

26 April 2023

## MAIDEN DRILLING CAMPAIGN COMMENCES AT HIGHLY PROSPECTIVE NEVADA LITHIUM-CLAY PROJECTS

Astro's projects located in the heart of the USA's premier emerging lithium district

#### **Key Highlights**

- Maiden 4,000ft (1,220m) air-core drilling campaign commences at Polaris and Altair.
- Projects located south of Nevada's highly prospective Big Smoky Valley lithium district.
- This district is one of the world's hot spots for lithium exploration, with recent activity including:
  - American Battery Technology Corporation's (OTCMKTS: ABML) announced
     15.8Mt Lithium Carbonate Equivalent (LCE) Inferred Mineral Resource Estimate for its Tonopah Flats Lithium Clay Deposit<sup>1</sup>.
  - Exploration drilling currently underway at Pan-American Energy's (OTCMKTS: PAANF) Horizon South project, immediately north of Astro's Polaris Project<sup>2</sup>.
  - Future Battery Minerals' (ASX: FBM) lithium-clay discovery, including an intercept of 109.7m @ 766ppm Li from 135.6m³.
- Both of Astro's projects are located near outcropping tertiary sedimentary host rock units that are known to host claystone lithium deposits around Nevada, including loneer's (ASX: INR) Rhyolite Ridge Project<sup>4</sup> and Lithium America's Thacker Pass deposit – the largest lithium deposit in North America<sup>5</sup>.

Astro Resources NL (ASX: ARO) ("**ARO**", "**Astro**" or "**the Company**") is pleased to advise that its North American lithium growth strategy is rapidly accelerating, with the commencement of its maiden drilling campaign targeting lithium-in-clay mineralisation in Nevada, USA.

Drilling has commenced as part of the Company's maiden 8-hole, 4,000ft (1,220m) air-core program at the recently staked Polaris and Altair Lithium Projects.

The projects are located in the southern extent of the Big Smoky Valley, south-west of the township of Tonopah, in the heart of one of the world's most active lithium exploration districts.

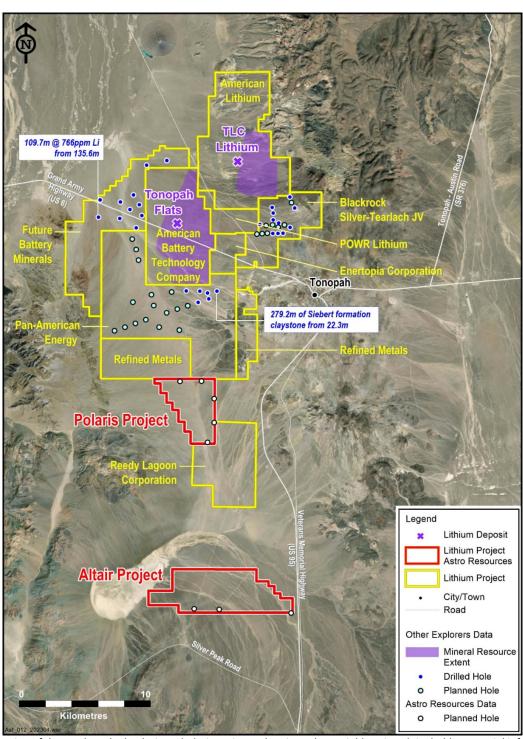
The project locations were staked following a systematic review of regional open file data, such as mapped geology, topography, stream sediment geochemistry, land administration and an assessment of suitable claim-free areas.

Nevada hosts a number of large claystone-hosted lithium deposits and is home to North America's only lithium mining operation, Albermarle's Silver Peak lithium brine operation. Other major deposits

in the district include Ioneer's (ASX: INR) Rhyolite Ridge Project and Lithium America's Thacker Pass deposit, the largest lithium deposit in North America.

### Astro Executive Chairman, Tony Leibowitz, said:

"I am very pleased to see the rapid progress being made by our team in executing our lithium exploration strategy in North America. The maiden drilling campaign will provide early insight into the lithium production potential of the Polaris and Altair Projects, situated in what is a highly sought-after lithium district."



**Figure 1.** Location of the newly staked Polaris and Altair Projects, showing select neighbouring claim holders, spatial inferred mineral resource extents, planned drilling and recent exploration drill results reported.

#### **Recent Exploration Activity in the Region**

The broader Big Smoky Valley region has been the focal point of significant lithium exploration activity over the past six months.

There are two lithium claystone Mineral Resources in the valley, including American Lithium Corporation's (TSX.V: LI) 9.79Mt LCE measured and indicated category TLC Lithium Project<sup>6</sup>, and American Battery Technology Corporation (OTCMKTS: AMBL) 15.8Mt LCE inferred category Tonopah Flats project<sup>1</sup>.

Other earlier stage exploration drilling has been, and continues to be, undertaken, with drilling campaigns conducted by Future Battery Minerals (ASX: FBM), Tearlach Resources Limited (TSX: TEA)<sup>7</sup> and Pan-American Energy (OTCMKTS: PAANF) with a drill campaign currently underway.

Recently reported results include Future Battery Minerals intersecting lithium claystone mineralisation of 109.7m @ 766ppm Li from 135.6m³, and Pan-American Energy intersecting 279.2m of prospective Siebert Formation claystones in drilling on a project to the immediate north of Astro's Polaris Project².

The significant level of exploration activity, and the positive results being reported by other explorers in the vicinity, is a testament to the highly prospective nature of the region and, by extension, the inherent potential of Astro's Polaris and Altair Projects.

#### **Polaris and Altair Projects**

The Polaris and Altair Projects are located proximal to outcropping tertiary sedimentary host rock units (the Ts3) that are known to host claystone lithium deposits around Nevada.

These include Ioneer's (ASX: INR) DFS-stage Rhyolite Ridge project<sup>4</sup> (US\$1.265B after-tax NPV) and Lithium America's 16.1Mt Lithium Carbonate Equivalent (LCE) Thacker Pass deposit – the largest lithium deposit in North America<sup>5</sup>.

#### **Claystone Lithium Deposits**

Claystone hosted deposits differ from hard-rock pegmatite deposits (such as are common in Australia) in that they form in soft rocks, with a semi-tabular shape that can be both strike extensive and thick.

If situated at surface or under shallow cover, this tabular morphology may facilitate low strip-ratio mining. Processing of ore from claystone hosted deposits does not require roasting and is therefore less energy intensive.

These differences result in lithium claystone projects having lower production costs than most hard-rock spodumene projects<sup>4,5</sup>.

#### Astro Drill Campaign

The Company's maiden air-core drill campaign will comprise five holes at the Polaris Project and three holes at the Altair Project for a combined 4,000ft (1,220m) of drilling.

The vertical-hole campaign is designed to test for lithium mineralisation in prospective Siebert formation claystone host rocks, which hosts two lithium mineral resources north of Astro's projects.

The drilling is designed as an early 'scout' program to establish the presence of lithium-in-clay mineralisation at strategic locations on the project areas, with results to dictate subsequent exploration drilling at the project.

Subject to ground conditions, the drilling campaign is expected to be completed by mid-May, with assay results expected by mid-July.



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Plan ID	East (NAD83)	North (NAD83)	Depth (feet)
PL01	471408	4206540	500
PL02	472375	4205201	500
PL03	471870	4201873	500
PL04	472382	4203385	500
PL05	469782	4206523	500
AL01	470861	4189184	500
AL02	478236	4188869	500
AL03	472767	4189133	500

Table 1. Planned hole details.

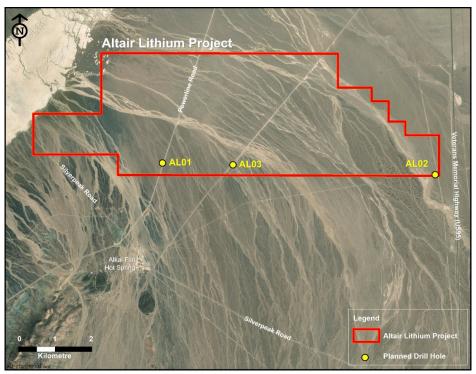
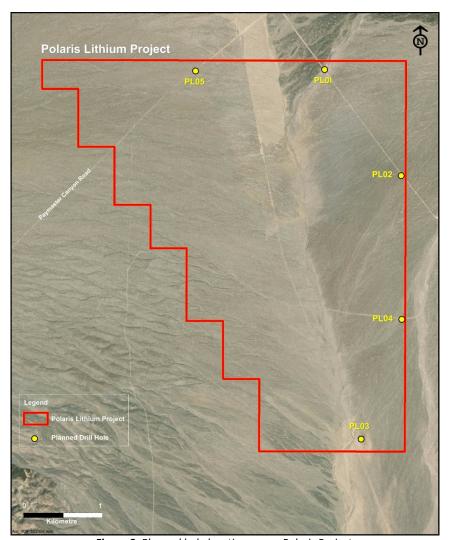


Figure 2. Planned hole location map – Altair Project.



**Figure 3.** Planned hole location map – Polaris Project.

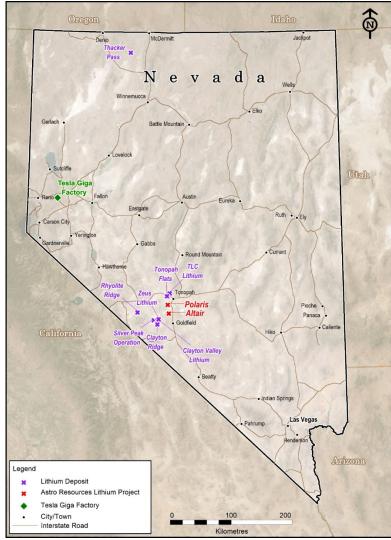


Figure 2. Astro Project Locations and major lithium resources of Nevada.

#### **Authorisation**

This announcement has been authorised for release by the Board of Astro.

#### **More Information**

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<sup>&</sup>lt;sup>1</sup> OTCMKTS: ABML 26 February 2023 'Technical Report Summary For The Tonopah Flats Lithium Project, Esmeralda..'

<sup>&</sup>lt;sup>2</sup> OTCMKTS: PAANF 22 March 2023 'Pan American Energy Provides a Midway Update on the Horizon Lithium Phase One Drill Program'

<sup>&</sup>lt;sup>3</sup> ASX: FBM 13 April 2023 'High-grade lithium claystone discovered in Nevada'

<sup>&</sup>lt;sup>4</sup>ASX: INR 30 April 2020 'Ioneer Delivers Definitive Feasibility Study.'

<sup>&</sup>lt;sup>5</sup>TSX: LAC 31 January 2023 'GM and Lithium Americas top Develop US-sourced Lithium Production'

<sup>&</sup>lt;sup>6</sup> TSX.V:LI 17 March 2023 'Tonopah Lithium Claims project NI 43-101 technical report – Preliminary Economic Assessment'

<sup>&</sup>lt;sup>7</sup>TSX: TEA 6 April 2023 'Tearlach Completes Phase 1 Drill Program at Gabriel Lithium Project in Nevada...'

### **Competent Person**

The information in this report is based on information compiled by Mr Richard Newport, principal partner of Richard Newport & Associates - Consultant Geoscientists. Mr Newport is a member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person under the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Newport consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.