ASX Announcement

17 June 2024

POSITIVE START TO EXPLORATION IN NSW AND ACQUISITION OF PRIORITY GROUND IN COBAR

HIGHLIGHTS

- **Initial field exploration activities completed across Lachlan Star's high-potential gold and copper projects in the Lachlan Fold Belt, New South Wales has identified favourable structural and alteration indicators that will inform the next phase of work.**
- **Exploration was prioritised at two of Lachlan Star's Projects:**
    - **the Bauloora North Project, located adjacent to the Bauloora Epithermal Gold Project being actively explored by gold major, Newmont Corporation (ASX: NEM), and;**
    - **the North Cobar Project situated immediately north of Metals Acquisition Limited's (ASX: MAC) CSA Mine.**
- **Geophysical surveys and targeted surface geochemical sampling are scheduled to commence at North Cobar and Bauloora North in late June and July 2024.**
- **Lachlan Star has also successfully applied for three Exploration Licences, totalling for 1,215km^2, which are strategically located adjacent to Metals Acquisition Limited's CSA Mine and Aurelia Metals Limited's (ASX: AMI) Peak Gold Mine in the Cobar Mining District.**

Lachlan Star Limited (ASX: LSA, **Lachlan Star** or the **Company**) is pleased to provide an update on its first expansive on-ground exploration program across its prospective gold and copper portfolio within the highly endowed Lachlan Fold Belt region of central New South Wales.

The Company also secured a strategic expansion of its exploration portfolio in the highly competitive and well-endowed Cobar region with the acquisition of new 100%-owned ground located adjacent to two of the region's more significant deposits and existing mining infrastructure.

MANAGEMENT COMMENT

Lachlan Star CEO Andrew Tyrrell said: *"This work demonstrates our team's commitment to undertake quality, systematic field exploration across our portfolio of projects, and is the first on-ground activity completed on these tenements since acquiring them from DevEx Resources last year. I am excited by what we have observed in the field so far, with strong indications of key alteration and structure within our tenure, and we will proceed with the next phase of work to clearly define targets for drill testing.*

"We have successfully applied for new tenements within the Cobar region, across some highly prospective and strategic ground. These new applications bolster our position as a key explorer within a region that is currently undergoing a renaissance of mining and exploration activity."

COBAR 100% LACHLAN STAR EXPLORATION LICENCE APPLICATIONS

Lachlan Star has successfully lodged applications for four new Exploration Licences within the highly competitive and endowed Cobar region of New South Wales (**Figure 1**).

Three tenements (ELA6760, ELA6761 and ELA6762) are located within the central Cobar Basin, sit directly adjacent to existing mines and infrastructure (the CSA Mine and the Peak Gold Mine) and overlie favourable structures and prospective geology. A fourth tenement (ELA6759) is contiguous with the existing North Cobar Project tenements and overlies the northerly strike extent of the interpreted Rookery Fault not already covered by the Company's existing tenure.

Following completion of recent work on the North Cobar Project and a mineral systems prospectivity review of the region, the Company has identified key target areas within the Cobar Basin that are interpreted as being favourable for hosting significant copper-gold and lead-zinc-silver mineralisation. The principal criteria are that economic mineralisation within the region is strongly controlled by the structural architecture of the Cobar Basin, with an emphasis on early extensional growth faults and the intersection of these with major transverse faults.

The Cobar region remains a premier location for gold and base metal discovery with an estimated pre-mining mineral endowment of 202 tonnes of gold, 4.6 tonnes of silver, 2.5 million tonnes of copper, 4.8 million tonnes of zinc and 2.8 million tonnes of lead[1]. The region has also seen ongoing and increased interest, underpinned by the acquisition of the CSA Mine in June 2023 by Metals Acquisition Limited for $1.64 billion[2].

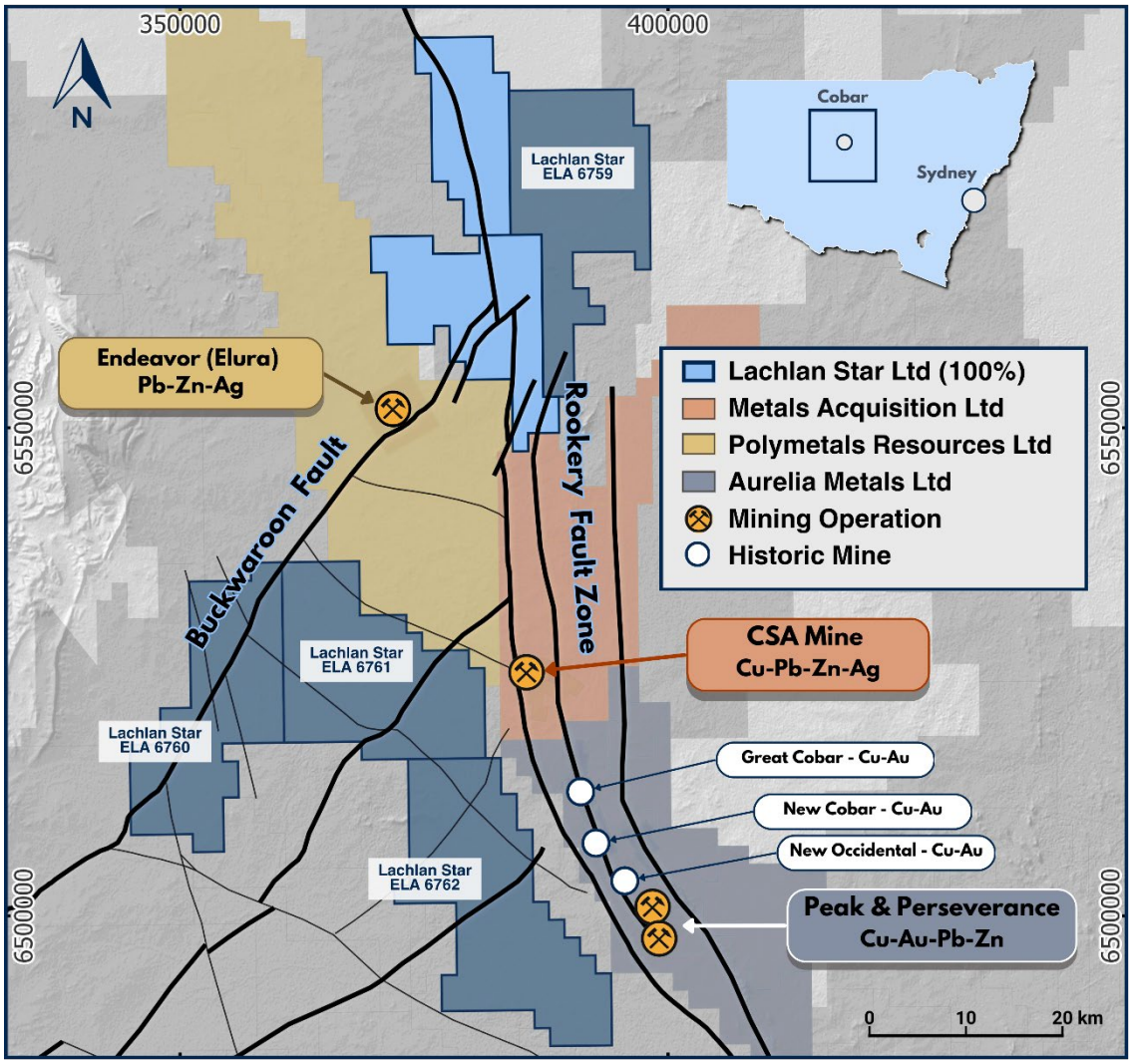

***Figure 1** – Location of Lachlan Star's granted and new Exploration Licence Applications (ELA6759, ELA6760, ELA6761, ELA6762), with Cobar Basin key structural framework and major deposits.*

NORTH COBAR (100% LSA)

The North Cobar Project lies immediately north of the Cobar mining centre in central New South Wales (**Figure 2**) and straddles the northern extension to the Rookery and Buckwaroon Fault systems, a metalliferous fault network which is associated with several significant gold-base metal mines in the district.

During April and May, the Company completed in-field verification of targets identified from the ground gravity 3D inversion modelling data. Targets were characterised as discrete gravity anomalies coincident with magnetic features (either high or low), within an interpreted complex structural corridor[3].

Six soil sampling orientation lines, comprising a total of 96 samples, were completed over four of the stronger gravity anomalies. Samples were analysed using fine clay fraction material and low detection methods for gold and a suite of multi-elements, as the team recognised that the alluvial cover over the targets would inhibit traditional methods that used coarser material and higher detection limits. These low detection methods are ideal in eliciting subtle responses in the geochemistry and in identifying potential buried mineralised systems.

Encouragingly, the soil sample assays returned weakly elevated, but coherent, responses of gold, arsenic, antimony (Au, As, Sb) and lead, zinc, silver (Pb, Zn, Ag) over targeted gravity features (**Figure 3**).

Tenement-wide mapping and rock chip sampling was also completed, with a total of 42 rock chip samples collected and submitted for analysis. Rock chips were taken of predominantly silicified silt-to-mudstones, quartz veined siltstone or iron-enriched (gossanous), brecciated and silicified material. Assays have been received and returned variable, but elevated gold, copper, lead, zinc, silver (Au, Cu, Pb, Zn, Ag) (**Figure 2**). Peak assay values include 9 ppb Au, 317 ppm Cu, 111.5 ppm Pb, 341 ppm Zn and 181 ppb Ag.

A program of pole-dipole induced polarisation geophysics and targeted grid-based soil sampling is scheduled for June over the priority targets.

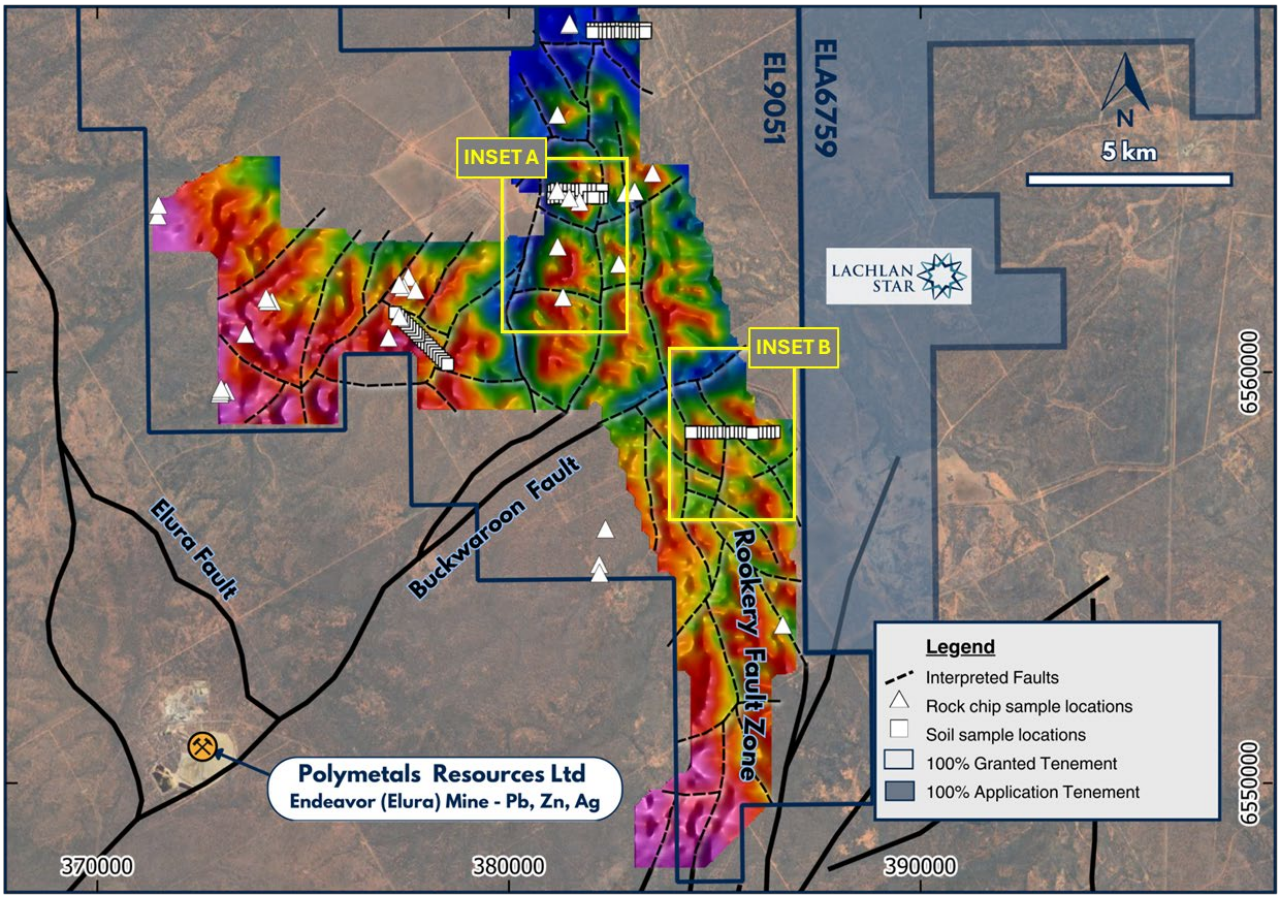

***Figure 2** – Location of the North Cobar Project (EL9051 and ELA6759), with distribution of rock chip and soil sample locations over Bouguer ground gravity.*

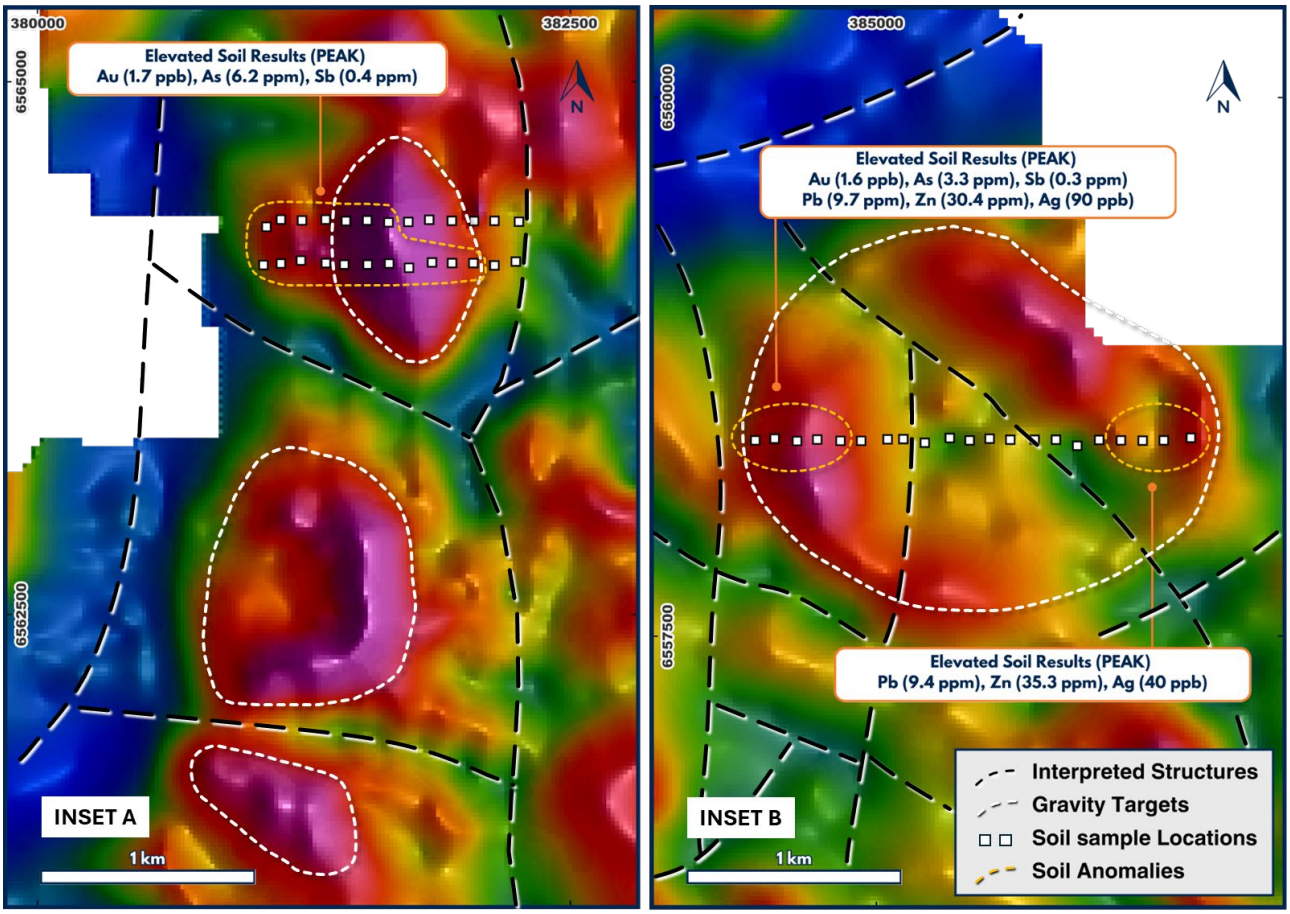

Figure 3 *– North Cobar Project (EL9051) and distribution of surface soil samples with contoured geochemical anomalies over key gravity targets. Peak results for significant pathfinders shown.*

BAULOORA NORTH (100% LSA)

At Bauloora North, the Company is exploring for low-sulphidation epithermal gold mineralisation. The project is situated immediately north and contiguous to ground being actively explored by gold major Newmont Corporation in joint venture with Legacy Minerals Holdings Limited (ASX: LGM), where significant alteration and veining have been mapped[4] and is interpreted to extend into Lachlan Star's tenement.

The Bauloora North tenement overlies the same geological sequence which host mineralisation immediately to the south and are extensively overlain by a thin layer of transported alluvial material.

While small windows of bedrock geology outcrop across the tenement, the presence of alluvial cover presents an opportunity for the potential discovery of a blind-to-surface mineralised system. Prior to Lachlan Star's exploration activities, the project area had not seen any modern systematic exploration.

During May, the Company completed reconnaissance mapping and rock chip sampling across the tenure with the aim of identifying key geological and alteration features, and geochemical indicators. Encouragingly, the mapping identified extensive areas of phyllic (silica-sericite-iron oxides after pyrite) and argillic (kaolinite-silica) to chalcedonic silica alteration (**Figure 4**), which generally represents the upper, shallow expression of a potential porphyry-style to low sulphidation hydrothermal system.

A total of 36 rock chips were collected (**Figure 4**), with assay results for all samples received. Encouragingly samples returned elevated results of gold-arsenic-antimony (Au-As-Sb) or copper-lead-zinc (Cu-Pb-Zn) coincident with the observed alteration. Peak assay values of 14 ppb Au, 1925 ppb Ag, 1100 As, 140 ppm Cu, 134.5 ppm Pb and 555 ppm Zn were returned across the project.

A program of targeted grid-based soil sampling is planned for the September Quarter, and the Company is assessing which geophysical methods will be appropriate to advancing the project to the next stage.

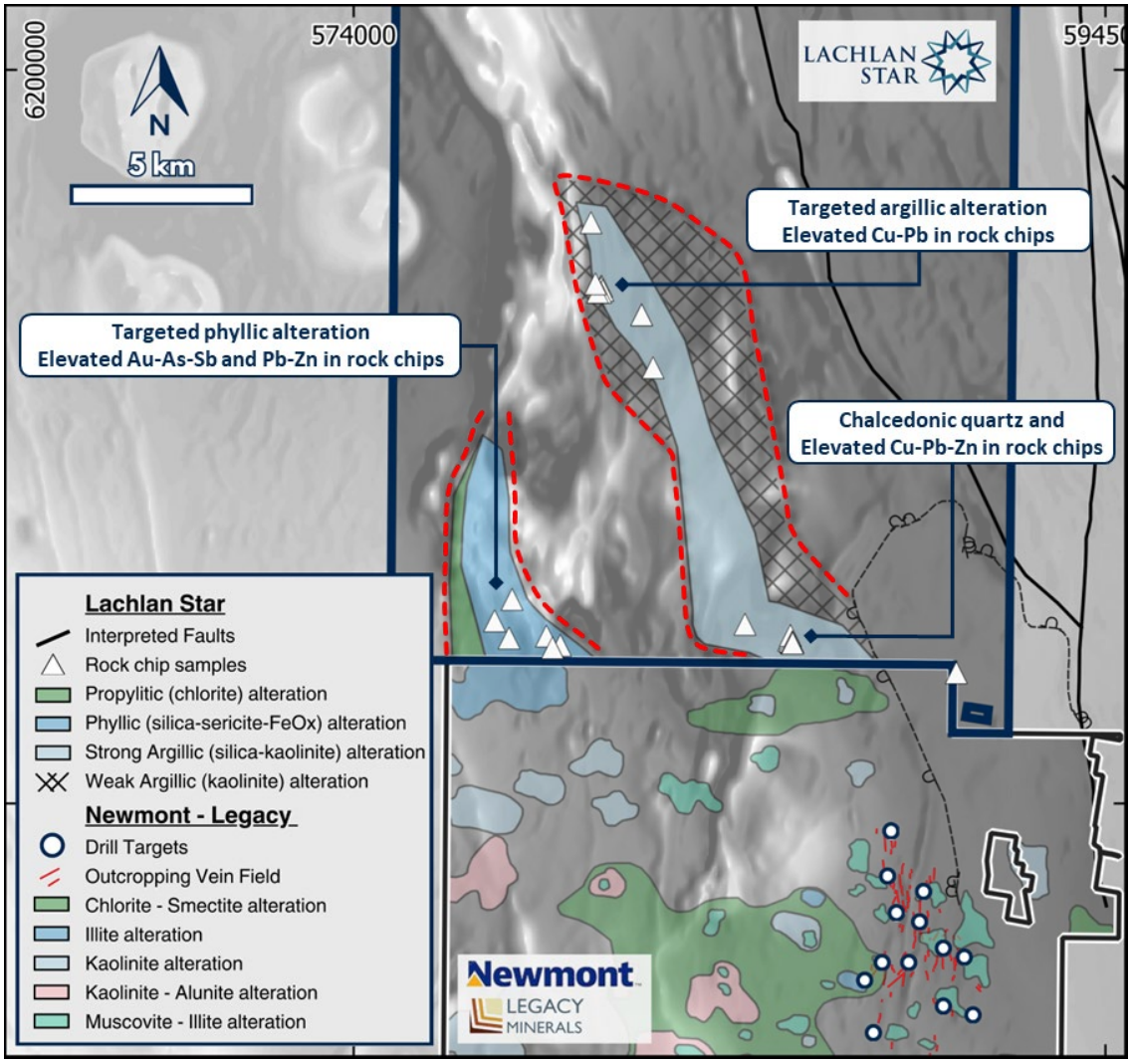

Figure 4 *– Location of the Bauloora North Project tenement (EL9448), with significant mapped alteration and geological features over greyscale 1VD RTP magnetics and distribution of rock chip sample locations.*

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

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Report References

1. Vladimir David, 2018, Cobar Deposits - Structural control, ASEG Extended Abstracts, Volume 2018, Issue 01
2. Metals Acquisition Limited Press Release dated 16 June 2023 and Investor Presentation dated 20 February 2024
3. Lachlan Star Limited ASX announcement dated 18 April 2024
4. Legacy Minerals Holding Limited ASX announcements dated 14 August 2023 and 21 November 2023

Competent Person's Statements – Exploration Results

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 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.

Information in this report may also reflect past exploration results, and Lachlan Star's assessment of exploration completed by past explorers, which has not been updated to comply with the JORC 2012 Code. The Company confirms it is not aware of any new information or data which materially affects the information included in this announcement.

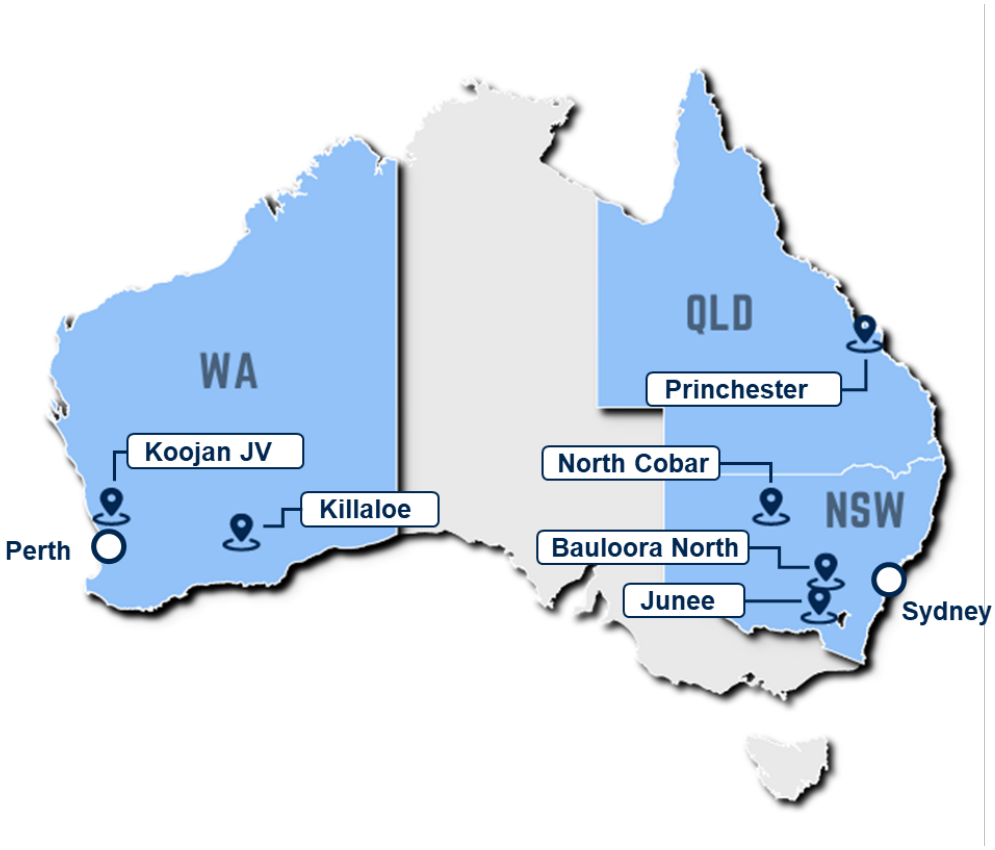
Forward Looking Statements

This announcement may contain forward-looking statements and projections. Such forward-looking statements are estimates only, involve a number of risks and uncertainties and should not be relied upon. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, 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 prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. While the information contained in this report has been prepared in good faith, neither Lachlan Star Limited nor any of its directors, officers, agents, employees or advisors give any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement.

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.

The Company also has the Koojan Joint Venture with Minerals 260 Ltd in the northern Julimar Province of Western Australia, the Princhester Magnesite Project in the New England Orogen of Queensland and the Killaloe Gold and Nickel Project in the Eastern Goldfields of Western Australia.



Appendix 1
Significant Rock Chip Sample Information

Project	Sample ID	Easting	Northing	Au (ppb)	Ag (ppb)	As (ppm)	Sb (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
North Cobar	CNR001	375632	6581954	0.5	79	207	0.3	12.5	8.4	14.4
	CNR002	382186	6555184	0.1	5	1.1	0.1	3.4	0.8	2.4
	CNR003	382193	6554969	<0.1	2	0.7	0.1	2.2	0.3	2.3
	CNR004	386676	6553704	0.1	7	1.2	0.1	1.7	0.3	1.4
	CNR005	382341	6556051	0.4	5	5.7	0.7	9.4	5.1	16.6
	CNR006	381628	6569441	0.3	19	13.6	0.3	21.4	10.9	40.1
	CNR007	381190	6568933	1.1	20	26.7	1.1	5.4	28.8	2.4
	CNR008	381455	6568387	0.9	51	36.4	1.4	8.5	19.8	4.7
	CNR009	381462	6568416	0.7	21	7.2	0.5	3	13.4	2.9
	CNR011	382831	6564265	1.3	21	19.4	1.7	9.9	17.7	7.4
	CNR012	383054	6564312	0.8	181	51.9	2.8	6.5	28.1	5.6
	CNR013	382671	6562536	1.5	13	21.1	3.8	6.7	25.6	7.6
	CNR014	381300	6561723	0.2	16	35.7	4.8	7.1	22	8.4
	CNR015	381168	6566185	0.7	7	3.8	0.3	7.7	7.2	6.6
	CNR016	372911	6559359	0.2	16	48.8	2.2	162.5	7.4	42.8
	CNR017	372928	6559420	0.5	20	79.7	1.1	40.5	33.1	51.5
	CNR018	372942	6559487	0.3	7	36.9	0.8	317	8.2	74
	CNR019	381455	6564146	1	<2	15.9	3.5	51.1	30.6	88.3
	CNR020	377305	6561245	1	<2	1.8	0.5	3.1	14.1	5.9
	CNR019A	381709	6564053	2	7	2.4	0.9	3	3.3	4.3
	CNR020A	381152	6564330	1	17	6.2	1.2	7.6	77.9	3.9
	CNR021	381160	6564328	1	39	20.4	2.2	21.7	16.4	14.9
	CNR022	381172	6562957	<1	4	3	0.7	12.3	111.5	13.6
	CNR023	377037	6560733	<1	12	11.5	1	12	45	16.3
	CNR024	377520	6562213	<1	13	3.2	0.6	6.9	8.2	10.7
	CNR025	377405	6561957	1	9	3.8	1.6	7.6	47.4	19.2
	CNR026	377296	6562032	1	10	5.1	2.2	9.1	102	10.2
	CNR027	377700	6561892	<1	17	15.9	8.8	38	18.6	341
	CNR028	371392	6563716	1	32	3.1	2.6	5.3	37.7	7.6
	CNR029	371409	6563977	2	40	253	4.7	189	22.3	143
	CNR030	373540	6560822	<1	19	18.3	2.1	12.1	15.4	25.5
	CNR031	373066	6559420	<1	27	92.5	1	37.2	22.3	63.1
	CNR032	372975	6559425	1	51	97.5	1.9	130	38	155.5
	CNR033	372953	6559407	4	71	112.5	2.4	134	45.4	166
	CNR034	372925	6559416	4	42	140	2.6	63.4	52.9	147.5
	CNR035	374189	6561616	9	12	71.7	10.8	9.6	36.6	7.9
	CNR036	374089	6561621	3	6	6	0.5	15.1	22.8	10
	CNR037	374044	6561697	3	20	24.7	2.7	14	32.2	135
	CNR039	383492	6564759	3	72	2.3	0.4	3.9	8.3	2.6
	CNR040	380764	6572715	4	21	1	0.2	4.2	5.4	5.2
	CNR041	381119	6572929	3	6	2.3	0.5	3	1.7	7.8
	CNR042	379777	6580113	2	30	18	0.3	21.5	19.7	329
Bauloora North	BNR001	585855	6184292	1	104	4.5	3	9.9	82.9	56
	BNR002	585872	6184202	1	42	5.6	2.5	11.2	22.2	17.1
	BNR003	585897	6184169	1	42	9.5	3.9	3.3	134.5	16.6
	BNR004	585913	6184164	2	18	10.5	3.9	6	16.3	8.8
	BNR005	585937	6184187	4	33	13.7	3.8	4.4	134.5	47.4
	BNR006	585825	6184240	1	87	2.8	2.4	10.3	22.9	31
	BNR007	590389	6183352	1	6	0.4	0.5	3.8	3.7	24
	BNR008	581824	6193090	3	9	3.1	1	3.9	5.3	10.8
	BNR009	582135	6191652	2	8	1.6	2.4	2.3	4.2	41.2
	BNR010	584634	6184669	2	97	9.7	3.6	9.1	20.2	58.3
	BNR011	579610	6184099	3	31	14.6	5.4	3.2	4.6	8.3
	BNR012	579398	6184033	14	28	700	35.6	3.3	42.1	29
	BNR013	579231	6184351	4	497	1100	34.7	4.5	27.4	15.2
	BNR014	578214	6184296	2	13	4.7	3	12.7	55.5	47.7
	BNR015	577820	6184763	2	4	4.5	2.7	12.2	30.2	64.2

	BNR016	578295	6185346	1	9	10.8	2.7	13.1	18.2	41.8
	BNR017	581824	6193090	1	20	6.9	10.9	4.2	4	11.3
	BNR018	580445	6195599	3	168	13.3	17.1	11.3	8	63.8
	BNR031	580731	6193878	2	1925	11.5	20.6	17.2	88.2	28.5
	BNR032	580729	6193870	1	171	13.2	4.6	11.2	11.6	27.2
	BNR033	580720	6193825	1	29	1.7	3	6.1	2.7	14.7
	BNR034	580764	6193758	<1	71	3.6	3.3	3	3.2	30.7
	BNR035	580707	6193702	2	27	17.5	4.1	14.7	6.1	30.3
	BNR036	580623	6193705	3	161	9.9	4.3	4.1	16.6	20
	BNR037	580565	6193935	4	32	26	3.4	11.9	4.3	71.5
	BNR038	586738	6211340	3	52	2	0.5	5.2	4.9	4
	BNR039	586739	6211353	3	135	1	0.4	4.4	4.2	25.3
	BNR040	586733	6211367	3	77	34.2	4.7	20.5	5.4	5.3
	BNR041	586734	6211387	3	52	3.5	1.2	4.3	1.9	2.5
	BNR042	586737	6211407	6	176	41.2	9	12.9	4.9	10.7
	BNR043	585873	6184367	2	94	35.7	95.8	140	31.3	555
	BNR044	585929	6184194	9	23	16.1	4.6	5.4	80.7	15
	BNR045	585928	6184195	3	40	11.9	4.3	3.5	79.7	12.6
	BNR046	585932	6184157	1	26	10.2	4.3	3.9	36.9	24.5
	BNR047	585932	6184158	<1	26	5.3	3.6	3.9	52.8	6.7
	BNR048	579396	6184034	10	169	1285	41.6	29	32.2	35.9

Note, Au and Ag converted to ppb and As, Sb, Cu, Pb, Zn rounded to one decimal place.

Significant Soil Sample Information

Project	Sample ID	Easting	Northing	Au (ppb)	Ag (ppb)	As (ppm)	Sb (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
North Cobar	C000501	381075	6564321	1.4	22	4.8	0.3	10.7	9	18.4
	C000502	381143	6564355	1	21	3.9	0.3	11.7	8.6	22
	C000503	381242	6564351	1.7	29	4.3	0.3	12.9	9.8	22.3
	C000504	381353	6564355	1.5	22	4.8	0.4	12.9	9.4	22.3
	C000505	381448	6564348	1.5	20	4.8	0.4	12.1	10.2	21
	C000506	381548	6564351	1.2	19	4	0.4	10.6	9	19.8
	C000507	381648	6564342	1.7	21	3.6	0.2	12	9.3	19.2
	C000508	381061	6564142	1.1	22	4.6	0.3	13.1	9.5	21.8
	C000509	381143	6564149	1.2	39	6.2	0.3	14.1	10.1	24.5
	C000510	381237	6564163	1.4	27	5.1	0.3	11.7	8.7	18.8
	C000511	381354	6564151	1.3	18	4.1	0.3	13.2	9.3	24.5
	C000512	381440	6564144	1.1	21	4.5	0.3	13.4	9.4	23.5
	C000513	381550	6564144	1.5	29	3.8	0.3	12.8	9.2	22.5
	C000514	381651	6564149	1.6	20	3.3	0.2	11.2	9.4	20.3
	C000515	381744	6564129	1.2	24	3.1	0.2	11.6	9.4	21
	C000516	381852	6564154	1.4	19	2.8	0.2	10.1	9.5	18.3
	C000517	381741	6564344	0.9	19	3.4	0.2	12	9.3	20
	C000518	381945	6564349	1.3	16	3.5	0.2	10.7	8.9	20
	C000519	381839	6564354	1.4	23	3.2	0.2	10.6	8.7	19.2
	C000520	381946	6564151	1.4	21	3.6	0.2	11.7	9.3	20.3
	C000521	382049	6564348	0.7	15	3	0.2	10.6	8.2	19.9
	C000522	382145	6564349	0.5	20	3.1	0.2	13.9	7.8	25.8
	C000523	382260	6564345	0.7	16	2.6	0.2	10.7	7.6	19.8
	C000524	382245	6564158	0.4	16	3.1	0.2	10	8	17.8
	C000525	382143	6564140	1	23	3.4	0.2	10.9	9.2	19.4
	C000526	382145	6564140	0.8	19	3.9	0.2	10.9	9.2	19
	C000527	382046	6564151	0.9	23	3.3	0.2	12.7	9.0	22.4
	C000528	382022	6568290	0.6	26	3.4	0.2	13.1	9.6	24.8
	C000529	382117	6568285	0.9	21	3.5	0.2	13	9	25
	C000530	382219	6568287	0.8	24	3.4	0.2	13.6	9.9	25.7
	C000531	382314	6568284	1	35	3.5	0.2	14	9.6	27.4
	C000532	382416	6568289	1.3	26	3.4	0.2	12.7	9.7	23.7
	C000533	382519	6568287	1.2	27	3	0.2	13.2	9.3	24.5
	C000534	382613	6568289	1.4	30	3.6	0.2	13.5	9.8	23.2
	C000535	382733	6568300	1.1	38	3.8	0.2	15.8	10.4	28.3
	C000536	382811	6568286	1.6	38	3.4	0.2	13.9	8.9	25.3

	C000537	382912	6568288	1.8	46	3.4	0.3	15.	9.9	30.5
	C000538	383025	6568293	1.8	54	3.5	0.3	16.2	9.6	29
	C000539	383112	6568284	1.6	51	3.6	0.3	14.8	9.3	26.5
	C000540	383217	6568289	0.7	17	3.4	0.3	12.4	9.3	24.2
	C000541	383319	6568285	0.8	24	3.1	0.3	13.5	8.1	25.7
	C000542	383121	6568180	1.1	33	3.6	0.3	15.8	8.5	29.9
	C000543	383222	6568180	0.7	19	3.5	0.2	13.1	9.2	26.2
	C000544	383309	6568194	0.9	30	4.1	0.3	16.5	10.6	31.7
	C000545	383017	6568179	1.8	43	3.9	0.3	15.9	9.2	27.5
	C000546	382919	6568188	1.9	61	3.4	0.3	15.6	9.8	29.4
	C000547	382825	6568185	1.2	39	3.4	0.2	14.7	9.1	26.8
	C000548	382721	6568194	1	33	3.4	0.2	12.6	9.2	22.2
	C000549	382612	6568185	1.7	36	3.6	0.2	14.1	9.2	24.4
	C000550	382535	6568200	1	33	3.5	0.2	12.7	9.4	23.6
	C000551	382414	6568188	1	38	3.5	0.2	14.7	9.7	27.7
	C000552	382334	6568190	1.3	38	3.7	0.2	13.8	9.3	25.3
	C000553	382220	6568185	1	28	3.4	0.2	13	9.8	24.9
	C000554	382112	6568191	1	24	3.5	0.2	13.6	9.1	25.5
	C000555	382022	6568191	0.9	24	3.7	0.2	12.4	9.5	23.6
	C000556	385433	6558407	0.7	22	3.7	0.2	13.7	9.8	27.2
	C000557	385526	6558415	0.8	23	3.1	0.2	12.3	9.2	22.1
	C000558	385622	6558410	0.9	25	3.2	0.2	12.4	10	24.9
	C000559	385735	6558410	1	25	3.6	0.2	14.3	9.5	29.7
	C000560	385834	6558410	0.7	16	3.4	0.2	11.9	8.9	22.9
	C000561	385341	6558418	1	29	3.7	0.2	13.3	9.7	27.5
	C000562	385225	6558396	1.1	23	3.7	0.2	12.7	9.4	24.4
	C000563	385125	6558413	0.8	26	3.8	0.2	13.7	9.3	27.2
	C000564	385052	6558412	0.9	26	3.2	0.2	14.3	9.5	29.7
	C000565	386461	6558419	0.7	31	3.4	0.2	12.3	9.1	22.6
	C000566	386335	6558407	0.8	35	3.3	0.2	13.5	7.9	25.7
	C000567	386237	6558406	0.8	26	2.8	0.2	11.6	7.9	21.5
	C000568	386136	6558407	0.6	26	3.3	0.2	15	9.4	35.3
	C000569	386035	6558409	0.9	24	3.2	0.2	13.9	7.3	28.5
	C000570	385933	6558382	0.7	24	3.3	0.2	12.9	8.7	26.1
	C000571	384929	6558405	0.6	29	3.3	0.2	13.6	9.7	28.1
	C000572	384833	6558405	0.9	56	3.2	0.2	14.4	9.7	28.4
	C000573	384725	6558411	1.2	45	3.1	0.2	15.2	9.7	30.4
	C000574	384631	6558404	1.2	68	3.1	0.3	15.1	8.5	28.5
	C000575	384527	6558414	1.1	86	3.2	0.2	16.1	8.4	27.4
	C000576	384527	6558415	1.4	105	3.3	0.2	15.7	8.2	25.7
	C000577	384437	6558407	1.6	68	3.2	0.3	14.9	8.6	27.7
	C000578	377837	6560704	0.7	49	2.8	0.2	13.7	8.8	24.5
	C000579	377896	6560634	0.8	35	3	0.2	13.7	9.4	27.2
	C000580	377975	6560574	0.8	33	2.6	0.2	12.2	8.5	23.1
	C000581	378055	6560499	0.5	33	2.9	0.2	13.9	9	27.8
	C000582	378121	6560421	0.9	41	2.9	0.2	12.8	9.3	25
	C000583	378190	6560354	1.1	39	2.8	0.2	12.4	8.1	23.4
	C000584	378264	6560281	0.7	30	3	0.2	12.9	9.2	24.2
	C000585	378333	6560205	1	31	2.9	0.2	13.6	9.6	27.1
	C000586	378405	6560140	1	41	2.9	0.2	14.1	9.5	27.2
	C000587	378479	6560073	0.7	32	2.8	0.2	14.7	9.2	31.1
	C000588	377768	6560772	0.9	28	3.2	0.2	12.1	9.2	21.1
	C000589	377708	6560835	0.7	30	3	0.2	11.8	9.4	22
	C000590	377629	6560916	0.9	31	3.6	0.2	11.9	9.6	21
	C000591	377551	6560986	1	26	3.4	0.2	11.5	9.1	18.2
	C000592	377483	6561054	1.5	33	4.1	0.3	13.3	9.6	22
	C000593	377407	6561132	1.5	26	4.3	0.3	11.7	9.7	20.8
	C000594	377344	6561194	1	34	4.2	0.3	11	8.7	18.8
	C000595	377275	6561273	0.9	23	4.4	0.3	11	7.7	19.8
	C000596	377197	6561337	1.1	21	4	0.3	10.8	7.7	18.3

Note, Au and Ag converted to ppb and As, Sb, Cu, Pb, Zn rounded to one decimal place.

Appendix B: 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	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 (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.*	**All Projects** • Rock chips were collected at random of in situ rubble, subcropping and outcropping bedrock material, or as float that are interpreted to represent the local geology. • Selection of rock chips samples was determined by their representation of potential alteration and mineralisation characteristic of the district. **North Cobar** • Soil samples were collected on predetermined lines at 50 metres spacing along the line. Two samples were collected at each sample site as part of the planned orientation soil survey, for submission to separate labs for comparison of analytical methods. • Soil samples were collected from a depth of approximately 0.3 metres below surface. Samples were sieved in the field to -2mm, with approximately 1kg of sample collected in calico bags.
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.).*	• Not applicable as drilling was not undertaken.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Method of recording and assessing core and chip sample recoveries and results assessed.* • *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 drilling was not undertaken.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	**All Projects** • Logging information is qualitative in nature, and quantitative for geochemical data. • Relevant information was recorded for each rock chip sample collected, including Sample ID, location, date, lithology, alteration, mineralisation, veining, sampler and comments.

		North Cobar • Relevant information was recorded for each soil sample site, including sample ID, location, date, landform, colour, particle size, depth, wet/dry, sampler and comments.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**North Cobar** • Soil samples were sieved to -2mm size fraction in the field, for submission to the assay laboratories. Soil samples were collected dry. • Soil sample field duplicates were collected at a ratio of 1 in 25 samples (~3%).
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	**All Projects** • Rock chip samples were prepared and analysed using the AuICP21 (Gold Fire Assay) and ME-MS61L (Four Acid Multi-element) digestion methods at ALS in Adelaide. AuICP21 lower detection limit for Au (0.001 ppm). Me-MS61L lower detection limit for Ag (0.002 ppm), As (0.02 ppm), Sb (0.02 ppm), Cu (0.02 ppm), Pb (0.01 ppm) and Zn (0.2 ppm). Rock chip samples were prepared at the ALS laboratory where samples were dried and pulverised to 85% passing 75µm. A sub-sample of approximately 200g was retained and a nominal 50g was used for analysis. The procedure is appropriate for this type of sample and analysis. • Internal QAQC was completed by the relevant assay laboratory on each batch of samples submitted. Results were acceptable. **North Cobar** • Soil samples were prepared and analysed for ME-MS41L (Super Trace Aqua Regia Multi-element) and pXRF-34 (Si, Ti, Zr) at ALS in Adelaide. ME-MS41L lower detection limits for Au (0.0002 ppm), Ag (0.001 ppm), As (0.01ppm), Sb (0.005 ppm), Cu (0.01 ppm), Pb (0.005 ppm) and Zn (0.1 ppm). pXRF-34 lower detection limits for Si (0.5 %), Ti (0.1%) and Zr (5 ppm). Soil samples were prepared at the ALS laboratory where samples were dried and pulverised to 85% passing 75µm. A sub-sample of approximately 200g was retained and a nominal 50g was used for analysis. These procedures are appropriate for this type of sample and analysis.

Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	**All Projects** • Assay results are verified by the Exploration Manager • In field data collection is with QField opensource software developed by OPENGIS.ch and recorded in notebooks. • Photographs of rock chip samples were taken at their collected location. • All data is backed up to Cloud storage. • No adjustments were made to the assay data.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	**All Projects** • Co-ordinate grid system across all projects is GDA94 MGA Z55. • Rock chip and soil sample locations were collected by handheld GPS, with an accuracy of ± 3 metres in Northing and Easting.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Not applicable as drilling was not undertaken.
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.* • *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 drilling was not undertaken.
Sample security	• *The measures taken to ensure sample security.*	• All rock chip and soil samples were collected and handled in the field by Lachlan Star employees. All samples were cable tied and labelled in polyweave bags as soon as was possible after collection and delivered to FedEx/TNT by Lachlan Star employees. Dispatch by FedEx/TNT was tracked through consignment note, with chain of custody maintained through delivery to the relevant assay laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• A review of the sampling techniques and assay quality has been completed internally. • Assay results for field duplicates, field and laboratory standards and blanks are all within the standard deviation for the sample type.

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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	**North Cobar** • All on ground activities were conducted on EL9051 and EL9520. • There are no registered heritage sites within the tenement. **Bauloora North** • All on ground activities were conducted on EL9448. • There are no registered heritage sites within the tenement. 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 Wales State Law including the Mining Act 1992. The Company has rural land access agreements over the majority of both tenements, with complete coverage over the work areas, reported in this release.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	**North Cobar** Intermittent exploration within EL9051 has been carried out since the late 1970s where Electrolytic Zinc focussed at the Burri prospect, located in the northwestern boundary of EL 9051, undertaking an aeromagnetic survey and identifying two anomalies. Gridding and auger geochemical sampling over the area returned no significant anomalies. Ground magnetics and IP were undertaken over the anomalies and the target was thought to be deep. Ground EM and gravity were also employed to constrain the target. A diamond drill hole was completed to 232m but did not encounter any mineralisation. In 1992 CRA Exploration drilled deeper at Burri to 399m but no anomalous geochemistry was returned, concluding that the source of the magnetic anomaly is from pyrrhotitic black shales within the basement Girilambone Group sediments. No source of the gravity anomaly was found. In 1995 Pasminco Exploration considered that the Burri magnetic anomaly was not sufficiently accounted for with historic drilling. They undertook reconnaissance grid lag sampling that outlined an arsenic-antimony gold anomaly and RAB drilling. DHEM on the CRA drill holes failed to return any drill targets. From 1980 – 1984 Getty Oil Development Company explored for gold, silver and Cobar & Elura style massive sulfide deposits in the southern area within EL 9051. They undertook gravimetrics, ground magnetics, IP and follow up percussion and diamond drilling, targeting gravimetric and some coincident IP anomalies. In 2007, Eastern Iron explored the southern area of EL 9051 for channel iron deposits drilling 27 air core holes on one palaeochannel which did not return significant iron or base metals to progress exploration further.

		Most recently (2021-23), DevEx Resources Ltd targeted the largely unexplored central-east area of EL 9051 for its potential to host gold-polymetallic mineralisation. DevEx compiled the historic exploration and synthesised this with the recent Geological Survey AEM survey data and identified 16 targets for prioritisation and follow up, prior to the October 2023 transaction with Lachlan Star. **Bauloora North** The tenement area of EL9448 has been void of any modern exploration activity. Mapping by the Geological Survey of New South Wales (GSNSW) indicated the Bethungra Formation extended to the north from the Bauloora Mine area, outcropping sporadically under Quaternary and Cenozoic cover.
Geology	• *Deposit type, geological setting and style of mineralisation.*	**North Cobar** The Cobar Basin is an inverted Late Silurian to Early Devonian basin within the Central Sub Province of the Lachlan Orogen. The basin is comprised of three deep water troughs (Cobar in the north, Mt Hope, and Rast in the south) flanked by coeval shallow water shelves (Winduck Shelf to the west and north, Walters Range and Mt Hope in the south and Kopyje Shelf on the eastern margin). These sediments unconformably overlie Cambro-Ordovician rocks of the Girilambone Group. The basin formed during a period of widespread back-arc extension and was accompanied by volcanism and emplacement of granitic plutons. It is interpreted to have evolved in two phases; 1. An early active syn-rift phase that was characterised by rapid deepening and active faulting. Sedimentation within the deep-water troughs is dominantly siliciclastic facies in the Cobar Trough to the north, and submarine volcanic facies to the south in the Mt Hope and Rast troughs. Subaerial volcanic components occur in the north and east of the basin. 2. A passive post-rift or sag phase which was characterised by less active sedimentation and the development of shelf facies. Basin inversion occurred in the Early Devonian due to northeast- southwest shortening, oblique to the Basin resulting in intense deformation in the eastern part of the basin with only very mild deformation in the west. Basin inversion was proceeded by the reactivation of syn-depositional faults: the different character of these faults being represented by the zonation of deformation across the Basin. The western margin of the Basin was inverted later in the Carboniferous with limited deformation. It is commonly accepted that mineralisation occurred as inversion of the basin took place. Mineral deposits in the Cobar Basin occur mainly within syn-rift phase sediments along a narrow corridor along the eastern edge of the basin. Most deposits close to the town of Cobar occur within the Nurri Group metasediments. The CSA and Elura (Endeavor) deposits are hosted within the lower part of the

		Amphitheatre Group and the Nymagee and Hera deposits within transitional sediments between the Mouramba Group and the lower Amphitheatre Group. **Bauloora North** The Bauloora North Project lies within the northern part of the Tumut Synclinorial Zone, a north-south trending basin of Early Paleozoic marine and volcanic sediments. These rocks form the Tumut Block, bound by the Gilmore fault zone to the west and the Cootamundra, Gundagai and Berthong faults to the east. During Silurian to Early Devonian compressional and extensional events (Benambran Orogeny ~445- 435Ma, Bindian event ~420-410Ma), sediments of the Tumut Block were overlain by felsic subaerial to submarine felsic volcanics. These volcanics have been deformed and intruded by S- and I-type granitoids. Volcaniclastic sediments and lavas of the Cootamundra Group (including the Cowcumbala Rhyolite and the basal Deep Gully Creek Conglomerate) were deposited during further extension in the early to middle Devonian. These rocks host low sulphidation epithermal mineralisation to the south of the tenement. These rocks were probably affected by the Middle Devonian Tabberabberan Orogeny (~390-380Ma), but they are only weakly deformed. Clastic quartzose sediments of the Hervey Group were deposited after the Tabberabberan Orogeny. They were gently folded during the final Kanimblan Orogeny (~360-340Ma). Although not recorded in geological maps across the tenement area, literature also mentions the emplacements of Jurassic lamprophyre dykes and alkali basalt magmatism in the Miocene.

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.*
	• *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.*
		• Not applicable as drilling was not undertaken.

Data aggregation methods	• *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.*	• Not applicable as drilling was not undertaken.

	• *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.*	
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 (e.g. 'down hole length, true width not known').*	• Not applicable as drilling was not undertaken.
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.*	• See Figures in release.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Not applicable as drilling was not undertaken.
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.*	• See release details.
Further work	• *The nature and scale of planned further work (e.g. 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.*	**North Cobar** • A program of induced polarisation geophysics and targeted grid-based soil sampling is scheduled for late June over the priority targets. **Bauloora North** • A program of targeted grid-based soil sampling is planned for the September Quarter, and the Company is assessing which geophysical methods will be appropriate to advancing the project.