

#### **ASX / MEDIA ANNOUNCEMENT**

19 MARCH 2024

### MOUNT IDA LITHIUM PROSPECT – GEOCHEMICAL DRILLING REVIEW

#### **HIGHLIGHTS**

- The results from both Phases 1 and 2 of the drilling campaigns were geochemically evaluated using the Prospectively and the Fertility Index.
- The evaluation has confirmed the lithium prospect is a fertile LCT mineralised environment.
- Phase 1 drilling dominantly intersected beryl-columbite pegmatites.
- Phase 2 drilling intersected albite pegmatites.
- The lithium rich LCT pegmatites lie outboard of the current drilling and away from the granite pluton.
- The next phase of exploration currently being evaluated.

Juno Minerals Limited (ASX: JNO) ('Juno' or 'the Company') is pleased to announce that the two phases of drilling data have been geochemically modelled. The Phase 1 drilling tested geological structure and the Phase 2 drilling tested the northern and southern soil anomalies to evaluate the potential for shallow subsurface Lithium Caesium and Tantalum (LCT) pegmatite developments as shown in Figures 1 and 2 respectively. The drill sample multi element results have subsequently been independently evaluated by a geochemist using the both the Prospectively and Fertility Index, "Evaluation of Phase 1 & Phase 2 LCT focused drilling, Mt Ida".

The Prospectively Index incorporates all the LCT elements (Li, Be, Nb, Ta, TI, and Sn) along with the granitic lithic elements (Al, K, Rb, Ga) and greenstone lithic elements (Mg, Cr). The purpose of the Prospectively Index is to identify areas related to true pegmatites and filter out false anomalies due to scavenging in a near surface environment.

The Fertility Index is  $[(Rb/K) \times 10]$  informs position within the granite-pegmatite system, with the closer to unity (1) the better the fertility.

The interpretation on the available data, has confirmed that the drilling has intersected LCT pegmatites, with Phase 1 dominantly intersecting beryl-columbite pegmatites, proximal to a granite, and Phase 2 intersecting albite pegmatites. The drilling has confirmed that the Mount Ida Lithium Prospect is a fertile LCT mineralised system, with the lithium rich LCT pegmatites lying outboard of the current drilling and away from the granite pluton in a north easterly vector as shown in Figure 3.



The next phase of exploration is currently being evaluated, which will most likely involve soil sampling on a tight spaced grid to the east of the Phase 2 drilling where the soil sampling was on a 400m grid. This will add further geochemical information to the data set to target lithium rich LCT pegmatites.



Figure 1: Northern anomaly completed drill positions on geochemical soil anomalies



Figure 2: Southern anomaly completed drill positions on geochemical soil anomalies



Figure 3: Geochem analysis and interpretation of drilling data

The geochemical evaluation of the Phase 1 and Phase 2 drilling have confirmed that the Mount Ida Lithium Prospect is a fertile LCT pegmatite system. The drilling has substantially added to the Prospect's data set and will inform the next exploration phase to target lithium rich pegmatites.

The Prospect doesn't have walk up outcropping lithia rich pegmatite targets, as such under cover exploration techniques are required. Juno will continue with a pragmatic and systematic approach to cost effective exploration on its Prospect. The Mt Ida region is an emerging area of interest for lithium exploration with Juno having a significant tenure position within the region.

This announcement has been approved for release by Greg Durack on behalf of the Board.

#### **CONTACTS**

Investor Relations Greg Durack – Managing Director and CEO P: + 61(0)8 9346 5599 E: investorrelations@junominerals.com.au



#### **APPENDIX 1 – Juno's Central Yilgarn Project with Mount Ida Lithium Prospect**

### 1 – Mount Ida Lithium Prospect: Summary

### Summary

- Drilling has intersected LCT pegmatites. Interpretation based on available data indicates:
  - Phase 1 dominantly intersected beryl -columbite pegmatites (Nb > Ta) proximal to a granite and forming at temperatures ~ 600 -650 C. In addition, Phase 2 intersected beryl -columbite at JUN 001
  - Phase 2 intersected albite pegmatites Ta -Nb, Be ±Sn at JUN\_007 and indicate the presence of a flux -rich, highly fractionated magma related to a large pluton volume and forming at ~500 -550 C
  - Lithium rich LCT pegmatites lie outboard of the current drilling and away from the granite pluton.



2 - Mount Ida Lithium Prospect: LCT Pegmatites – Drilling Phase 1 and Phase 2 positions

### LCT Pegmatites: Pluton related?

Туре	Subtype	Family Geochemical Signature		
Complex	Spodumene	LCT	Li, Rb, CS, Be, Ta-Nb, (Sn, P)	
	Petalite	LCT	Li, Rb, CS, Be, Ta-Nb, (Sn, P)	
	Lepidolite	LCT	Li, Rb, CS, Be, Ta-Nb, (Sn, P)	
	Elbaite	LCT	Li, Rb, Sn, (Ta, Be, Cs)	
	Amblygonite	LCT	Li, Rb, CS, Ta-Nb, Be, (Sn)	

REL Class, Complex type (LCT's) 510 C — —

REL Class, REE subclass & Li subclass, beryl type 550 C — — —

Туре	Subtype	Family	Geochemical Signature	Dhace 1 drilling
Beryl	Beryl-Columbite	LCT	Be, Nb-Ta, (+/- Sn)	
Beryl	Beryl-Columbite Phosphate	LCT	Be, Nb-Ta, P, (Li, +/- Sn)	
Albite-Spodumene		LCT	Li, (Sn, Be, Ta-Nb)	Dhase 2 drilling
Albite		LCT	Ta-Nb, Be, (Li, +/- Sn)	Phase 2 unung

This is a fertile / mineralized environment.



©Juno Minerals 13/03/2024 100-02

3 - Mount Ida Lithium Prospect: Ta vs Nb (pegmatites only)

### Ta vs Nb (pegmatites only)



A very distinct and different Ta -Nb distributions from Phase 01 vs Phase 02 drilling.

4 - Mount Ida Lithium Prospect: Fractionation of pegmatites

### Fractionation of pegmatites FI\_LCT : NbTa\_ratio Phase01 Phase02 beryl-columbite NbTa\_ratio Phase01 10 Phase02 NbTa\_ratio Target NhTa\_min Region 0.1 0.2 Complex pegmatites<sup>2</sup> FI\_LCT [Locked]

FI\_LCT = Fractionation Index ([(Rb/K) x 10]

5 - Mount Ida Lithium Prospect: Local Vectors

### Local Vectors

- The regional trends are also present at a local level.
  - For example 23MIRC15 appears to intersected beryl-columbite pegmatites whilst 23MIRC25 intersected albite pegmatites.
- This would suggest there is little room at JUN\_007 for a significant Li-rich LCT pegmatite.
  - Regionally the Li-rich LCT pegmatite will lie outboard of JUN\_007.





6 - Mount Ida Lithium Prospect: 23MIRC15 Nb, Ta, Be & +/-Sn

### 7 - Mount Ida Lithium Prospect: 23MIRC15 Rb, Cs, TI, K

23MIRC15

#### Li\_ppm Gast-Ultramafic Gast\_Mafic Barren Fractionated Fertile Pegmatite a effect.





8 - Mount Ida Lithium Prospect: 23MIRC15 Rb, Li



9 - Mount Ida Lithium Prospect: 23MIRC15 Li



Note elevated Li in greenstone not in pegmatite.

**10 - Mount Ida Lithium Prospect: 23MIRC25** LCT Elements – Albite Pegmatite

# 23MIRC25. All LCT elements elevated within pegmatite (albite pegmatite)



Li\_ppm

Barren
 Fractionated
 Fertile

🔴 Pegmatite

Gnst-Ultramafic
Gnst Mafic



11 - Mount Ida Lithium Prospect: 23MIRC25 LCT Elements – Albite Pegmatite

### 23MIRC25. All LCT elements elevated within pegmatite (albite pegmatite)



Li\_ppm

Barren Fractionated

Fertile

Gnst-Ultramafic Gnst Mafic

Page | 17

**12 - Mount Ida Lithium Prospect: Distribution of Pegmatites** 

## Distribution of pegmatites

