

Unlocking the  
Earaheedy Basin's  
Next **BIG** Discovery



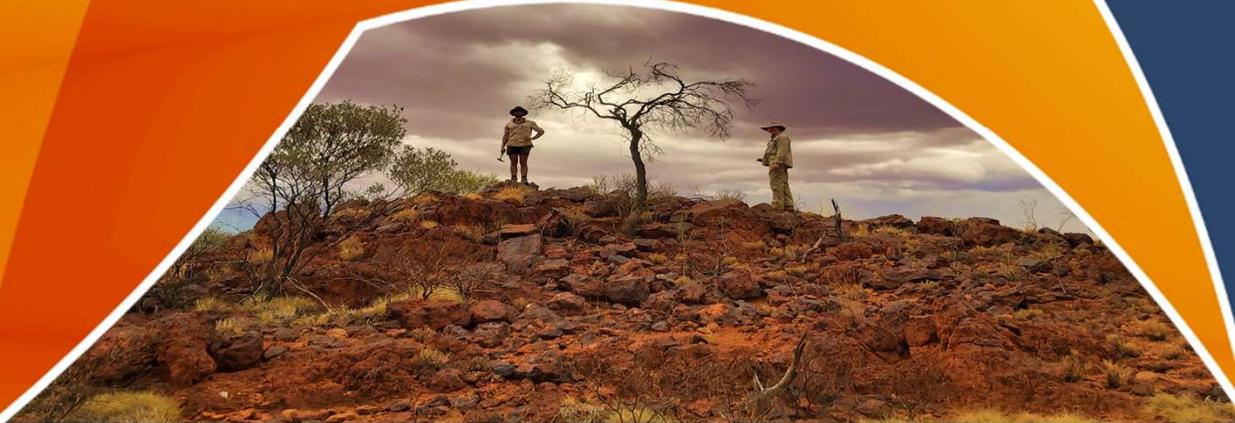
# LODESTAR

MINERALS

*Mining News Select  
Sydney Conference  
Presentation*

18 March 2024

ASX: LSR



# Important Notices



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## Competent Persons Statement

*The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr. Ed Turner, who is a Competent Person and a Member of the Australian Institute of Geoscientists. Mr. Turner is the Managing Director of Lodestar Minerals Limited. Mrs. Turner has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Turner consents to the inclusion in the report of the matters based on her information in the form and context in which it appears. The information in this announcement that relates to previously released exploration results was disclosed under JORC 2012 in the ASX announcements dated:*

- **Rumble Resources ASX announcement dated 19<sup>th</sup> April 2023**
- **Lodestar Minerals ASX announcement 15<sup>th</sup> Dec 2021**
- **Lodestar Minerals ASX announcement 10<sup>th</sup> July 2023**
- **Lodestar Minerals ASX announcement 23<sup>rd</sup> Dec 2022**
- **Lodestar Minerals ASX announcement 17<sup>th</sup> July 2023**
- **Lodestar Minerals ASX announcement 2<sup>nd</sup> August 2023**
- **Lodestar Minerals ASX announcement 7<sup>th</sup> August 2023**
- **Future Battery Minerals ASX announcement 24<sup>th</sup> August 2023**
- **Lodestar Minerals ASX announcement 23<sup>rd</sup> March 2024**

*These announcements are available to view on the Lodestar website. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. 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.*

## Board and Senior Management

### *Managing Director – Ed Turner*

- Geologist with 35 years of experience with listed public companies in exploration management, resource development, capital raisings, and commercial acquisitions and divestments
- This experience includes precious metals, base metals, uranium and lithium in Australia, Africa, Eastern Europe, and South America
- Recent positions include CEO of Galena Mining Ltd and Kingwest Resources Ltd

### *Non-Executive Chairman – Ross Taylor*

- Chartered Accountant and finance professional with extensive experience in global investment banking and financial markets
- Senior positions with Deutsche Bank, Bankers Trust and Barclays Capital
- Largest shareholder in Lodestar

### *Non-Executive Director – David McArthur*

- Chartered Accountant with broad range of experience in financial and corporate management of public listed companies gained over the past 30+ years

## Capital structure

ASX code	LSR
Shares on issue	2,023m
Options on issue	320m
Share price	0.2¢
Market capitalisation	A\$4m
Directors	7.2%
Top 20 shareholders	26%

### *Exploration Manager – Coraline Blaud*

- Geologist with 10 years' experience in the junior mining sector working across multiple commodities including base metals, precious metals, lithium and potash in Western Australia, Europe and Africa
- Significant experience in Greenfields exploration and Resource Definition including the Abra Base Metal Deposit (Galena Mining Ltd) and the Menzies Gold Project (Kingwest Resources Ltd)

# Earaheedy Project: Tier 1 Base Metal Jurisdiction

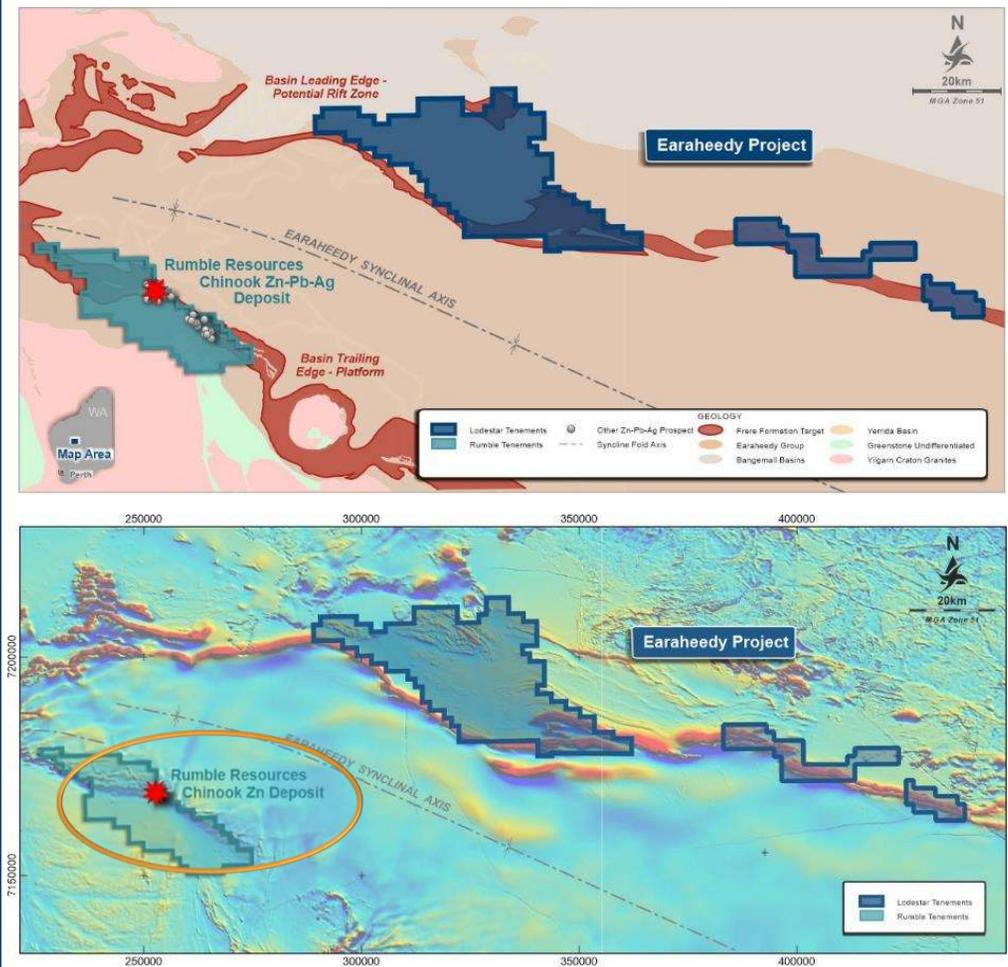


## The Right Location for Discovery

### Earaheedy has clear Tier-1 Base Metal potential:

- Zn-Pb-Ag targets on the same geological setting as Rumble Resources Chinook Discovery (94Mt @ 3.1% Zn+Pb and 4.1 g/t Ag)<sup>2</sup>
- Lodestar now has >100km strike length<sup>1</sup> of the targeted Yelma-Frere unconformity within its tenements – the same geological setting as Rumble’s Tier 1 Zn-Pb-Ag Chinook Deposit
- Emerging Earraheedy metallogenic terrane, same age as DeGrussa (Cu)
- Copper in historical drilling at Main Gossan intersected *2m at 4.65% Cu and 3m at 1.97% Cu*<sup>3</sup>

1. See Rumble Resources ASX release dated 19<sup>th</sup> April 2023  
2. See Lodestar Minerals ASX release dated 10<sup>th</sup> July 2023  
3. See Lodestar Minerals ASX release dated 15<sup>th</sup> December 2021



# Earaheedy Project: *Recent Exploration Recap*



## *New Targets Highlight Scale and Prospectivity*

- 16 new large base metal anomalies (Cu, Pb, Zn, Co) defined in first pass geochemical soil sampling
- New anomalies cover in excess of 100km of strike length and 30km strike width
- Despite the extent of sampling completed to date, LSR has only sampled approximately half of the Earaheedy Project area, so further high-quality targets are expected to be identified in the near-term
- 3 diamond core holes and one RC hole comprising 1,093.4m completed in Q4 2023 to follow up the significant RC drilling gold and base metal intersections
- New drill targets currently being defined for next phase of drilling in Q2 2024



# Earaheedy Project: *Early Drilling Success*



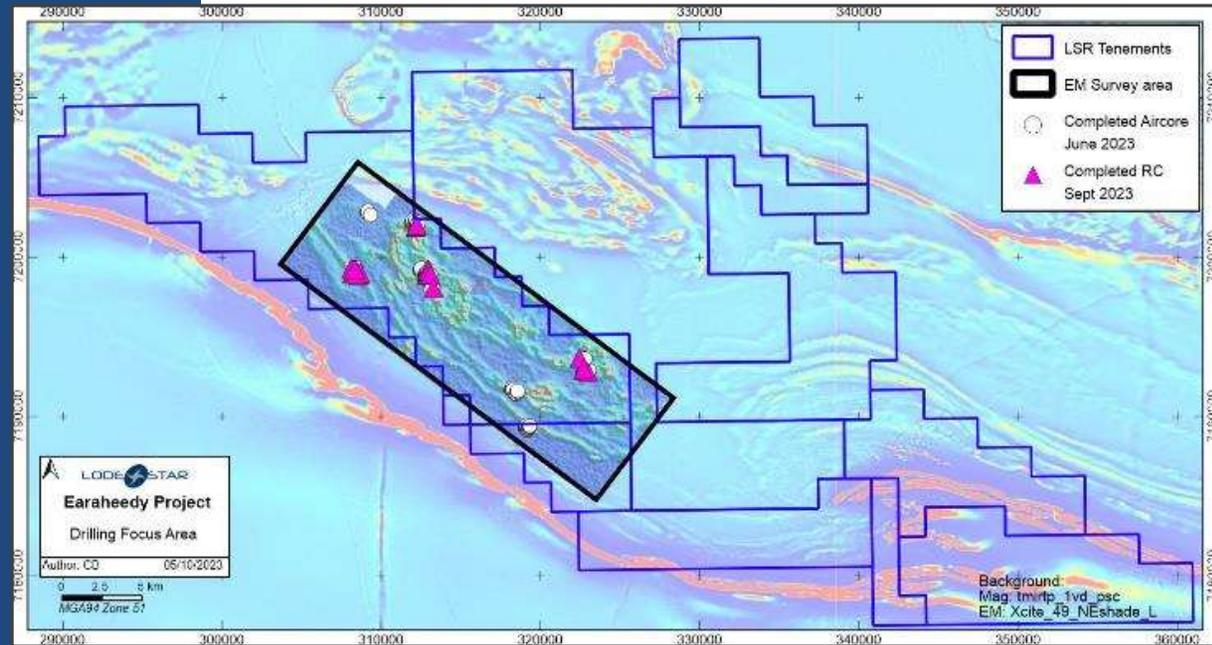
## *Drilling Highlights Significant Underlying Potential*

### Primary Cu-Au drilling targets

- Maiden 5,000m aircore drilling successfully tested coincidental EM and soil anomalies<sup>4</sup>
- **Follow up of 4,000m RC drilling intersected significant Au, Cu and Zn**
- Majority of the EM conductors lie under sand cover with no previous drilling

### Additional Base Metal targets

- Soil sampling programmes recently delineated 16 major anomalous areas over previously unexplored areas<sup>5</sup>

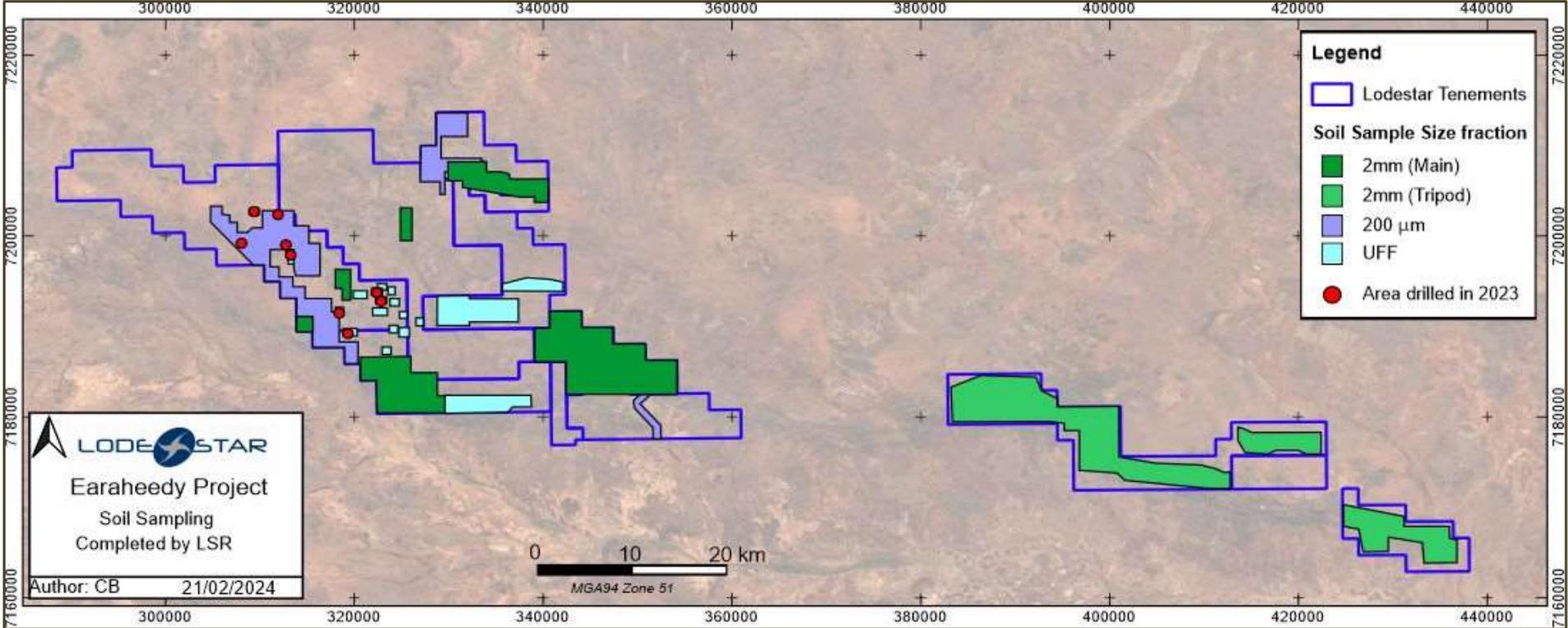


4. See Lodestar Minerals ASX release dated 23<sup>rd</sup> December 2022  
5. See Lodestar Minerals ASX release dated 26<sup>th</sup> February 2024.

# Earaheedy Project: *New High Quality Targets*

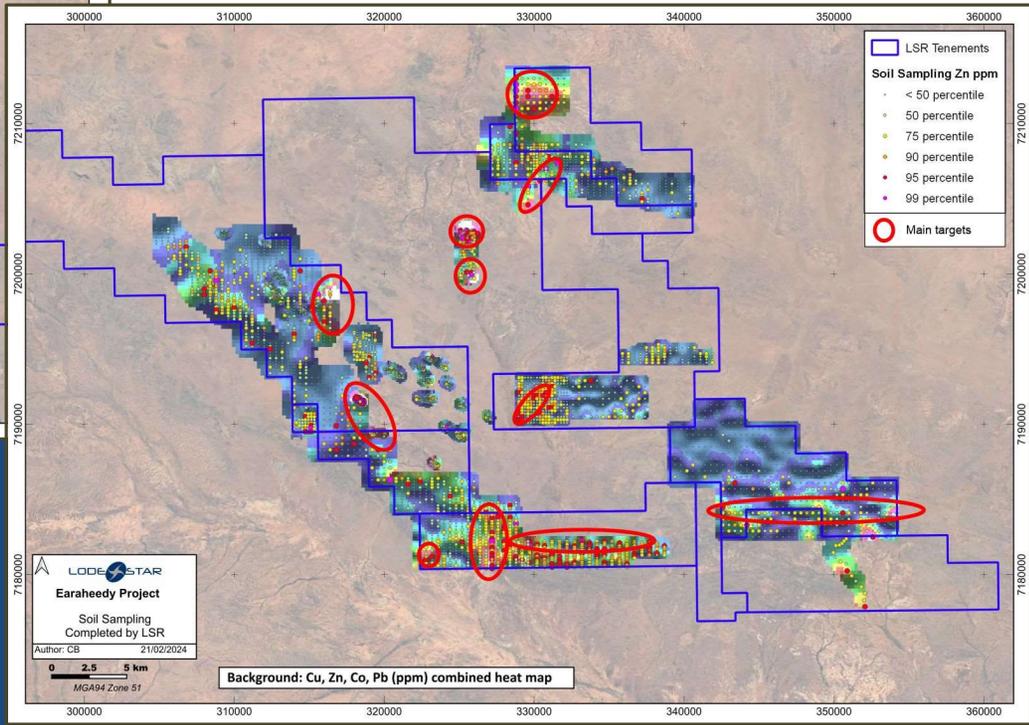
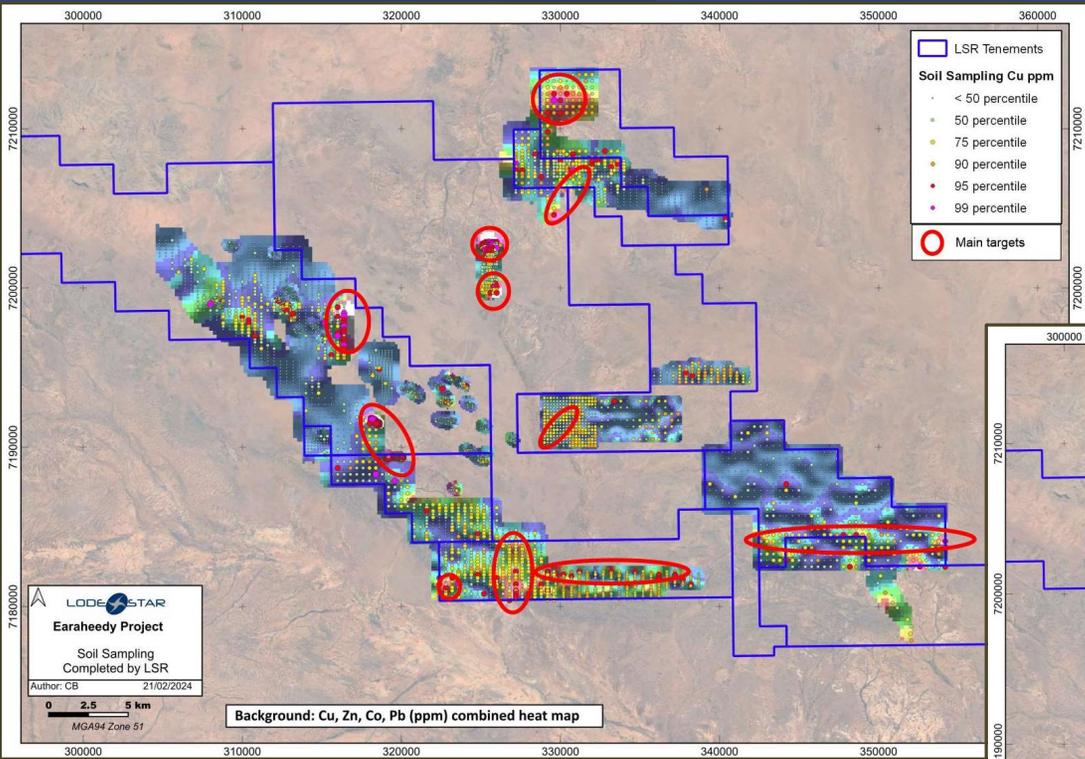


**16 new large Cu, Pb, Zn, Co anomalies covering 100km of strike length and 30km strike width defined in first pass geochemical soil sampling<sup>6</sup>**



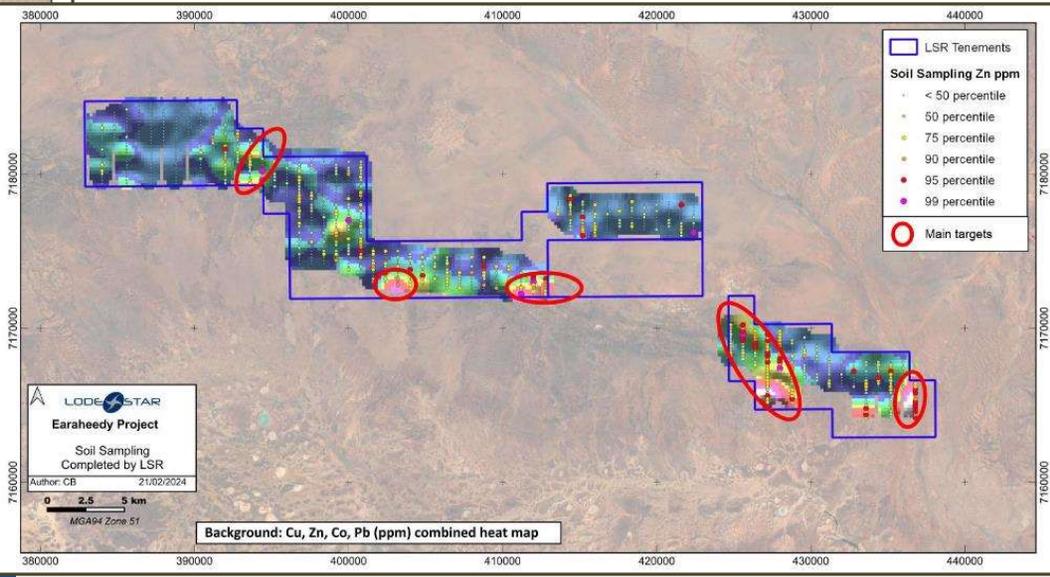
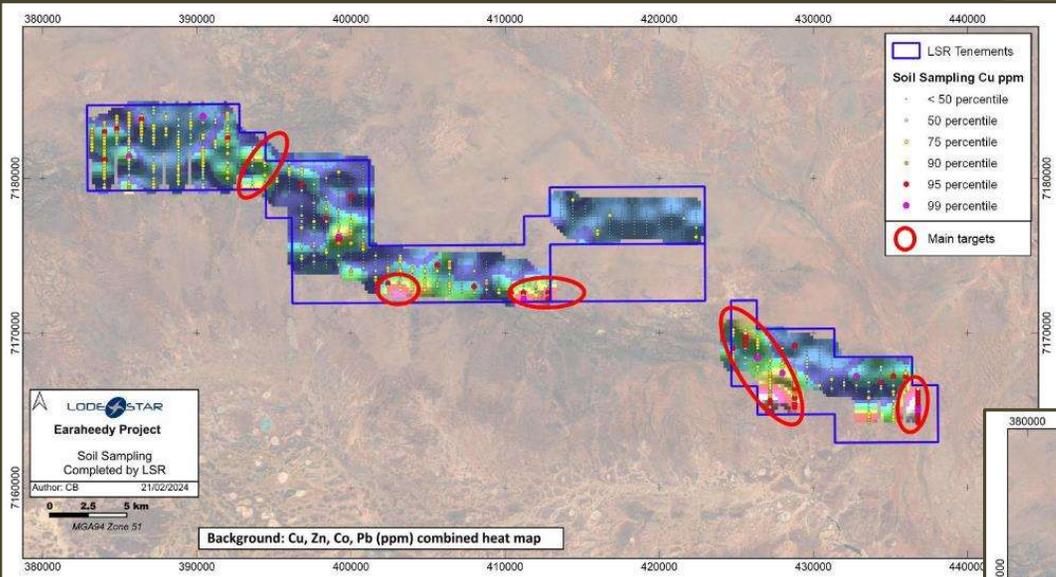
6: See Lodestar Minerals ASX release dated 26<sup>th</sup> March 2024.

# Earaheedy Project: High-Quality Targets



*Cu and Zn results on background heat map of combined Cu, Zn, Co and Pb values in Earaheedy Main Project Tenement Area*

# Earaheedy Project: High-Quality Targets



*Cu and Zn results on background heat map of combined Cu, Zn, Co and Pb values in Tripod Tenement Area*

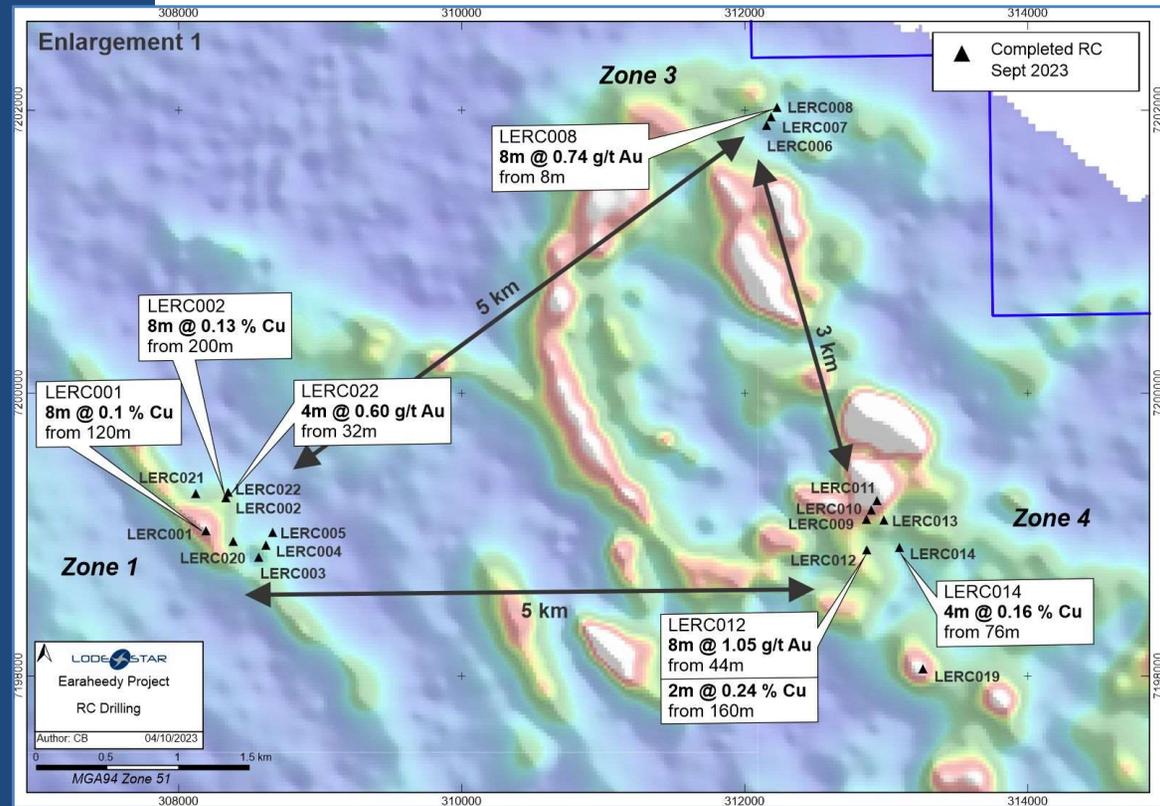
# Earaheedy Project: Encouraging Au and Cu Results



## LSR Maiden Drilling Intersects Gold Mineralisation for First Time

- Encouraging drill hits included intersections of  $>0.2$  g/t Au in three of the seven targets drilled<sup>7</sup>
- These three targets are spread over an area at least 5km x 3km in size
- Best intersections to date included:
  - 7m @ 1.03 g/t Au from 36m (EOH) in LEA0008 and
  - 8m @ 1.05 g/t Au from 44m in LERC012

*“This is the first time that any explorer has intersected significant gold in the project area and to do so at multiple targets demonstrates the potential scale of the mineralised system or systems.”*



7. See Lodestar Minerals ASX release dated 17<sup>th</sup> July 2023.

# Strategic Exposure: *Future Battery Minerals*



3.6% strategic shareholding, up to 12% on milestone

## A new LCT Pegmatite Discovery

- Future Battery Minerals (FBM) owns the Kangaroo Hills Lithium Project in WA and the Nevada Lithium Project in the USA
- Kangaroo Hills is 25km south of Coolgardie, and FBM's main project
- LSR has 27.5M Performance Rights convertible upon FBM proving a Mineral Resource (MRE) of >10Mt @ 1.0% Li<sub>2</sub>O<sup>8</sup>



8. See Lodestar Minerals ASX release dated 7 August 2023

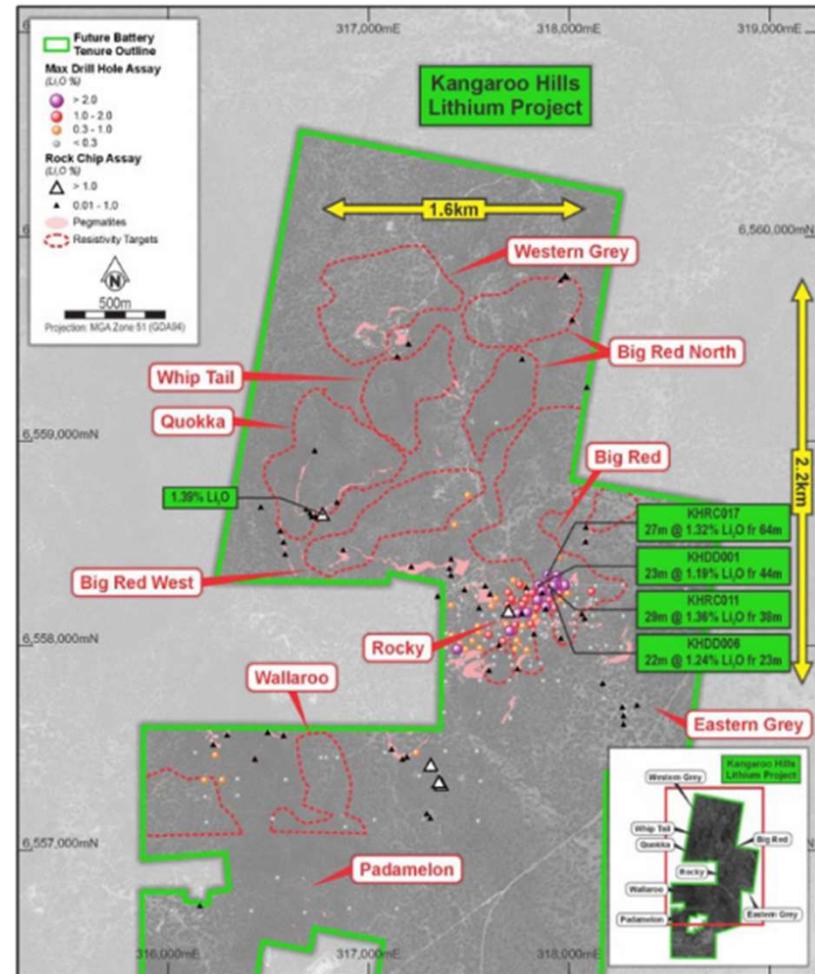
# Emerging Lithium: Kangaroo Hills Lithium Project



## Advancing towards an economic Resource

- Phase 3 drilling has extended the mineralized pegmatite footprint to more than 1km x 1 km
- Proven the size potential after intersecting stacked sets of mineralized pegmatites<sup>9</sup>
- Average thickness of Big Red is 20m
- This included:
  - 29m @ 1.36% Li<sub>2</sub>O from 38m (KHRC011)
  - 27m @ 1.32% Li<sub>2</sub>O from 64m (KHRC017)
  - 19m @ 1.03% Li<sub>2</sub>O from 42m (KHRC015)
- Numerous IP resistivity targets ready to be drill tested

9. See Future Battery Minerals ASX release dated 24 August 2023.





## **Why Invest in Lodestar Now?**

- ✓ *Systematically unlocking value from 100% owned Earaheedy Project, located within one's of WA's most under explored and prospective Base Metal provinces*

### **Busy news flow pipeline over next 6 months:**

- *Closer spaced infill geochemical soil sampling for the 16 new base metal targets is underway*
  - *First pass geochemical soil sampling for the remaining highly prospective - but untested areas - to commence imminently*
  - *New drill targets set to be delineated for next round of drilling in H1 2024*
- ✓ ***Lithium exposure via FBM shareholding: FBM making rapid progress at the Kangaroo Hills and Nevada Lithium Projects***

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