook Project.

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	Surface soil samples were collected along the road verge by Caspin personnel typically on 200m spacings but out to 400m at the end of lines.
	gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Where possible soils samples were collected by Auger, digging a 10-30cm pit to the base of cultivated soil and then augered to 50cm depth with a 1-2kg bulk sample collected.
		Alternatively, surface soil samples were collected by digging a 30x30x20cm pit, homogenising and then collecting a bulk 1-2kg sample.
		Soil samples were analysed for Au, Pt and Pd and 48 elements.
	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.
	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.	Samples were dried at low temperature (max 60°c) and sieved to -180µm before analysis by Fire Assay and ICP-MS for Au, Pt and Pd and 4-acid digest with ICP-MS and ICP-AES finish for 58 elements.
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 of standard tube, depth of diamond tails, face-sampling bit or other type, whether core is orientated and if so, by what method, etc).	Not applicable as no drilling results reported.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not applicable as no drilling results reported.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not applicable as no drilling results 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.	Not applicable as no drilling results reported.
Logging	Whether core and chip samples have been	Not applicable as no drilling results reported.

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

ASX: CPN | www.caspin.com.au

Criteria	JORC Code explanation	Commentary
	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.	Not applicable as no drilling results reported.
	The total length and percentage of the relevant intersections logged.	Not applicable as no drilling results reported.
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable as no drilling results reported.
preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Samples were screened at the lab to -180 $\mu\text{m}.$
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample type, size, fraction and analysis methodology has been assessed by a consultant geochemist and found to be appropriate for the project area.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	Caspin QC procedures involve the use of certified reference material (CRM) as assay standards and blanks along with field duplicates.
	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.	Analysis of field duplicates confirms the sampling is representative of the in situ material collected.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for the regolith type, style of mineralisation, the sampling methodology and assay ranges for the primary elements within the Yarawindah Brook Project.
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.	All soil samples were submitted to Bureau Veritas in Canning Vale. Samples were submitted as bulk 1-2kg samples. Samples were dried at the lab at low temperature (max of 60°c) before being screened to -180µm.
		Au, Pt, and Pd were determined by fire assay fire assay with ICPMS. 58 elements were determined by four acid "near total" digest on 0.25g of sample with analysis by ICP-MS and ICP-AES. This method is considered total for Au, Pt and Pd and near total for 58 elements.
	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 tools, spectrometers, or handheld XRF instruments, etc. utilised.
	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	Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in- house procedures.
	estadiished.	Certified reference materials, having a good range of values, are inserted blindly and

Criteria	JORC Code explanation	Commentary
		randomly.
		Repeat or duplicate analysis for samples did not highlight any issues.
		Caspin also collected Auger and soil samples during an orientation survey which was reviewed by an independent specialist.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Not applicable as no drilling results reported.
	The use of twinned holes.	Not applicable as no drilling results reported.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Geochemical sample coordinates and geological information was recorded in field books and coordinates and track data from handheld GPS's was saved. Field data is entered into Excel spreadsheets and sent to 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 all soil samples has been recorded using handheld GPS.
	Specification of the grid system used.	The grid system for the Yarawindah Brook Project is GDA94 MGA Zone 50.
	Quality and adequacy of topographic control.	The tenement package exhibits subdued relief with undulating hills and topographic representation is sufficiently controlled using an appropriate Digital Terrane Model (DTM).
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Sampling was not completed along the road verge on 200m or 400m spacings.
	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 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.	At this early stage of exploration, mineralisation thickness', orientation and geometry are not known.
	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.	Not applicable as no drilling results reported.
Sample security	The measures taken to ensure sample security.	Sample chain of custody is managed by Caspin Resources. Samples for the Yarawindah Brook Project are stored on site and delivered to the assay laboratory by Caspin personnel. Whilst in

Criteria	JORC Code explanation	Commentary
		storage the samples are kept in a locked yard.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	A review of an orientation geochemical survey was undertaken by an external consultant geochemist to ascertain the most appropriate, effective sampling and analysis methodology for the Yarawindah Brook Project. The results showed the methodology employed by Caspin and reported in this announcement is appropriate for the regolith type and mineralisation styles encountered in the project area.

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 Yarawindah Brook Project is located approximately 15km SSE of New Norcia in the SW of Western Australia and comprises Five granted Exploration Licence (E70/4883, E70/5166, E70/5116, E70/5330 and E70/5335). Tenements are held under terms of the Yarawindah Brook Joint Venture Agreement of which Caspin Resources Limited has acquired 80%, and Mr Scott Wilson, retains a 20% interest.
		Caspin has entered into land access and compensation agreement with the property owners on which Yarawindah Brook, Avena, Ovis, Brassica and Yenart prospects are situated.
		Aboriginal Heritage Access Agreements are in place for the live tenements.
	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.	All tenements are in good standing and have an existing Aboriginal Heritage Access Agreements in place. No Mining Agreement has been negotiated.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Yarawindah Brook Project area has been explored for Ni-Cu-PGE mineralisation since the discovery of outcropping Ni-Cu gossans in 1974. A series of drill programmes conducted by various companies since that time mainly focused on near- surface, laterite-hosted PGE mineralisation culminating in the definition of a (historical, non- JORC compliant) resource of 2.9 Mt at 0.79 g/t Pt+Pd (at 0.5 g/t cut-off) by Reynolds/AuDAX in 1989. Later drilling programmes and limited electromagnetic surveying was conducted by Washington Resources, resulting in intersections of massive Ni-Cu-PGE sulphides; however, on-ground exploration on the project area has been limited since the GFC in 2008. The work completed by previous operators is considered by Caspin to be of a high standard.
Geology	Deposit type, geological setting and style of mineralisation.	The Yarawindah Brook Project is located within the Jimperding Metamorphic Belt hosted in the Lake Grace Terrane at the SW end of the Yilgarn Craton. In the area of the Yarawindah Brook, outcrop is poor

.

ASX: CPN | www.caspin.com.au

Criteria	JORC Code explanation	Commentary
		with deep regolith development. Regionally, the lithological trend is NW, with moderate dips to the NE.
		The western portion of the project area is dominated by metasediments and gneiss containing lenses of mafic and ultramafic rocks. It is these mafic- ultramafic lithologies that are the hosts to Ni-Cu-PGE sulphide mineralisation and have been the main targets for exploration.
		The Yarawindah Brook Project is considered prospective for accumulations of massive, matrix and disseminated Ni-Cu-PGE sulphides, both within the mafic-ultramafic complex and as remobilised bodies in the country rocks.
Drill hole	A summary of all information material to the	No drilling was completed.
Information	understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Historic rock chip data is tabulated in the body of the document.
	• 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.	
	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.	The full element suite (up to 61 elements) is not tabulated for the rock chips, soil samples are not tabulated but Pt+Pd is annotated on maps.
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.	No weighting has been applied, but Pt+Pd are reported as a combined value.
	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.	Pt+Pd are reported as a combined value.
	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').	Not applicable as no drilling results reported.

ASX: CPN | www.caspin.com.au

Criteria	JORC Code explanation	Commentary
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.	All relevant exploration data is reported.
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 reported
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.	Caspin is continuing exploration on several prospects with soil sampling underway and ground geophysics scheduled for Q1 2020.