

## DRILLING INTERSECTS SEMI-MASSIVE COPPER SULPHIDES AT BASIN CREEK, NSW

### HIGHLIGHTS

- Initial 6-hole diamond drilling program completed at the Basin Creek Prospect, with semi-massive chalcopyrite (copper sulphide) intersected in drill holes BCD0003 and BCD0005.
- Drilling has confirmed the structurally controlled nature of the mineralisation, with drill holes successfully intersecting multiple zones (10-45 metres wide) of visual copper sulphide (chalcopyrite, bornite and chalcocite) mineralisation, occurring as veins, stringers and disseminations.
- The program effectively demonstrates continuity of the semi-massive chalcopyrite and down-plunge potential of the broader copper sulphide-rich system.
- Assays expected to be progressively received over the course of the next 2-6 weeks.

### CAUTIONARY STATEMENT ON VISUAL ESTIMATIONS

Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

**Lachlan Star Limited** (ASX: LSA, **Lachlan Star** or the **Company**) is pleased to provide an exploration update on the progress of its maiden diamond drilling program recently completed at the Basin Creek prospect, located within its 100%-owned southern Junee Project in the Lachlan Fold Belt of New South Wales.

The program, comprising six diamond holes totalling 1,252.3 metres, was designed to confirm the continuity and down-plunge extents of the high-grade semi-massive copper sulphide (chalcopyrite) and broader disseminated copper sulphide mineralisation recognised in historic diamond drilling<sup>1</sup>.

Drilling successfully intersected semi-massive chalcopyrite in drill holes BCD0003 and BCD0005, as well as broad zones up to 45 metres of disseminated-to-veined chalcopyrite, plus minor bornite and chalcocite.

Downhole gamma, magnetic susceptibility and conductivity readings were also taken and demonstrate a strong relationship between alteration, sulphide mineralisation and favourable host units that can be correlated between drillholes.

Detailed geological logging and core processing is in progress, with assay results anticipated to be progressively received over the next 2-6 weeks.

<sup>1</sup> Refer to ASX announcement, "High-Grade Copper Drill Targets Defined at Basin Creek – Junee Project, NSW" dated 15 August 2024



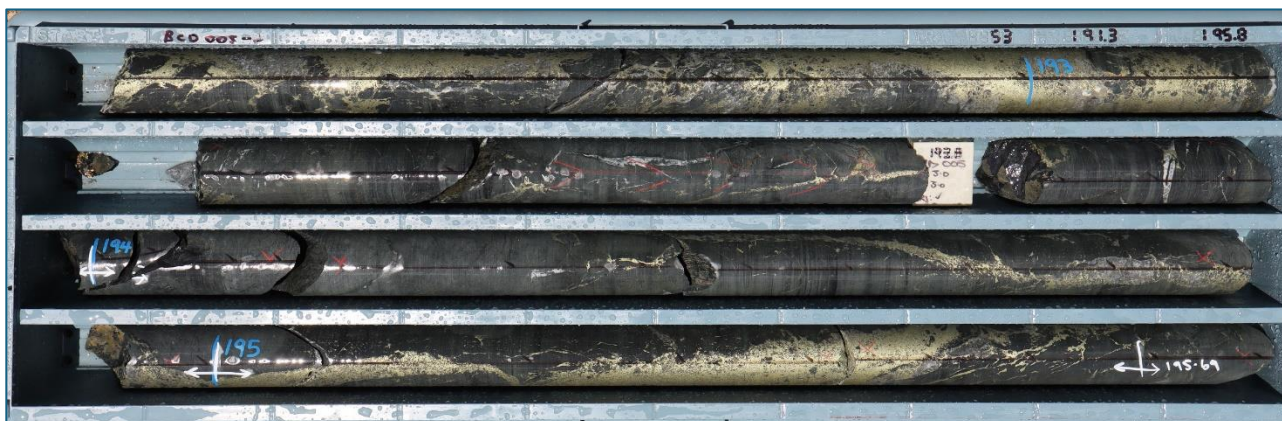
## MANAGEMENT COMMENT

Lachlan Star CEO Andrew Tyrrell said:

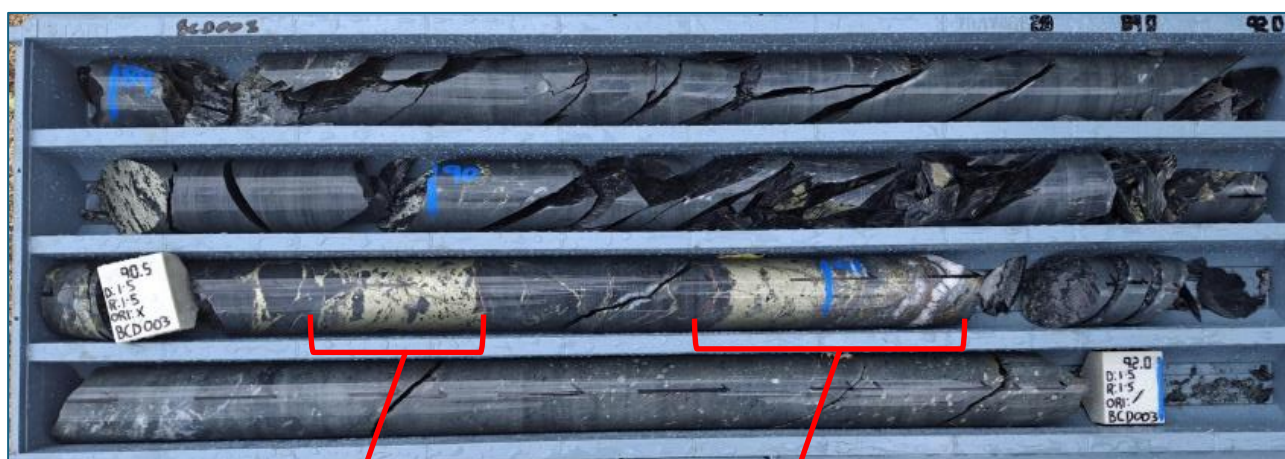
*"I am encouraged by the visual observations of significant copper sulphide mineralisation in the drilling completed. This shows we are dealing with a sizeable system."*

*"The program has confirmed our theory that a north-plunging copper-rich system is present at Basin Creek, and we are working through the drill core to gain a better understanding of the controls to the shoot geometry of the high-grade semi-massive copper sulphides."*

*"We eagerly await the assay results, which we anticipate being received over the coming weeks."*



**BCD0005** - Photo of diamond core containing semi-massive / vein breccia chalcopyrite (copper sulphide) between 192.3 to 195.8m downhole. Core diameter is HQ3 (61.1mm).



**Chalcopyrite**

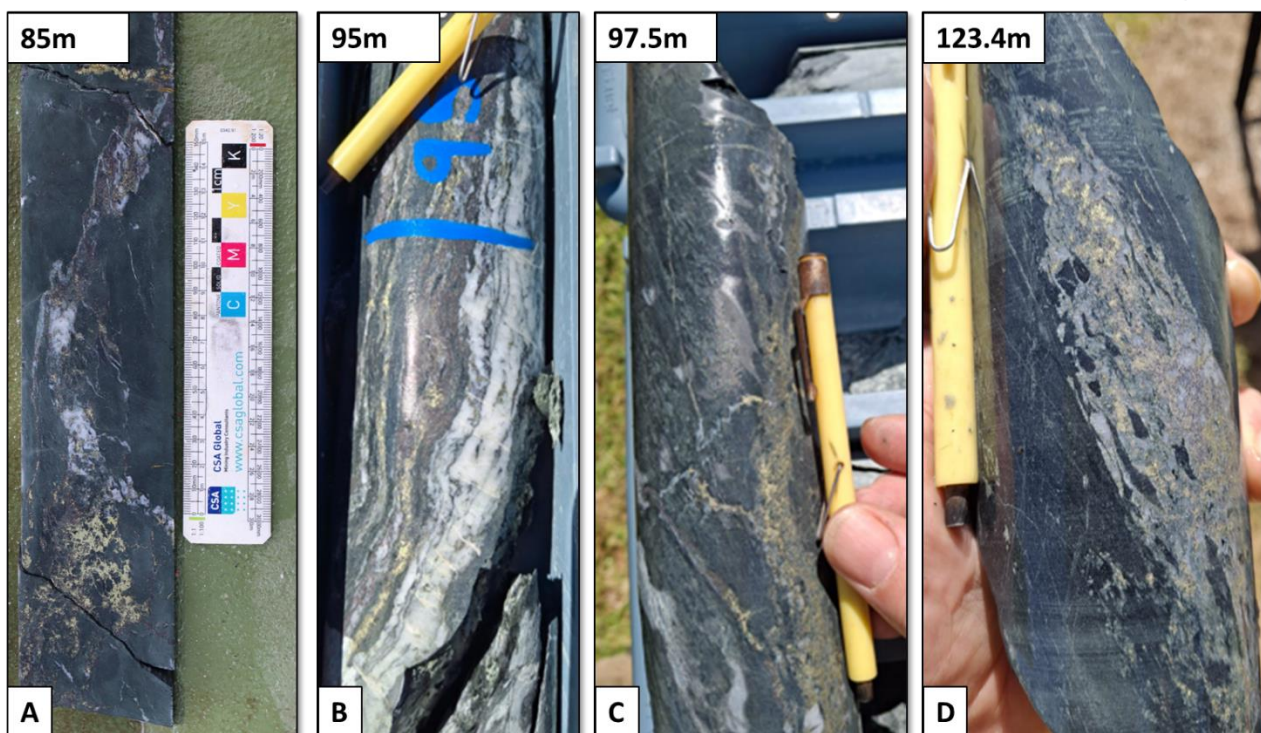


**Chalcopyrite**

**Bornite + quartz**

**Chalcopyrite**

**BCD0003** - Photo of diamond core (89m – 92m) containing semi-massive / vein breccia chalcopyrite (copper sulphide) and bornite between 90.45 to 91.4m downhole. Core diameter is HQ3 (61.1mm).



**BCD0002** - Representative photos of diamond core containing stringer-to-fracture filled copper sulphide (chalcopyrite + bornite  $\pm$  silver) mineralisation over a 45-metre interval (80 to 125 metres downhole). Core diameter is HQ3 (61.1mm), Photo A is of half core, Photos B-D are of full core.

## GEOLOGICAL OBSERVATIONS

### Geology

Drilling at Basin Creek has revealed a basement sequence of massive-to-laminated very fine-grained siliciclastic rocks, overlain by intermediate volcanics and an andesitic volcanic unit. The andesite consists of massive, to pillowed flow-sequences that are variably brecciated and locally preserve porphyritic and amygdaloidal igneous textures. Above the andesite is laminated felsic tuff, which is in-turn overlain by a sequence of feldspathic sandstone interbedded with lapilli-tuff and matrix-supported polymictic conglomerates.

Mineralisation is primarily contained within and adjacent to the andesitic volcanic and volcanoclastic units.

### Mineralisation

Copper sulphide (+ silver  $\pm$  lead-zinc) mineralisation is strata-bound and has historically been related to exhalative processes associated with a volcanogenic massive sulphide (VMS) system. Lachlan Star has documented an important late overprint which is responsible for the remobilisation of early massive sulphides into sheeted semi-massive lenses that cross-cut the stratigraphic sequence and is oriented sub-parallel, to the steep-dipping and north-northwest-striking regionally developed foliation.

Mineralisation in the main “semi-massive” lode is defined largely by chalcopyrite with lesser chalcocite  $\pm$  bornite  $\pm$  magnetite, which occurs as lenses of vein-breccia and fracture-controlled infill. Mineralisation is associated with chlorite veins, or an intense pervasive chlorite alteration of the massive-to-brecciated andesite host-rock.

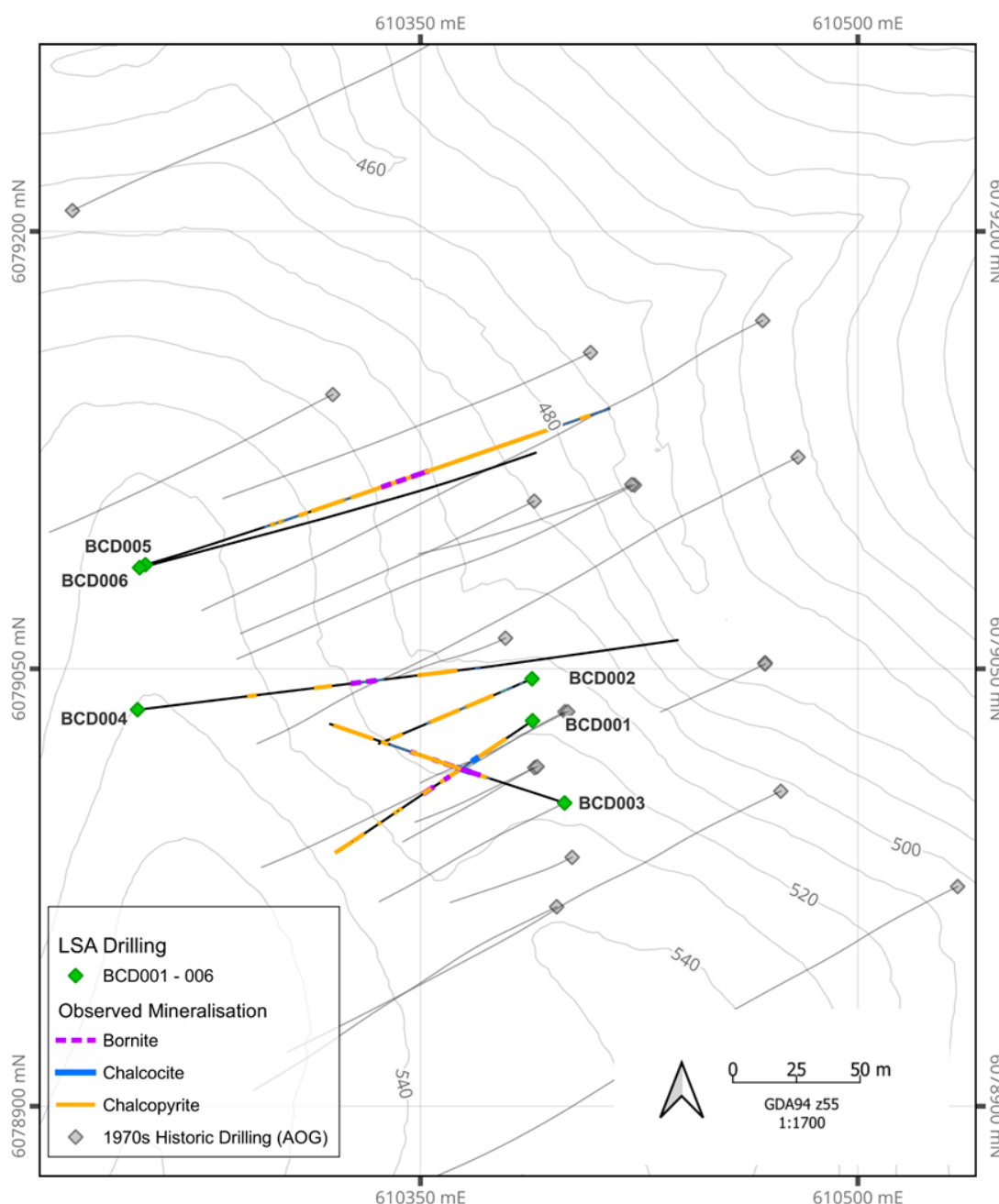


A broader 30-45 metre envelope of discontinuous stringer-to-veined and disseminated copper sulphides, primarily chalcopyrite ± bornite, encompasses the semi-massive lode, with similar sub-parallel zones, between 10-to-30 metres wide, also intersected.

Secondary mineralisation is located throughout a ≤10m-thick interval above the main lode, primarily as argentiferous (silver-rich) chalcocite ± bornite. These minerals occur as irregular stringers and disseminations-to-clots and are closely associated with a strong-to-pervasive patchwork of epidote and hematite alteration of the andesitic host-rock.

Copper-sulphide mineralisation throughout the near-surface transitional zone (from surface to less than 50m depth) reflects the style of mineralisation associated with the main lode (i.e., fracture-controlled) but is largely weathered to iron (goethite) and copper (malachite) oxides.

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**Figure 1** - Locational map of the Basin Creek prospect, showing diamond drill hole collars (BCD0001 – 006) and drill traces in plan view, with intervals containing visual observations of sulphides highlighted. Note, geological logging of BCD0006 is currently in progress.



## Cautionary Statement

Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

**Table 1:** Nature of the copper sulphide mineral abundances observed in diamond drilling at Basin Creek.

Nature of the sulphide minerals
Fine grained disseminated sulphides
Fine-to-coarse 'clots' of sulphides (clusters)
Fine grained irregular-to-discontinuous stringer sulphides
Fine sulphides as fracture fill
Fine sulphides as banded-to-veined accumulations
Sulphides as lenses of semi-massive accumulations and vein breccia matrix

**Table 2:** Types of copper sulphide minerals observed in diamond drilling at Basin Creek.

Copper Sulphide Mineral Types		
Chalcopyrite	Bornite	Chalcocite

**Table 3:** Visual estimates of copper sulphide mineral abundances observed in diamond drilling at Basin Creek. Greater than 1% copper sulphide mineral abundance highlighted.

Drillhole	From (m)	To (m)	Length (m)	Min. Styles	Chalcopyrite (%)	Bornite (%)	Chalcocite (%)
BCD0001	19.5	30.9	11.4	Disseminated to stringer	0.1-0.5		
	30.9	32.4	1.5	Disseminated to stringer	0.5-1		
	<b>32.4</b>	<b>32.44</b>	<b>0.04</b>	<b>Semi-massive</b>	<b>25-50</b>		
	32.44	39.1	6.66	Disseminated	0.1-0.5		
	39.1	40.5	1.4	Disseminated to clots		0.1-0.5	0.1-0.5
	49.5	51.4	1.9	Disseminated to stringer	1-2		
	51.4	59.1	7.7	Disseminated	0.1-0.5		
	59.1	59.9	0.8	Disseminated	0.1-0.5	0.1-0.5	
	59.9	70.1	10.2	Disseminated	0.1-0.5		
	70.1	75.1	5	Disseminated to clots	0.1-0.5	0.1-0.5	
	92.25	92.41	0.16	Disseminated	0.1-0.5		
95.6	95.66	0.06	Disseminated	0.1-0.5			



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Drillhole	From (m)	To (m)	Length (m)	Min. Styles	Chalcopyrite (%)	Bornite (%)	Chalcocite (%)
	106.91	106.95	0.04	Disseminated	0.1-0.5		
	118.8	137	18.2	Disseminated	0.1-0.5		
BCD0002	44.05	50.3	6.25	Disseminated	0.1-0.5		
	50.3	65.3	15	Disseminated to stringer	1-2		
	65.3	70.17	4.87	Disseminated	0.1-0.5		
	<b>70.17</b>	<b>70.5</b>	<b>0.33</b>	<b>Semi-massive</b>	<b>10-25</b>		
	<b>79.65</b>	<b>94.87</b>	<b>15.22</b>	<b>Stringer to veined</b>	<b>1-2</b>		
	<b>94.87</b>	<b>95.14</b>	<b>0.27</b>	<b>Stringer to veined</b>	<b>2-5</b>		
	95.14	97.4	2.26	Disseminated to stringer	0.5-1		
	<b>97.4</b>	<b>97.7</b>	<b>0.3</b>	<b>Fracture-fill to veined</b>	<b>5-10</b>		
	97.7	107.8	10.1	Disseminated to stringer	1-2		
	138.53	161.3	22.77	Disseminated	0.1-0.5		
BCD0003	48	52	4	Disseminated to stringer	1-2		
	52	58	6	Disseminated to clots		1-2	
	58	63.45	5.45	Clots to stringer		1-2	1-2
	63.45	64.8	1.35	Disseminated to stringer	1-2		
	<b>64.8</b>	<b>65.6</b>	<b>0.8</b>	<b>Stringer to veined</b>	<b>2-5</b>		
	65.6	68	2.4	Disseminated to stringer	1-2		
	68	78	10	Clots to stringer	1-2	1-2	
	78	83	5	Disseminated to stringer	1-2		
	<b>83</b>	<b>90.55</b>	<b>7.55</b>	<b>Stringer to veined</b>	<b>2-5</b>		
	<b>90.55</b>	<b>91.12</b>	<b>0.57</b>	<b>Semi-massive / vein breccia</b>	<b>&gt; 50</b>		
	107	109	2	Disseminated to stringer	1-2		
	115.8	137	21.2	Disseminated	0.5-1		
BCD0004	56.5	59.2	2.7	Disseminated to stringer	1-2		
	89.8	96.5	6.7	Disseminated to stringer	1-2		
	107.9	122.9	15	Disseminated to clots		0.1-0.5	
	140.2	157.4	17.2	Disseminated to stringer	1-2		
BCD0005	66.5	67.4	0.9	Disseminated	0.1-0.5		
	70.7	71.46	0.76	Disseminated	0.1-0.5		

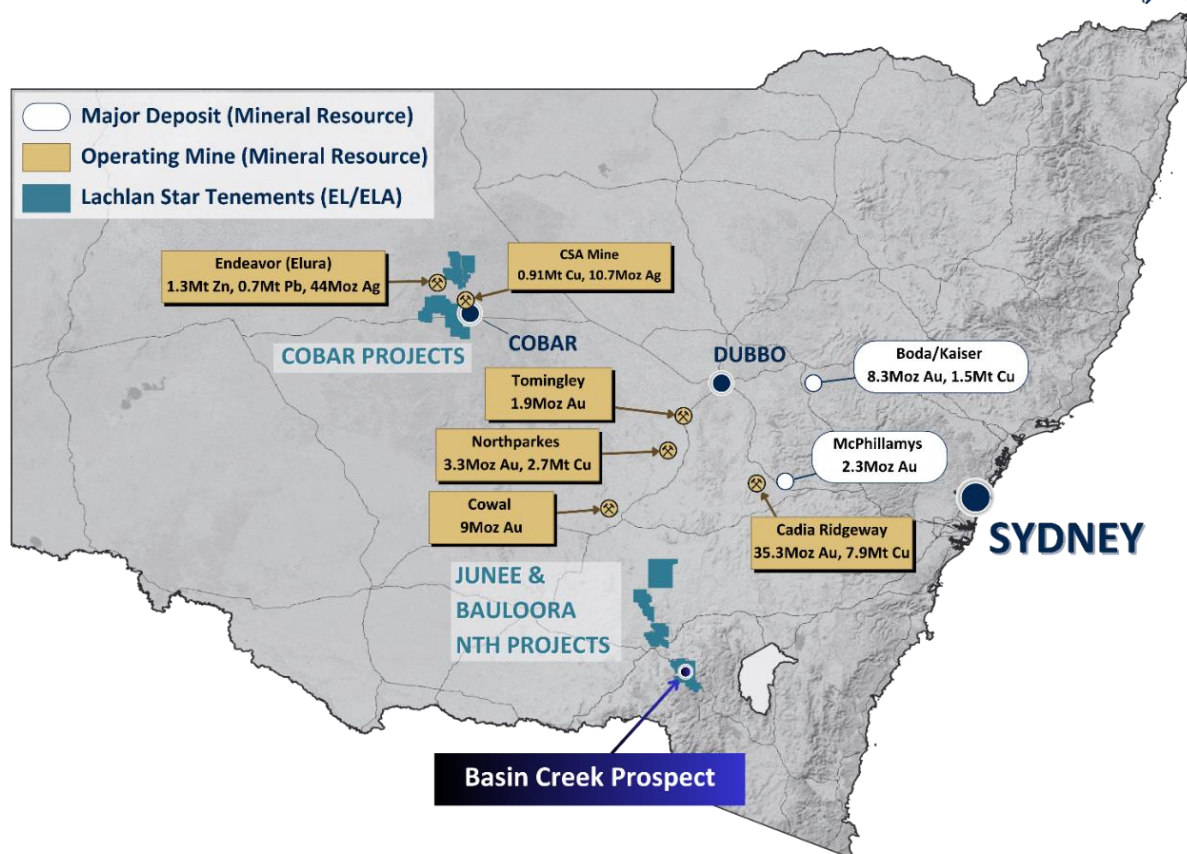


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Drillhole	From (m)	To (m)	Length (m)	Min. Styles	Chalcopyrite (%)	Bornite (%)	Chalcocite (%)
	<b>81.38</b>	<b>81.64</b>	<b>0.26</b>	<b>Stringer to veined</b>	<b>2-5</b>		
	81.64	84.29	2.65	Disseminated to stringer	0.5-1		
	88.09	104.4	16.31	Disseminated	0.1-0.5		
	109.2	146.48	37.28	Disseminated to clots	0.1-0.5	0.1-0.5	
	<b>146.48</b>	<b>148.11</b>	<b>1.63</b>	<b>Stringer to veined</b>	<b>2-5</b>	<b>0.1-0.5</b>	
	148.11	165.78	17.67	Disseminated	0.1-0.5		
	<b>165.78</b>	<b>166.47</b>	<b>0.69</b>	<b>Fracture-fill to veined</b>	<b>5-10</b>		
	166.47	178.34	11.87	Disseminated to stringer	0.5-1		
	<b>178.34</b>	<b>179.18</b>	<b>0.84</b>	<b>Semi-massive</b>	<b>25-50</b>		
	179.18	187.33	8.15	Disseminated	0.1-0.5		
	187.33	187.83	0.5	Disseminated to stringer	0.5-1		
	187.83	192.17	4.34	Disseminated	0.1-0.5		
	<b>192.17</b>	<b>195.69</b>	<b>3.52</b>	<b>Semi-massive / vein breccia</b>	<b>10-25</b>		
	<b>195.69</b>	<b>200.1</b>	<b>4.41</b>	<b>Stringer to veined</b>	<b>2-5</b>		
	200.1	215.23	15.13	Disseminated	0.1-0.5		
	215.23	215.75	0.52	Disseminated to stringer	0.5-1		
	228.03	231.22	3.19	Disseminated to stringer	0.5-1		
BCD0006	Logging in progress						

**Table 4: Drilling Information - Collar coordinate details for BCD0001 – BCD0006.**

Prospect	Hole ID	Total Length (m)	Easting MGA94-55 (m)	Northing MGA95-55 (m)	RL (m)	Azimuth (Magnetic)	Azimuth (True North)	Dip
Basin Creek	BCD0001	137.3	610,388	6,079,032	515	235	247.14	-53
	BCD0002	161.3	610,392	6,079,046	522	244	256.14	-70
	BCD0003	137	610,400	6,079,003	536	286	298.14	-54
	BCD0004	274.8	610,259	6,079,038	541	80	092.14	-45
	BCD0005	241.8	610,250	6,079,089	530	083	095.14	-45
	BCD0006	300.1	610,250	6,079,089	530	083	095.14	-70



**Figure 2** - Location map showing Lachlan Star tenements and position of the Basin Creek prospect, within the southern Junee Project area. Major deposits (historic and current) and endowment shown. Mineral Resources sourced from the relevant Company public domain reports

This ASX announcement has been authorised for release by the Board of Lachlan Star Limited.

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**Competent Person's Statement**

The Information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr Alan Hawkins, who is a Competent Person, Member (3869) and Registered Professional Geoscientist (10186) of the Australian Institute of Geoscientists (AIG). Mr Hawkins is the Exploration Manager, a shareholder and a full-time employee of the Company and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hawkins consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.





The Information in this Release that relates to previous Exploration Results for the Basin Creek project is extracted from: “*High-grade copper drill targets defined at Basin Creek – Junee Project, NSW*”, released 15 August 2024, which is available at [www.lachlanstar.com](http://www.lachlanstar.com).

The Company confirms that it is not aware of any new information or data that materially affects the information included in the above original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

### **Forward Looking Statements**

This report contains forward-looking statements which involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectation, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions provide incorrect, actual results may vary from the expectations, intentions and strategies described in this report. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

### **About Lachlan Star Limited**

**Lachlan Star Limited** (ASX: LSA) is focused on the discovery of gold and copper resources across a portfolio of early-stage high-potential exploration projects located in central New South Wales. The Company has three priority projects situated within the highly endowed mineral Lachlan Fold Belt province of New South Wales and includes North Cobar, Bauloora North and Junee.

Appendix A: 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 techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sounds, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drill core was collected to provide a high-quality sample which was logged for lithological, structural, alteration, mineralisation, geotechnical and other relevant attributes and criteria. Sub-sampling of the core was carried out as per industry best practice and detailed below.</li> <li>A SciAps X-505 pXRF was used to 'spot analyse' the drill core onsite. Readings were taken to help identify minerals and alteration with field calibration periodically performed on the pXRF instrument using SciAps-supplied standards. The pXRF results have been used as an internal guide for preliminary assessment of element compositions, prior to the receipt of assay results from the certified laboratory.</li> </ul> <p><b>AOG Drilling</b></p> <ul style="list-style-type: none"> <li>Details of all historical exploration drilling and drilling results referred to in this release that were carried out by Australian Oil &amp; Gas Minerals Pty Ltd can be seen in the Table 1 of ASX Announcement, 'High-grade copper drill targets defined at Basin Creek – Junee Project, NSW' – dated 15<sup>th</sup> August 2024.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<ul style="list-style-type: none"> <li>Commercial drilling contractor Deepcore Drilling Pty Ltd conducted the diamond drill core program between 15<sup>th</sup> October and 21<sup>st</sup> November 2024, with an LF170 drill rig with a PQ head on a Morooka base.</li> <li>All holes were drilled with HQ3 (triple tube: 61.1mm diameter) diamond core from surface to end of hole.</li> <li>Core was orientated at the start of every 3m run where possible with an Axis Champ Ori – HQ tool.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Core recoveries were recorded during drilling and reconciled during core preparation / mark up and geological logging.</li> <li>Core is measured and marked after each core run using marker blocks to record the depth and calibrated against the rod count of the drillhole's progress. Any core loss is recorded on blocks within the core trays.</li> <li>No relationship was observed that would impact a potential sample bias.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Logging information is qualitative in nature, and quantitative for geochemical data.</li> </ul>



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	<ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Relevant information was recorded for each core sample interval collected, including Hole ID, sample ID, date, lithology, alteration, mineralisation, veining, structure (alpha and beta angles), sampler and comments. Core trays were photographed in both dry and wet form.</li> <li>• Magnetic susceptibility was recorded at 1m intervals on all drill holes with a KT-10 instrument.</li> <li>• All drill holes were logged in full (BCD0006 in progress), with the exception that no bulk density / specific gravity measurements were recorded during the program. Selected samples will be recorded retrospectively.</li> </ul>
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Competent diamond core samples were cut in half parallel to the orientation line using a CoreWise automatic diamond core saw. The righthand half core samples were routinely collected for assay, and the remaining lefthand half core samples returned to the core trays. For heavily broken and orientated core, representative sections of core were cut in half and sampled with the remaining half core returned to the core trays.</li> <li>• All samples for the entire drill hole(s) were sent for assay. Sample intervals for the most part were sampled on the metre marks. Sampling was carried out to lithological contacts with a minimum sample length of 0.3m and a maximum length of 1.5m. Sample weights were recorded by the laboratory.</li> <li>• Quality control procedures include submission of Certified Reference Materials (CRM's) (OREAS Standards). QAQC results were routinely reviewed to identify and resolve any issues.</li> <li>• No duplicate / second-half sampling of the cut diamond core was carried out.</li> <li>• The sample sizes are appropriate for the material being sampled.</li> </ul>
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All samples were prepped by ALS Global in Adelaide and analysed by ALS Global in Perth.</li> <li>• Core samples were dried and pulverised to 85% passing 75µm. A sub-sample of approximately 200g was retained and a nominal 25g and/or 30g was used for analysis. Samples were prepared and analysed using 25g nominal weight multi-element four acid digest ICP-AES/ICP-MS method (ME-MS61). Lower detection limits for ME-MS61 main elements are Ag (0.01 ppm), Cu (0.2 ppm), Pb (0.5 ppm) and Zn (2 ppm) – refer to <a href="#">Geochemistry Testing and Analysis Services   ALS</a> for a full description of the method and detection limits for all elements. The procedure is appropriate for this type of sample and analysis. For the current program selected samples may retrospectively be analysed for Au by fire assay (30g) with ICP finish (Au-ICP21) with a lower detection limit for Au of 0.001 ppm.</li> <li>• Laboratory QAQC involves the use of internal lab standards using CRM's, blanks and pulp duplicates as part of in-house procedures. Lachlan Star submits a suite</li> </ul>



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		<p>of OREAS CRM's and blanks which are inserted at appropriate intervals around areas of visual mineralisation.</p>																																																																																
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Significant intersections and assay results are verified by the Exploration Manager.</li> <li>• BCD0001 attempted to twin historic hole TDH01, however the exact twinned rig position could not be replicated due to restricted rig placement on the drill pad, with the new hole being collared 10m to the west and drilled on a different azimuth.</li> <li>• All data is backed up to Cloud storage.</li> <li>• No adjustments were made to the assay data.</li> </ul>																																																																																
<p>Location of data points</p>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Co-ordinate grid system is GDA94 MGA Z55.</li> <li>• Gray Surveyors of Tumut, NSW were employed to conduct a collar pick up of the historic 1970's Australian Oil &amp; Gas Minerals Pty Ltd drill holes prior to the current drill program, as discrepancies had been identified by Lachlan Star staff when field checking collar locations with the data provided in the Geological Survey of NSW's MinView online portal. Seventeen of the nineteen historical holes were able to be located and surveyed which were used to establish the locations of the reported drill program.</li> </ul> <table border="1" data-bbox="1160 821 2072 1316"> <thead> <tr> <th>Hole ID</th> <th>East</th> <th>North</th> <th>RL</th> </tr> </thead> <tbody> <tr><td>TDH01</td><td>610399.304</td><td>6079035.174</td><td>515.175</td></tr> <tr><td>TDH02A</td><td>610468.003</td><td>6079051.739</td><td>473.314</td></tr> <tr><td>TDH03</td><td>Not Found</td><td></td><td></td></tr> <tr><td>TDH04</td><td>610408.259</td><td>6079159.286</td><td>466.363</td></tr> <tr><td>TDH05</td><td>610397.405</td><td>6078968.961</td><td>538.916</td></tr> <tr><td>TDH06</td><td>610388.669</td><td>6079107.505</td><td>489.538</td></tr> <tr><td>TDH07</td><td>610465.782</td><td>6079168.176</td><td>491.095</td></tr> <tr><td>TDH08</td><td>610423.224</td><td>6079113.189</td><td>467.935</td></tr> <tr><td>TDH09</td><td>610479.768</td><td>6079123.237</td><td>497.573</td></tr> <tr><td>TDH10</td><td>Not Found</td><td></td><td></td></tr> <tr><td>TDH11</td><td>610230.657</td><td>6079207.32</td><td>486.975</td></tr> <tr><td>TDH12</td><td>610533.256</td><td>6078974.855</td><td>502.397</td></tr> <tr><td>TDH13</td><td>610399.655</td><td>6079004.319</td><td>527.303</td></tr> <tr><td>TDH14</td><td>610399.5</td><td>6079035.174</td><td>515.175</td></tr> <tr><td>TDH15</td><td>610422.394</td><td>6079113.156</td><td>468.165</td></tr> <tr><td>TDH16</td><td>610389.141</td><td>6079016.32</td><td>524.81</td></tr> <tr><td>TDH17</td><td>610401.905</td><td>6078985.726</td><td>534.242</td></tr> <tr><td>TDH18</td><td>610379.266</td><td>6079060.636</td><td>509.259</td></tr> <tr><td>TDH19</td><td>610390.266</td><td>6079016.601</td><td>524.815</td></tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Collars for the reported drill program were pegged using a Garmin 65S handheld GPS.</li> </ul>	Hole ID	East	North	RL	TDH01	610399.304	6079035.174	515.175	TDH02A	610468.003	6079051.739	473.314	TDH03	Not Found			TDH04	610408.259	6079159.286	466.363	TDH05	610397.405	6078968.961	538.916	TDH06	610388.669	6079107.505	489.538	TDH07	610465.782	6079168.176	491.095	TDH08	610423.224	6079113.189	467.935	TDH09	610479.768	6079123.237	497.573	TDH10	Not Found			TDH11	610230.657	6079207.32	486.975	TDH12	610533.256	6078974.855	502.397	TDH13	610399.655	6079004.319	527.303	TDH14	610399.5	6079035.174	515.175	TDH15	610422.394	6079113.156	468.165	TDH16	610389.141	6079016.32	524.81	TDH17	610401.905	6078985.726	534.242	TDH18	610379.266	6079060.636	509.259	TDH19	610390.266	6079016.601	524.815
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<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• As the drill program is at the exploration stage, the spacing and distribution of drillholes is not relevant. At this stage of the Project the completed drilling has not been used to establish or support a Mineral Resource under the classifications applied in the JORC Code 2012.</li> <li>• Due to topographic limitations for the positioning of drill pads, drill holes were drilled at various dips and azimuths to target optimal positions at depth.</li> <li>• No Compositing has been applied to the exploration results.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The orientation of key structures may be locally variable with relationships to mineralisation still being established.</li> <li>• The orientation of drilling relative to key mineralised structures is not considered likely to introduce sampling bias.</li> <li>• The orientation of sampling is considered appropriate for the current geological interpretation of the mineralisation style.</li> <li>• A sample bias due to drilling orientation has not been observed at this stage.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Core samples were logged, cut and sampled at a secure Lachlan Star facility before being bagged into tied calico bags, grouped into polyweave bags and transported in palletted bulka bags by Lachlan Star employees to a commercial transport company in Wagga Wagga, NSW. Samples were then sent to the ALS Prep Lab in Adelaide, with pulps being sent to ALS Perth for analysis.</li> <li>• Chain of custody was maintained through delivery to the ALS laboratory and Lachlan Star has protocols in place to ensure data security.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sampling and assaying techniques completed by Lachlan Star are industry standard. Sampling techniques and procedures are regularly reviewed internally. To date, no external audits of sampling techniques and data have been completed on the drilling program.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All activities relate to current tenement EL8939.</li> <li>• There are no registered heritage sites within the tenement.</li> <li>• All tenements are owned by TRK Resources Pty Ltd, a 100% owned subsidiary of Lachlan Star Limited and are in good standing with the New South Wales Titles Management System. The tenements lie within rural free-hold land requiring TRK Resources Pty Ltd to enter into formal land access agreements with individual landowners, prior to any field activity, as prescribed by New South</li> </ul>



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		Wales State Law including the Mining Act 1992. The Company has rural land access agreements in place over the work areas reported in this release.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	Details of all historical exploration, drilling and drilling results carried out by other parties can be seen in the same section of the Table 1 within ASX Announcement, 'High-grade copper drill targets defined at Basin Creek – Junee Project, NSW' – dated 15 <sup>th</sup> August 2024.
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	Details of the deposit type, geological setting and style of mineralisation can be seen in the Table 1 of ASX Announcement, 'High-grade copper drill targets defined at Basin Creek – Junee Project, NSW' – dated 15 <sup>th</sup> August 2024.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	See Tables 3 and 4 in the body of the report.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No Exploration Results have been reported in this release.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>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 (e.g. 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>Intervals of sulphide mineralisation are reported as down hole widths, true widths are yet to be established at this early stage of exploration.</li> <li>The orientation of key structures may be locally variable and the relationship to mineralisation is an evolving work in progress.</li> <li>Drill holes are planned as perpendicular as possible in plan-view and 3D to intersect the geological targets.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to Figures in the body of this release.</li> </ul>



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	<p><i>reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></p>	
<p><i>Balanced reporting</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration Results have not been reported in this release.</li> <li>• Visual estimates have been reported as an indication to mineralisation based on mineral abundance (Refer to Tables 1, 2 &amp; 3 in the body of the report).</li> <li>• Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.</li> </ul>
<p><i>Other substantive exploration data</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• DHEM was acquired on 4 of the 6 holes (BCD0001-0004) during November 2024 by Australian Geophysical Services with a 300m x 200m loop. Processing and interpretation was completed by Jeremy Cook of West Coast Geophysics.</li> <li>• Groundsearch Australia performed downhole magnetic susceptibility, gamma and conductivity on BCD001-006.</li> </ul>
<p><i>Further work</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<p>Further exploration will be planned based on ongoing drill results and may include geophysical surveys, 3D modelling and geological assessment of prospectivity.</p>