ASTUTEMETALSNL

27 October 2023

SEPTEMBER 2023 QUARTERLY REPORT

Active quarter sees substantial progress in Astute's critical minerals strategy

HIGHLIGHTS

Lithium Projects, Nevada USA

Altair Project

- **First hole in maiden program intersected two zones of significant lithium 1mineralisation:**
  - **33.5m @ 481ppm Li from 80.8m and 33.5m @ 508ppm Li from 147.8m (AL01)**
  - **Hole ended in lithium 1mineralisation, indicating further potential beyond hole depth.**
- **Mineralisation occurs within regionally significant Siebert formation claystone, known to host lithium deposits.**

Cobre Project

Staking of the Cobre Project completed, with mapped Ts3 sedimentary host rocks prospective for lithium clay mineralisation and soil sample results of up to 1,640ppm Li.

Red Mount Project

- **Staking of the Red Mountain Project completed, containing mapped Ts3 sedimentary host rocks.**

Governor Broome Mineral Sands Project, WA

Acquisition of Fouracres

- **Acquisition of Retention Licence R70/22 (the "Fouracres Deposit") completed, located along strike from the Jack Track Heavy Mineral Deposit.**
- **Indicated Resource of 0.72Mt @ 11.4% HM and Inferred Resource of 0.22Mt @ 3.6% HM.**
- **High-value Heavy Mineral suite comprising 75% ilmenite, 3% secondary ilmenite, 4% leucoxene/rutile and 8% zircon for a valuable HM content of 90%.**

Completion of Wet and Dry Plant testwork program

- **Testwork program completed on 2t bulk sample from the cornerstone Jack Track deposit.**
- **Successful processing using conventional mineral sands processing techniques delivered a high 85.5% recovery to produce a concentrate with an HM grade exceeding 90%.**
- **Ilmenite, Rutile and Zircon products produced using conventional methods, with additional Monazite (rare-earth element mineral) concentrate by-product.**

Scoping Study

- **Highly-regarded international mineral sands consultancy group, TZMI, appointed to undertake the Governor Broome Scoping Study, which is on track for completion in Q1 2024.**

Georgina Basin

- **ExoSphere Ambient Noise Tomography (ANT) Survey underway to delineate structural features and identify zones of potential IOCG alteration to assist with drill targeting.**

Corporate

- **$3.403M raised through completion of "Tranche 2" and placement to Holdmark Property Group.**
- **Shareholders approve change of name from "Astro Resources" to "Astute Metals".**

Astute Metals NL (ASX: ASE) ("ASE", "Astute" or "the Company") is pleased to report on exploration and development activities across its projects in Australia and the USA for the period ended 30 September 2023.

Lithium Projects

Background

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[3] and Lithium America's Thacker Pass deposit, the largest lithium deposit in North America[4] (Figure 1).

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 [3,4].

Altair and Polaris Projects

The Altair and Polaris Projects were staked by the Company in Q3 2022 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. The projects are located in the southern extent of the Big Smoky Valley, south-west of the township of Tonopah, Nevada, in the heart of one of the world's most active lithium exploration districts. Close to the projects, the Siebert formation (Ts3) hosts large claystone lithium deposits, including American Battery Technology Corporation's (OTCMKTS: ABML) 15.8Mt Lithium Carbonate Equivalent (LCE) Inferred category Tonopah Flats Lithium Clay Deposit[1] and American Lithium Corporation's (TSX.V: LI) 9.79Mt LCE Measured and Indicated category TLC Lithium Project[2] (Figure 2).

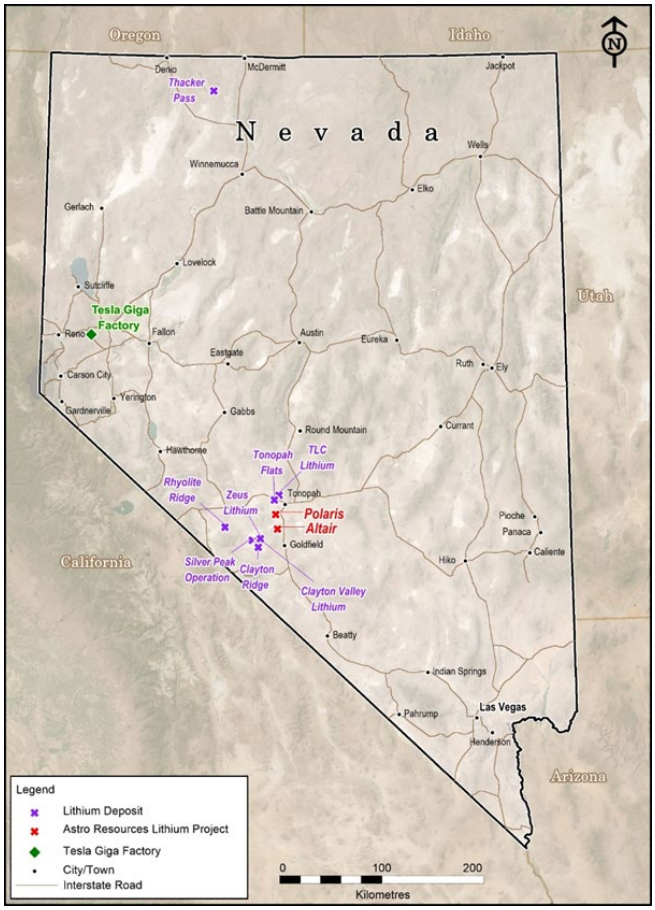

Figure 1. Project locations and lithium deposits.

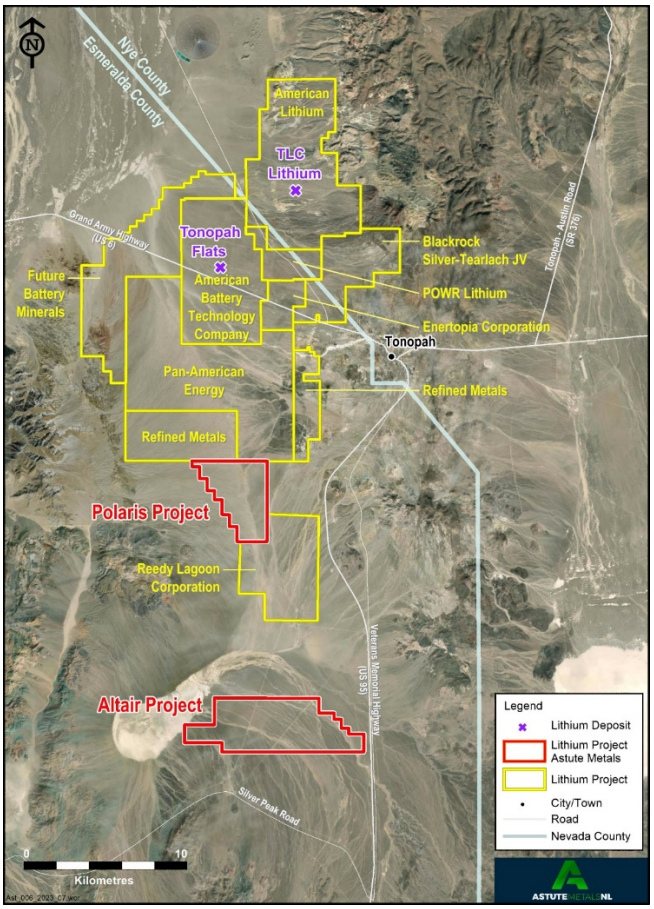

Figure 2. Project locations and select neighbouring projects

Work During the Quarter

The Company embarked on its maiden scout drill campaign over Q2-Q3 2023, exploring for lithium mineralisation within the Siebert formation claystone under alluvial (gravel) cover at the two projects. Initial drilling was successful, confirming the presence of lithium-bearing claystone at Polaris and a thick intersection of Siebert formation claystone in the first hole at Altair[4].

Drill Results

Drill-hole AL01 at Altair was drilled to a total depth of 181.4m, ending in Siebert formation claystone. It intersected 109.7m of Siebert Formation that contained two significant zones of lithium mineralisation, with the final, end-of-hole sample grading 585ppm Li, indicating further potential for lithium beyond the current drill-hole depth.

Assays from the drill-hole, reported at a 300ppm Li intersection cut-off (with allowance for 5ft of internal dilution) are:

- **33.5m @ 481ppm Li from 80.8m** (265ft); and
- **33.5m @ 508ppm Li from 147.8m** (485ft) to End-of-Hole (181.4m/595ft)

The two intersections are both hosted mostly by blue-green claystones, and are separated by a lower-grade zone dominated by clayey gravels (Figure 3). Both intersections lie within a broader lower-grade envelope of 109.7m @ 389ppm Li that constitutes the full Siebert formation claystone intersected by AL01.

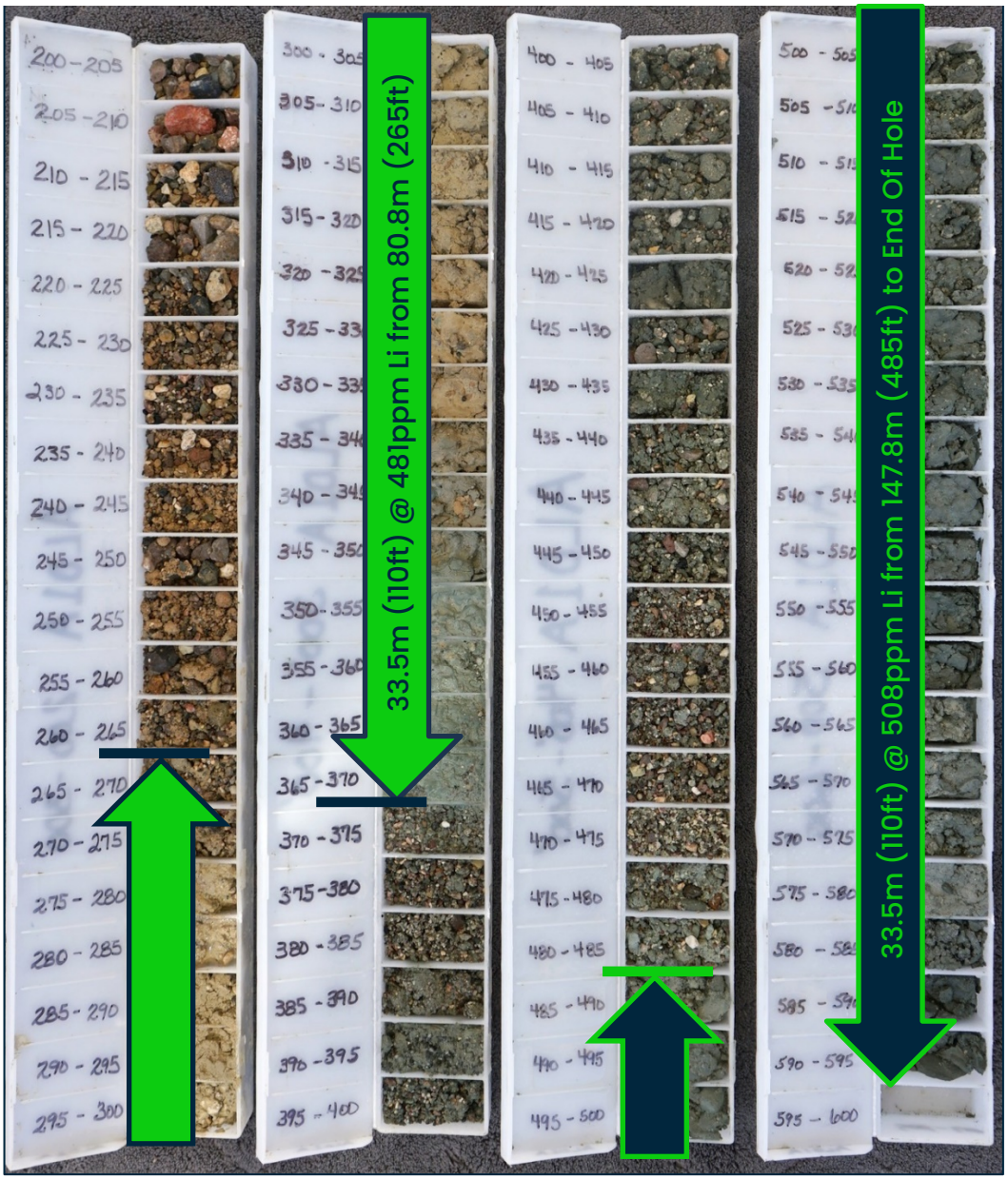

Figure 3. Chip tray samples at 5-foot (Approx. 1.5m) depth intervals from Altair drill-hole AL01 and colour-coded arrows indicating zones of lithium mineralisation.

In addition to the results from AL01, assay results were also returned for PL04A, the re-drill of Polaris Project drill-hole PL04. The deepening of hole PL04A was designed to test for higher-grade lithium mineralisation beyond the original PL04 intersection of 3.05m (10 feet) grading 140.8ppm lithium at end-of-hole. The successful re-drill continued to intersect highly anomalous lithium results, up to a maximum grade of 236ppm Li over a single 1.5m (5-foot) sample from 158.5-160.0m (520-525ft). The full intersection of Siebert formation claystone of 59.5m (195ft) graded 82.8ppm Li on average.

Interpretation

The intersection of two thick zones of lithium mineralisation in the first hole drilled at Altair is an excellent result that highlights the potential of the Altair Project for thick claystone-hosted lithium mineralisation.

Next Steps

A plan to further build on the initial success of AL01 at Altair includes the drilling of two already permitted drill holes in quarter 4 this year. These two holes are designed to test for continuity of lithium mineralisation to the east over a 7km strike extent (Figure 4). Due to the challenging ground conditions encountered during drilling of the initial sites at Polaris and Altair, the Company has prioritised sourcing a higher-powered rig to drill the remaining holes at Altair.

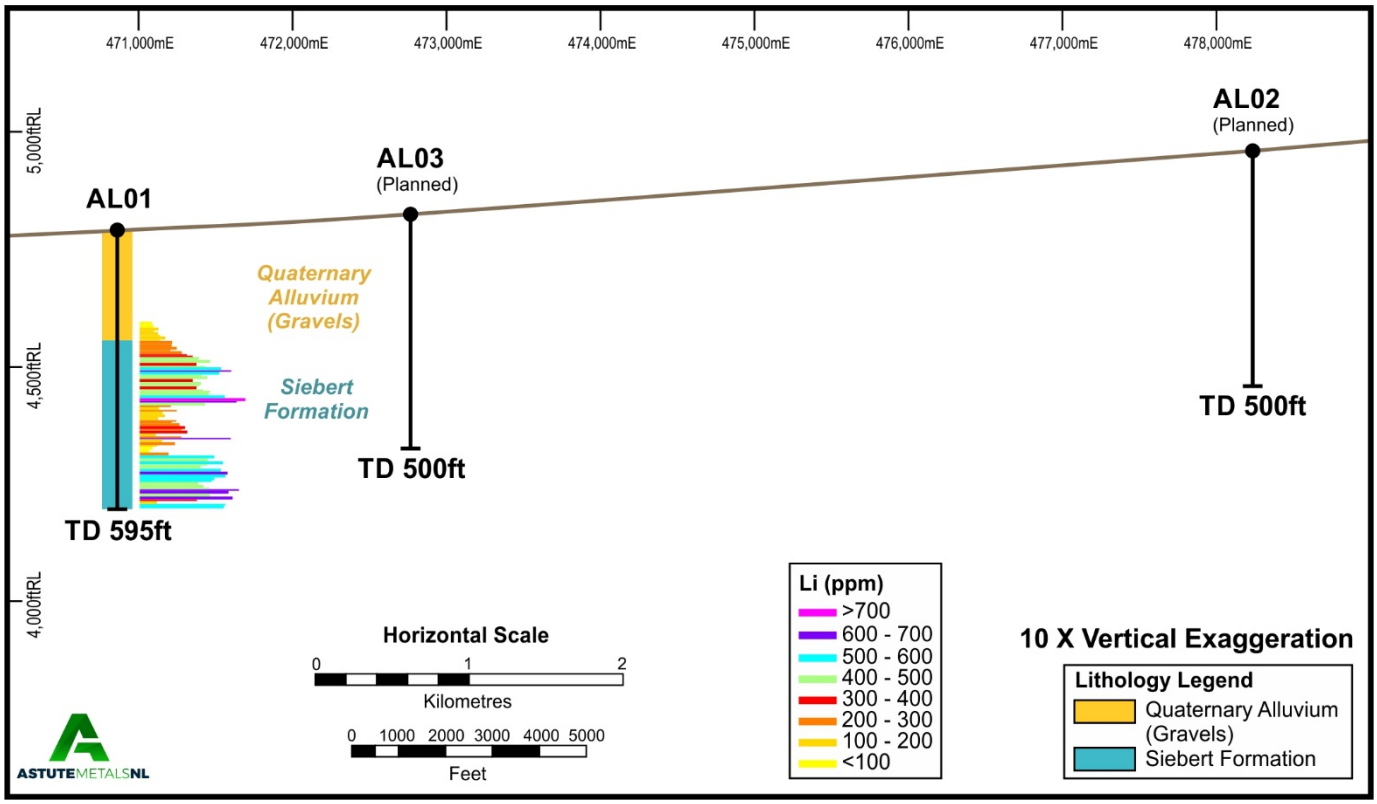

Figure 4. East-west cross-section showing AL01, lithium geochemistry and remaining planned holes.

Expansion of Lithium Footprint

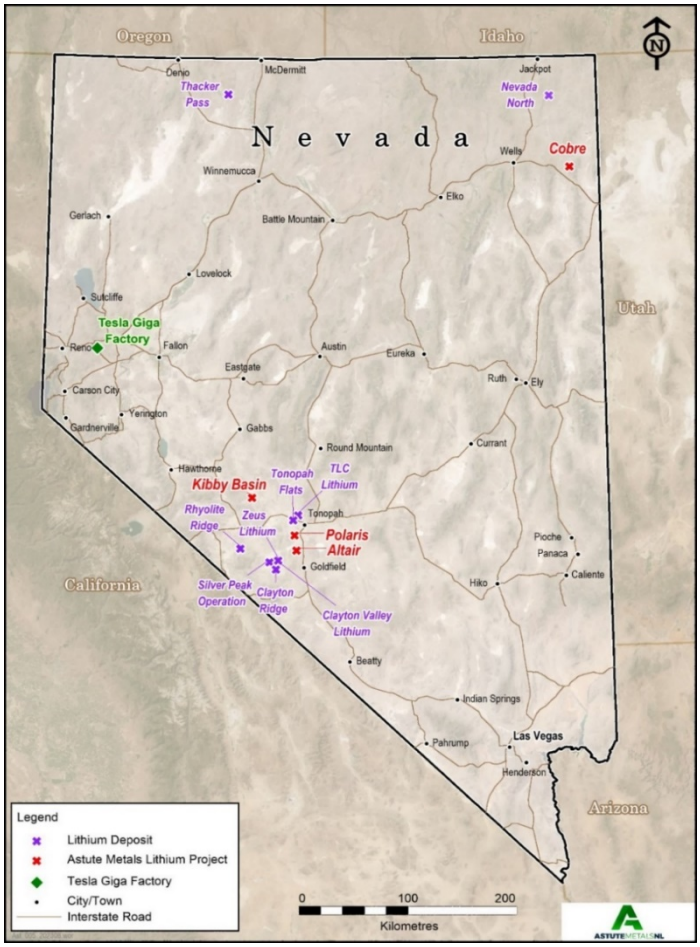

Figure 5. Map showing the location of Cobre Project and its proximity to the Polaris and Altair Projects

During the quarter, the Company completed the physical staking of a new project, known as the Cobre Lithium Project, in northeast Nevada (Figure 5). The Cobre Project is located east of Wells and close to the locality of Cobre, a historical interchange between the Southern Pacific Railroad and the Nevada Northern Railway, which historically serviced the copper mining industry in Ely, Nevada. The claims are considered prospective for claystone-hosted lithium deposits.

Cobre Soil Sampling

Following the staking of the Cobre Project, the Company conducted a soil sampling program to detect the presence of lithium in soil. Lithium in the soil may indicate the presence of lithium-bearing claystone.

The Company collected a total of 229 samples covering the staked project area on a 400m x 100m sampling grid pattern, mostly overlaying mapped outcropping tertiary sedimentary (Ts3) host rocks, considered prospective for lithium claystone mineralisation.

The results returned were highly encouraging, with a peak value of 1,640ppm lithium, and 23 results of over 100ppm lithium, which is considered highly anomalous (Figure 6). The lithium-in-soil geochemistry, which highlights the prospective nature of the Project, will be used to inform drill locations for permitting and subsequent drill testing. Full results can be found in Appendix 1 of the ASX release dated 18 September 2022.

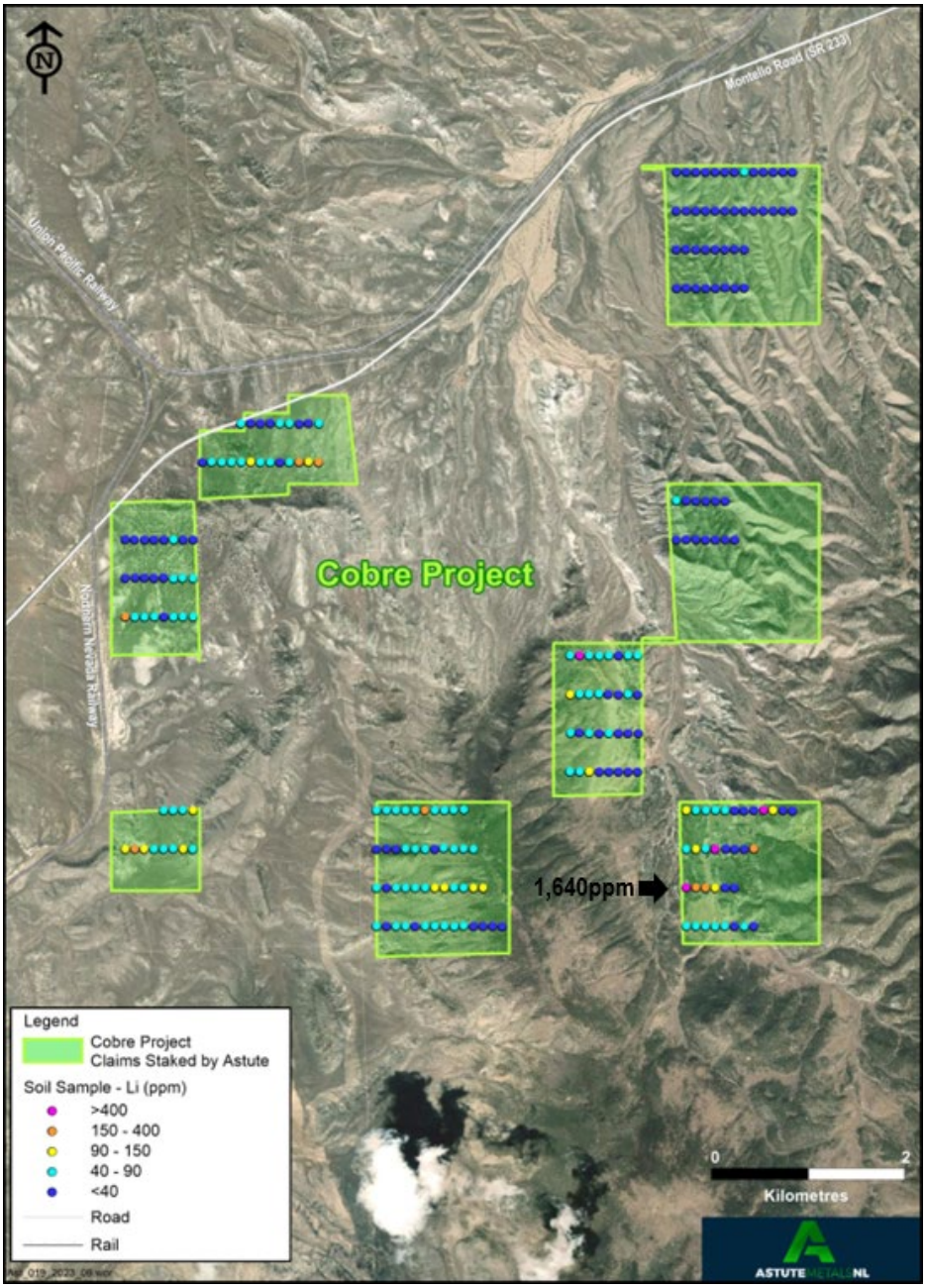

Figure 6. Soil sample lithium geochemistry, Cobre Project claims outline and aerial image.

Red Mountain Project Staking

During the quarter, the Company also completed physical staking of a project in eastern central Nevada named 'Red Mountain' (Figure 7). The Project is located 195 kilometres from the Polaris and Altair Projects. The Project was an area of interest to the Company based on the presence of mapped Ts3 sedimentary rocks, known to host lithium deposits elsewhere in the state of Nevada, and anomalous lithium geochemistry in two historical stream sediment samples collected in 1980 as part of the National Uranium Resource Evaluation (NURE) program[2]. The samples were re-assayed for a full suite of elements, with the latest revised data publicly released in 2021. These results included analysis for lithium[4].

At quarter-end, the Company was in the final stages of processing its claims forms, with the matter finalised subsequent to the end of the reporting period.

The Company noted that a competitor has staked claims in the same area and it is possible that a number of the claims may be the subject of dispute. However, based on information to hand, the Company considers that it will be in a position to secure at a minimum, a substantial part of the area.

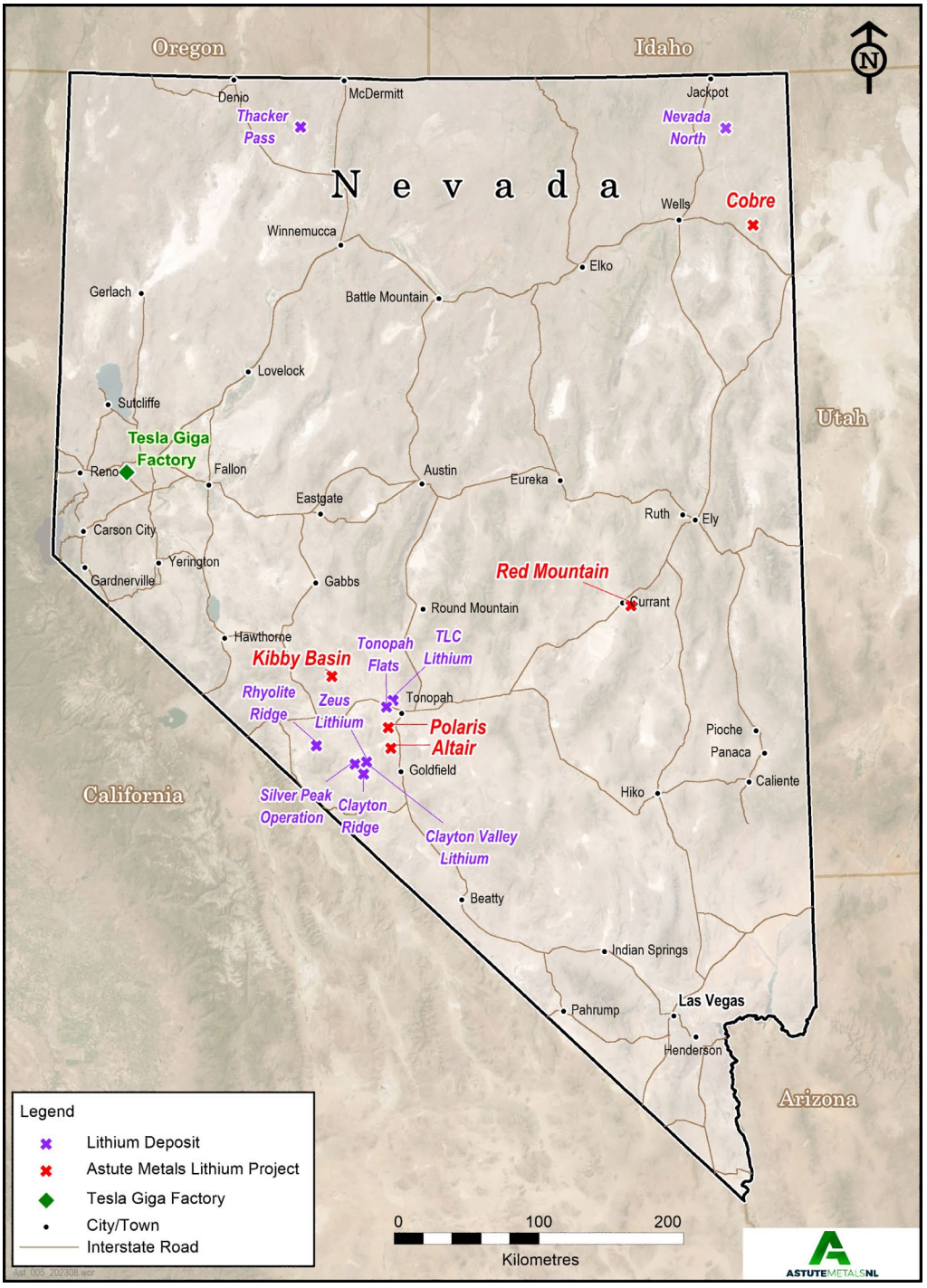

Figure 7. Astute Metals Nevada Lithium Project locations and lithium deposits.

Governor Broome Mineral Sands Project, WA

Project Overview

The 100%-owned Governor Broome Mineral Sands Project is located approximately 95km by sealed road south of Busselton, 105km south of Iluka's processing plant at Capel, and 135km from Bunbury Port and from Picton, where Doral has a heavy mineral separation plant.

Figure 8. Governor Broome Project Location, WA.

A 132kV power line is located just 5km to the north and a three-phase power line passes through the Governor Broome Project, giving it significant strategic advantages from an infrastructure and access perspective.

Astute is progressively de-risking the project development, with the first stage of this process completed in Q2 with the successful execution of in-fill drilling to upgrade high-value Inferred Mineral Resources to Indicated status. The Company expects to report an updated Mineral Resource Estimate for Governor Broome in Q4. This updated Mineral Resource estimate will underpin a Scoping Study, scheduled for completion Q1 of 2024.

The Scoping Study is expected to deliver strong output metrics, based on the shallow, high-grade nature of the Mineral Resources that form the foundation of the Project, and the demonstrated ability to separate the valuable heavy minerals into marketable products.

Previous bulk sample results from the western part of the Governor Broome Project demonstrated the ability to produce premium-grade Zircon, chloride-grade Ilmenite and sulphate-grade Ilmenite (ARO Announcement 16th June 2021).

During the September Quarter, Astute undertook bulk sample testwork on Indicated Resource material from the Jack Track Deposit, in the eastern part of the Project, which confirmed the ability to produce high-value Ilmenite, Rutile and Zircon products using conventional dry plant mineral separation equipment.

Acquisition of the Fouracres Deposit

During the quarter, the Company completed the acquisition of the Fouracres Deposit, which hosts an Indicated Resource with a very high grade of 11.4% heavy minerals ("HM").

The heavy mineral assemblage of the Fouracres Deposit is also high value, comprising 75% ilmenite, 3% secondary ilmenite, 4% leucoxene/rutile, and 8% zircon for a 90% VHM content. The ilmenite has a high TiO_2 content of 60%.

The Fouracres Deposit was explored using air-core drilling by Cable Sands during 1991. Cable Sands carried out a resource estimation and mineralogical studies.

The Fouracres Resources were re-estimated in 2011 to comply with the reporting standards of the JORC code, using the results of the drilling and mineralogical studies that had been previously reported to the Department of Mines and Petroleum.

Details of the drilling and resource assessment are set out in JORC Code Table 1 in Appendix 1 to the ARO announcement dated 13 July 2023.

Below (Figure 9) is a map showing the expanded Governor Broome Project area, including the Fouracres Deposit, which now forms part of the expanded Governor Broome Project:

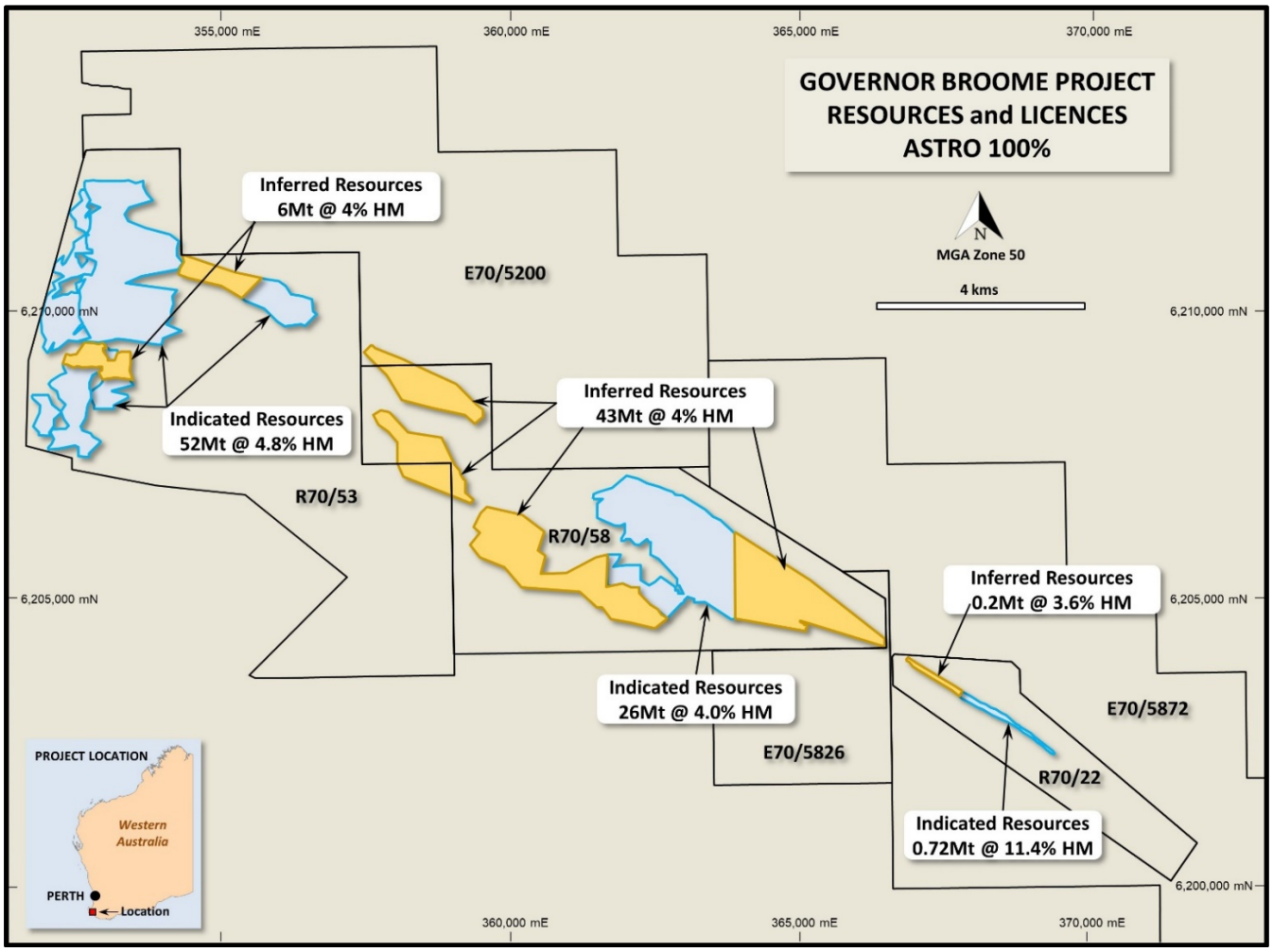

Figure 9. Governor Broome Project – Resources and Licences, including Fouracres

Governor Broome Project Updated Resources

The Governor Broome Project's updated Mineral Resources are summarised in Table 1 (refer to ASX ARO release 13 July 2023). Based on the previously announced resource table (ASX release 19 September 2022), set out below are the updated resources inclusive of the Fouracres Deposit.

Tenement	Category	Tonnage (Mt)	HM (%)	Slimes (%)	Oversize (%)
R70/58 - Jack Track	Indicated	26	4	8.6	7.1
	Inferred	43	4	9	3
R70/53 - Governor Broome	Indicated	52	4.8	13	8.5
	Inferred	6	4	15	6
R70/22 – Fouracres[1]	Indicated	0.72	11.4	6.5	1.7
	Inferred	0.2	4	9	0.8
Project	Indicated	79	4.5	11	8
	Inferred	48	4	10	4
	Total Resources	**127**	**4.3**	**11**	**6.5**

Table 1. Governor Broome Project Resources – at 2% HM lower block-cut-off grade for Jack Track and Governor Broome and 3% for Fouracres

Notes: 1. The Fouracres resources were estimated at a 3% HM lower block-cut-off grade
2. The values in the table have been appropriately rounded

Acquisition Terms

The terms of the acquisition with Cable Sands are as follows:

- a cash payment on settlement of $150,000; and
- a 1% gross royalty on all future product arising from the Fouracres Deposit.

Completion of the transaction occurred on 3 August 2023.

Work During the Quarter

Bulk sample testwork Program

During the quarter, a testwork program was completed by Allied Mineral Laboratories ("AML") in Perth (ASE Announcement 23rd August 2023). The purpose of the program was to evaluate grades and recoveries of potential heavy mineral products separated from the Jack Track Deposit (Figure 10). The testwork comprised Feed Preparation Plant (FPP), Wet Concentrator Plant (WCP) and Dry Plant sighter testwork on a 2-tonne bulk sample from the Jack Track Deposit.

The Wet Concentrator Plant (WCP) is the second stage of typical Mineral Sands processing, whereby heavy minerals are concentrated from the sand by exploiting the differences in the density of the various minerals present in the feed. This process rejects the lighter low value minerals such as quartz, which are not of economic interest. Dry Plant testwork separates the Heavy Mineral Concentrate (HMC) produced by the WCP stage into mineral products using conventional magnetic, gravity and electrostatic processes. The mineral products produced are then tested for quality. Products produced as part of the testwork included TiO_2 feedstocks including primary ilmenite, secondary ilmenite and rutile, as well as zircon and monazite concentrates.

Results

Feed preparation plant test-work

Feed preparation is the first stage in Mineral Sands processing, whereby coarse material (>2mm) and fine clays/slimes (the <45µm fraction) are separated and rejected from the sand fraction containing the valuable heavy minerals. The processing employed a trommel, screen, and desliming cyclone. Table 2 shows the proportions of the size fractions recovered from the bulk sample.

Size Fraction	Jack Track Deposit Mass %
Coarse	1.5%
Sand	89.8%
Slimes	8.6%

Table 2. Size proportions of Bulk Sample

As with the Governor Broome West and East material previously tested[6], this stage of the testwork successfully demonstrated the amenability of the material sourced from the Jack Track Deposit to processing through the feed preparation circuit using conventional mineral sands processing equipment.

The material was processed without difficulty with the sand fraction containing the valuable heavy minerals readily liberated from the slimes without the need for energy intensive processing equipment. A photomicrograph of the heavy mineral concentrate produced during the trial is shown in Figure 10.

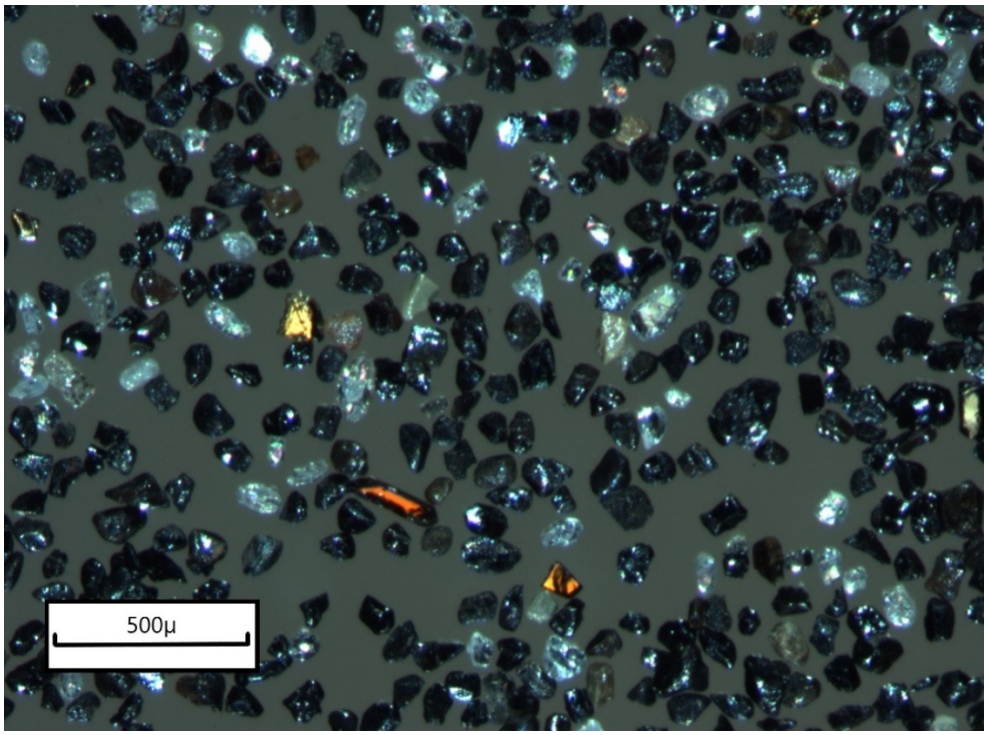

Figure 10. Photomicrograph of heavy mineral concentrate produced during testwork (scale approximate)

Wet Concentrator Plant test-work

The metallurgical performance of the sand-fraction through the WCP circuit was assessed using full-scale gravity concentration spirals in a five-stage circuit followed by an attritioning/gravity upgrade stage. The processing successfully demonstrated that a heavy mineral concentrate containing valuable heavy minerals could be produced with a high recovery of valuable heavy minerals to the concentrate. The low-density 'gangue', or valueless, minerals were successfully rejected to tails producing a heavy mineral concentrate containing greater than 90% heavy minerals.

Overall, recovery of heavy minerals to the heavy mineral concentrate at 85.5% exceeded the previous results achieved for the Governor Broome West and Governor Broome East bulk testwork[6].

Estimates of the recoveries of minerals across the FPP and WCP, based on a mineralogical assessment were determined to be:

- Zircon: 97.5%
- Primary Ilmenite 89.7%
- Rutile 74.7%
- Secondary ilmenite 58.0%

The testwork results indicated the potential to isolate several TiO_2 mineral products of differing TiO_2 grades, and the opportunity exists to improve the recovery of valuable heavy minerals by optimisation of the WCP circuit. Overall, the wet circuit testwork demonstrated the amenability of the material sourced from the Jack Track Deposit to processing using conventional mineral sands processing equipment and that high recoveries of valuable heavy mineral to a high-grade heavy mineral concentrate could be achieved.

Dry Plant Test-work

The HMC produced from the Jack Track Deposit bulk sample was then processed through a drymill flowsheet, making use of conventional mineral sands processing techniques and equipment, to investigate the potential quality of the final mineral products.

The dry plant process was simulated at a pilot scale by employing multiple magnetic separation stages (RED and RER) followed by electrostatic separation and a screening stage to investigate the potential to isolate several ilmenite products of differing TiO_2 grades.

The non-magnetic stream, rich in zircon and rutile, was upgraded through stages of gravity, electrostatic and high-intensity magnetic separation to isolate zircon and rutile products. A by-product monazite concentrate product was also produced which assayed 7.46% CeO_2 (cerium oxide).

The testwork demonstrated that the HMC produced responded well to the dry circuit processing with ilmenite, rutile and zircon minerals readily isolated into final products.

Mineral Products

The drymill processing of the HMC successfully demonstrated that a range of ilmenite, leucoxene, rutile, and zircon products could be recovered from the HMC. Monazite was also recovered to a para-magnetic concentrate stream.

Highly-regarded international mineral sands consultancy group TZMI has assessed the TiO_2 feedstock products generated during the testwork program and is of the opinion that:

- The combined ilmenite (58.7% TiO_2) product will be suitable for direct use in chloride feedstock markets or for chloride slag manufacture.
- The CaO, MgO and MnO of the combined ilmenite are within the generally accepted thresholds for direct use in chloride pigment manufacture or as an ilmenite feed for chloride slag or SR manufacture, particularly as the MgO content (at ≤0.3%) compares favourably against competing products.
- The rutile product meets the criteria of a premium-grade rutile product and will be suitable for use in pigment production. Low levels of key impurities make it suitable for welding applications for sale as a higher value product.

The composition of the TiO2 products generated during the trial is given in Table 3.

Element	Primary Ilmenite	Secondary Ilmenite	Leucoxene	Combined Ilmenite Product	Rutile Product
TiO_2 (%)	55.9	63.3	79.6	58.7	96.5
Fe_2O_3 (%)*	41.1	30.9	14.7	37.2	0.79
Al_2O_3 (%)	0.41	0.99	1.15	0.62	0.28
CaO (%)	0.04	0.08	0.11	0.06	<0.01
Cr_2O_3 (%)	0.05	0.11	0.14	0.07	0.13
MgO (%)	0.29	0.19	0.10	0.26	<0.01
MnO (%)	0.98	0.88	0.34	0.94	<0.002
Nb_2O_5 (%)	0.12	0.17	0.34	0.14	0.33
P_2O_5 (%)	0.07	0.14	0.15	0.10	0.03
SiO_2 (%)	0.87	0.51	0.66	0.80	0.44
V_2O_5 (%)	0.20	0.24	0.28	0.22	0.48
U+Th (ppm)	64	205	260	116	66
*Total iron expressed as Fe_2O_3					

Table 3. TiO_2 product compositions

A photomicrograph of a sample of the ilmenite produced is shown in Figure 11.

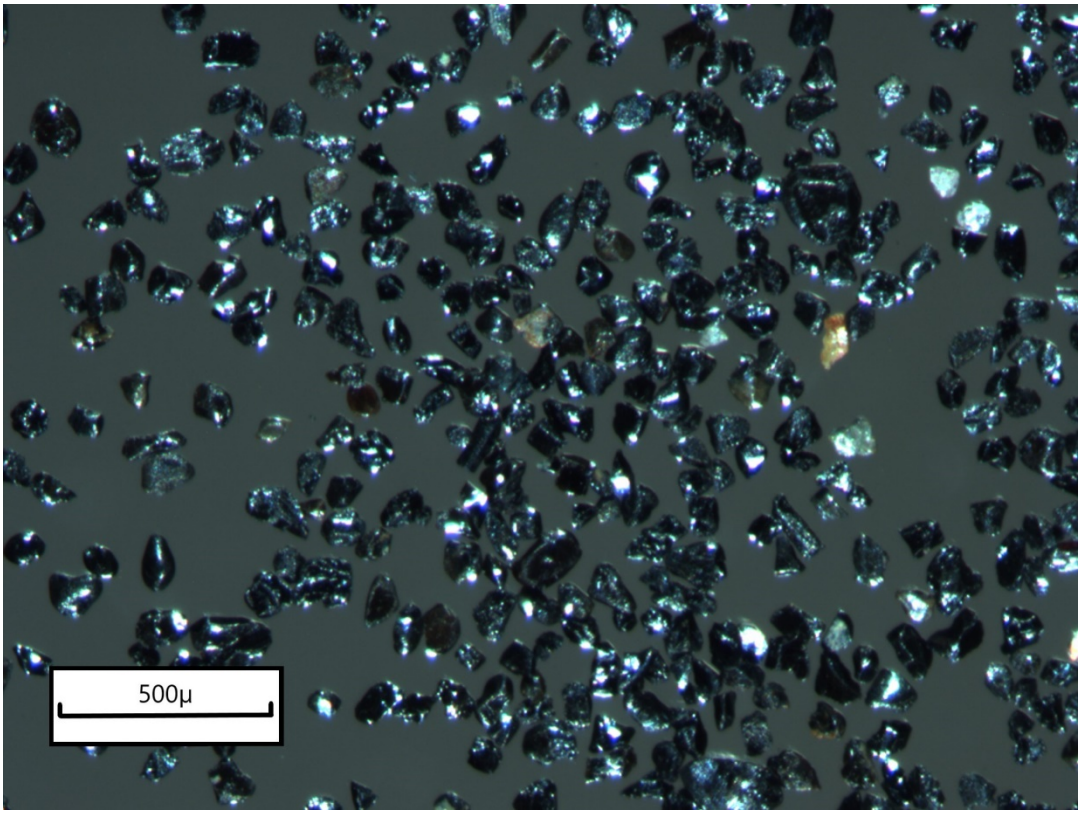

Figure 11 Photomicrograph of ilmenite produced during the testwork (Scale approximate)

TZMI has also assessed the zircon products and is of the opinion that:

- At a ZrO_2 + HfO_2 content of 65%, the zircon product generated is considered a standard grade product.
- The Fe_2O_3 and TiO_2 contents of the Jack Track zircon product are within the acceptable threshold for ceramics and foundry applications.
- TZMI estimates that a price discount of about 5% relative to premium-grade zircon may be applicable.

Element	Zircon Product
ZrO_2+HfO_2 (%)	65.0
SiO_2 (%)	32.8
Al_2O_3 (%)	0.68
TiO_2 (%)	0.14
Fe_2O_3 (%)	0.04
CaO (%)	0.03
CeO_2 (%)	<0.01
U+Th (ppm)	530
Cr_2O_3 (%)	0.01
MgO (%)	0.01
MnO (%)	0.01
Nb_2O_5 (%)	0.01
P_2O_5 (%)	0.14
K_2O (%)	0.01
SO_3 (%)	<0.01
LOI1000	0.17

Table 4. Indicative Zircon product composition

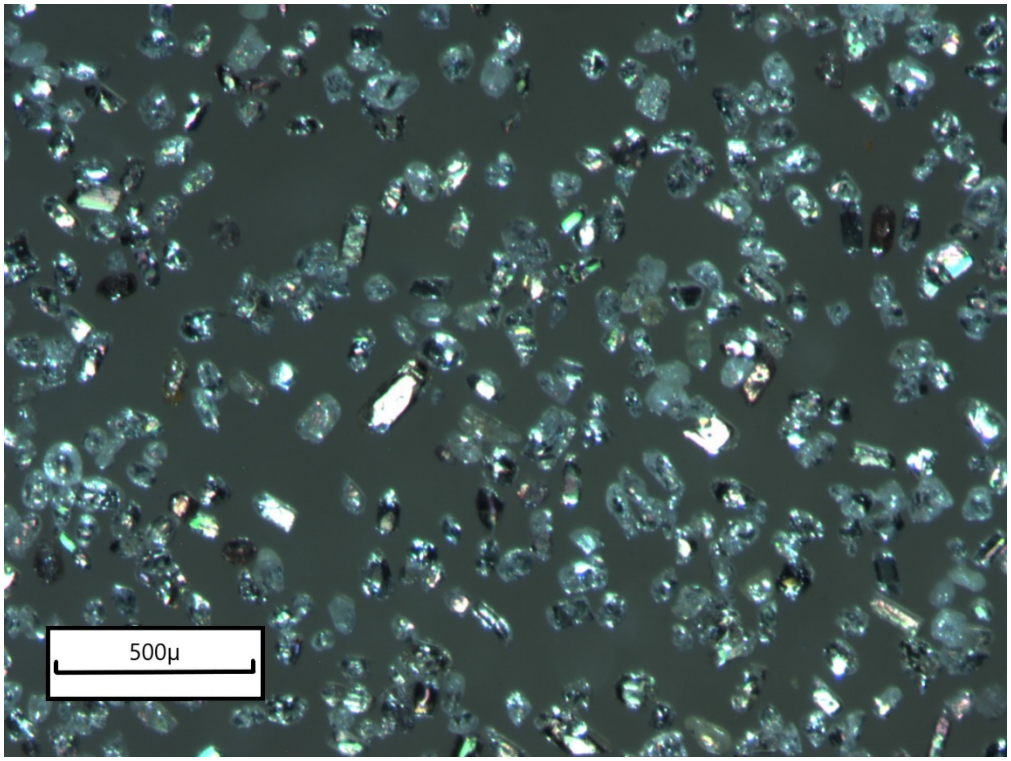

Figure 12. Photomicrograph of zircon produced during the testwork (Scale approximate)

Bulk Sample Data

The bulk samples were sourced from the full depth of the modelled heavy mineral sands mineralisation in each of the 233 air-core holes drilled by Astute into the Jack Track Deposit during 2022 and, as such, are representative of its HM mineralisation. A total of 960 one-metre samples were used to make up the bulk sample. Full details of the hole locations and HM intersections that provided the bulk samples are given in Appendix 2 of the ASX release dated 23 August 2023.

Resource and Project Development Timeline

Astute is currently in the final stages of completing an updated Mineral Resource Estimate (MRE) for the Governor Broome Project. The Company embarked on an in-fill drilling campaign in Q2 designed to upgrade Inferred Mineral Resources within R70/58 to the Indicated category. The upcoming MRE update will incorporate data and results from this in-fill campaign with a view to maximizing Resource tonnes to be included in the Scoping Study. The MRE update will be completed in Q4 and provided to TZMI for incorporation into the Scoping Study, which is scheduled for completion in Q1 2024.

Results from mineral assemblage data sourced from the drilling campaign will to be reported in conjunction with the updated MRE. They will also be incorporated in the Scoping Study.

Scoping Study

During the quarter, the Company finalised arrangements with highly-regarded international mineral sands consultancy group, TZ Minerals International (TZMI), to complete the Scoping Study for the Governor Broome Project. The study, scheduled for completion in Q1 2024, will comprise a review and assessment of the project setting, mining options, processing options, infrastructure assessment and mineral products market review, guided by the bulk testwork outcomes.

Optimisation of the value of Project

In parallel with the progress of the Governor Broome Project Scoping Study, the Company will commence actively considering its options for the ultimate direction of the Project, with a view to optimising value-creation for shareholders in alignment with Astute's clear long-term strategic direction as a critical metals explorer.

The options to be considered include:

- Sourcing of debt funding
- Investigating potential Joint Venture partners and how the arrangements can enhance value;
- Review of sale options and likely buyers for the asset; and
- Consider other avenues for value realisation.

Georgina Basin, Northern Territory IOCG Project

Project Overview

Located in the highly prospective East Tennant province in the Northern Territory, the Georgina Project comprises seven granted Exploration Licences and three under application for a combined total of approximately 4,500km^2. The Georgina Project is 80%-owned by Astute, with the remaining 20% owned by Greenvale Energy Limited (ASX: GRV).

The East Tennant province has been the subject of intense geoscientific investigation by both Geoscience Australia and the Northern Territory Geological Survey for over five years. Pre-competitive work undertaken as part of the Federal Government's $225 million Exploring for the Future program (EFTF) included solid geology interpretation, alteration proxy mapping and mineral prospectivity mapping for Iron Oxide Copper Gold (IOCG) deposits.

The collaborative MinEx CRC National Drilling Initiative, conducted in late 2020, confirmed the highly prospective nature of the region by intersecting prospective host rocks, IOCG-style alteration and sulphide mineralisation as part of a 10-hole program at East Tennant.

IOCG deposits are typically large, economically attractive copper-gold deposits with some smaller high-grade variants – most notably those at Tennant Creek. This style of deposit contains elevated levels (10-60wt %) of the iron oxide minerals magnetite and hematite, which gives rise to their (typically) elevated magnetic and gravity (density) properties.

Australian IOCG's include South Australia's Olympic Dam, Prominent Hill and Carrapateena deposits, Ernest Henry in north-west Queensland, and the high-grade Warrego and Juno deposits located west of the Georgina Project at Tennant Creek in the Northern Territory.

Work During the Quarter

During the quarter, the Company commenced an Ambient Noise Tomography ("ANT") geophysical survey over its highly prospective central Georgina tenement, EL33375. The survey, conducted using Fleet Space Technologies' "ExoSphere" technology, is the first of its kind to be employed in the frontier IOCG-prospective East Tennant region.

The purpose of the ExoSphere survey is to gain an improved understanding of the subsurface structure, which, when used to constrain the Company's existing gravity and magnetic survey data, is expected to be a highly powerful tool for the identification of IOCG-style targets for future drill testing.

Astute's survey comprised of 192 survey points stretching across a 14km survey axis incorporating previous drilling, including two National Drilling Initiative (NDI) drill holes. Geodes are placed in the field and left in place until sufficient seismic data has been collected, after which they are relocated to a new survey point.

Next Steps

Following completion of the survey, surfaces of the two broad cover sequences of the Georgina Basin limestones and Kalkarindji flood basalt will be established over the survey area. These will be used to construct a series of constrained geophysical inversion models for gravity and magnetic data, providing greater insight into basement geophysical anomalies that may be characteristic of IOCG-style mineralisation and warrant drill testing. This targeting work will be completed in Q4 of 2023.

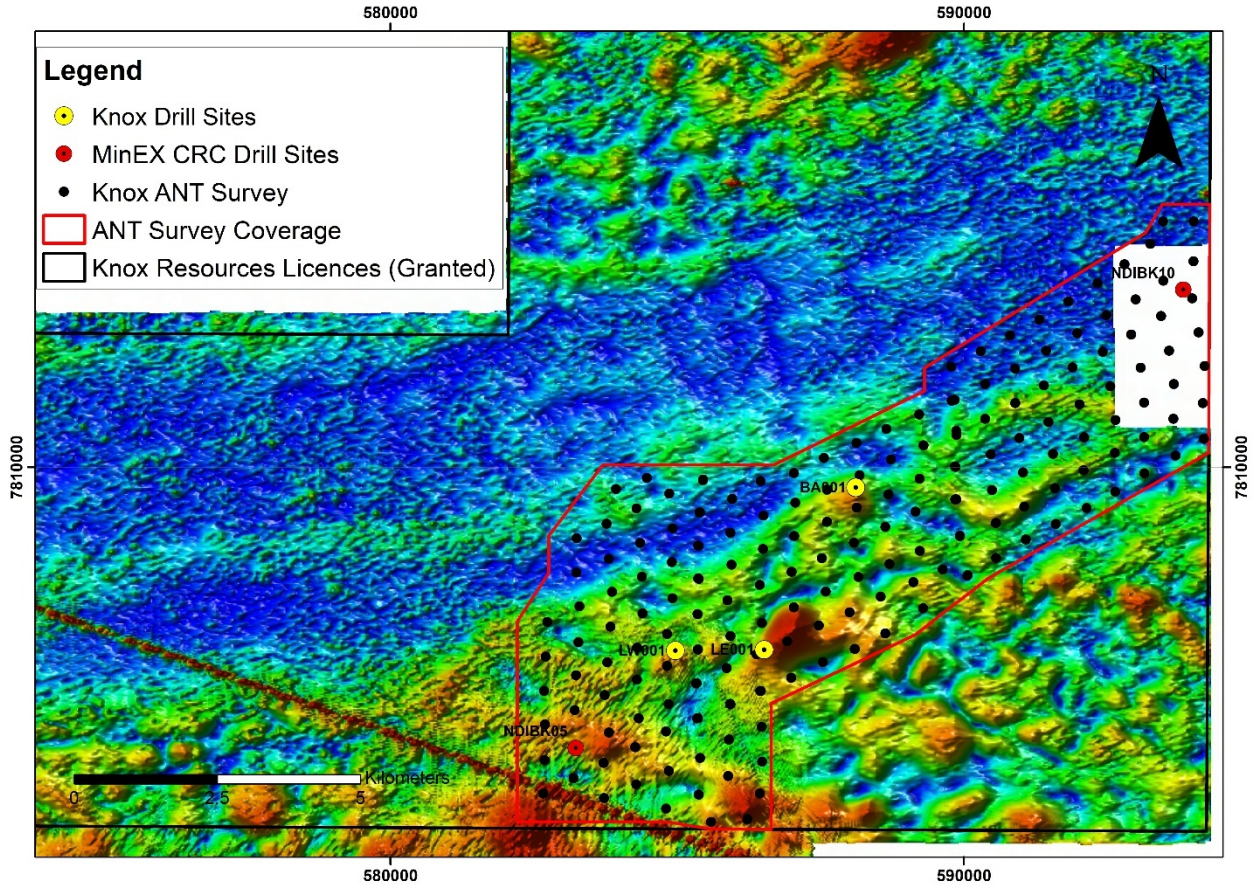

Figure 14. ANT geode locations, NDI drillholes and Project drillholes over TMI-RTP Magnetic image

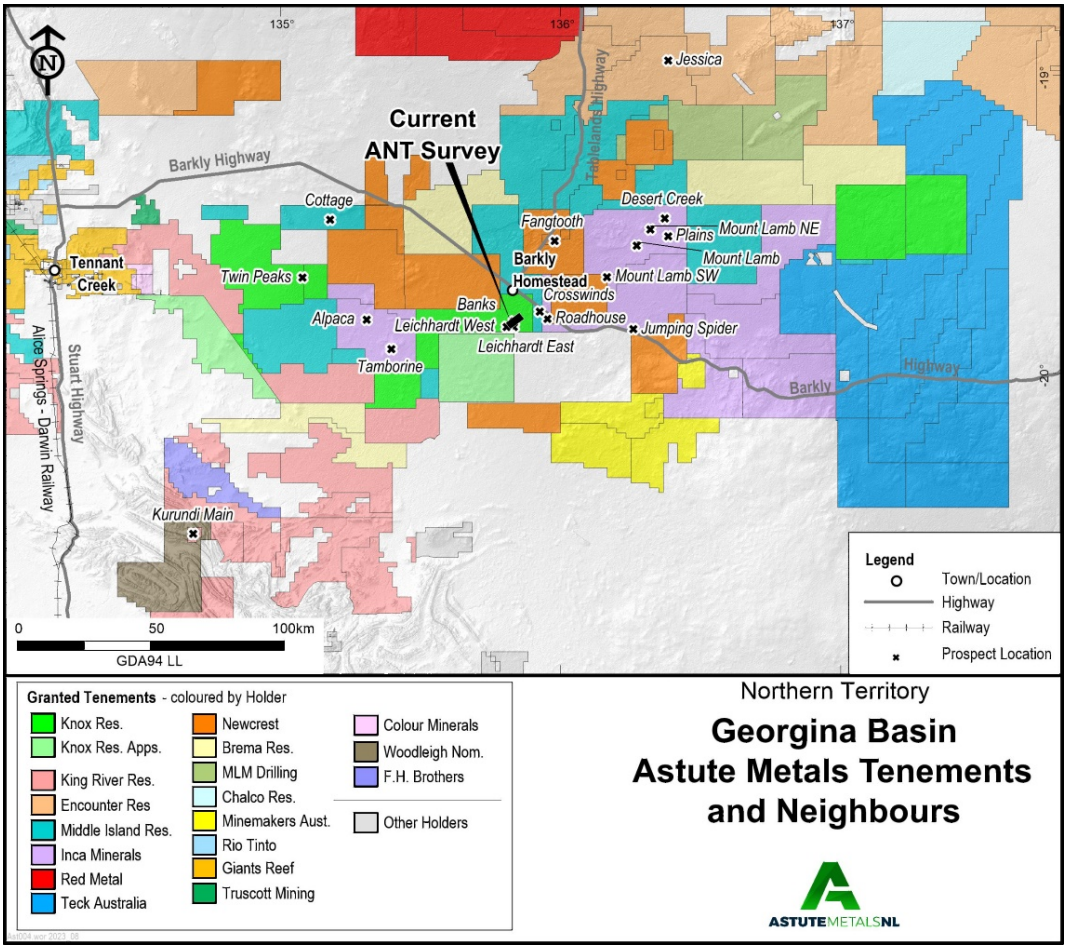

Figure 15. Astute (Knox Resources) tenements (green), neighbouring tenements and location of ANT Survey

Needles Gold Project, Nevada

No work was undertaken during the quarter on the Needles Gold Project.

East Kimberley Diamond Project

Following extensive negotiations with the Traditional Owners (TO's), the Company has secured a land access agreement for its 100%-owned East Kimberly Diamonds Exploration Licence E80/4120 (tenement).

With this agreement now in place, the Company has submitted a proposed work plan to the TO's to undertake work on the tenement so as to satisfy its statutory obligations. The proposed work is considered to be of a nature that necessitates the completion of a cultural heritage survey, and accordingly, the matter has been submitted to a heritage surveyor for a cost proposal. The Company is now awaiting a suitable proposal.

The protracted period taken to obtain the land access agreement, followed by the wait to undertake a heritage survey, has prevented field work from being undertaken on the project during the term of the tenement as was proposed under the last Extension of Term (EoT) application submitted in 2021. The Company has now submitted a new EoT application for a period of two years, with an associated proposed work program, to the Western Australia Department of Mines, Industry Regulation & Safety (DMIRS). The Company is confident that its application will be successful.

Approval of the EoT application by DMIRS will allow the Company to resume its previous negotiations for a joint venture and/or alternative means of reducing its funding obligation associated with the tenement. Until the EoT is approved, the Company intends to undertake no further work on this project.

Corporate

Capital raising

Following approval by shareholders at the Company's General Meeting held on 17 July 2023 (**General Meeting**), the Company issued 25,413,641 fully paid ordinary shares (**Shares**) pursuant to a placement to sophisticated investors and directors, raising $1,346,923 (before costs). The Shares were issued pursuant to the Company's placement capacity under Listing Rules 7.1.

Placement to major shareholder, Holdmark Property Goup

During the quarter, the Company entered into a binding subscription agreement with its major shareholder, Holdmark Property Group (Holdmark), for the issue of 41,273,185 fully-paid ordinary shares at a price of $0.05 per Share to raise $2,063,659.26. Holdmark has been a substantial shareholder of Astute since October 2020.

The Placement was completed on 25 September 2023. Following the issue of the shares, Holdmark's shareholding in the Company has increased from 11.05% to 19.9%.

The placement was issued out of the Company's capacity under Listing Rule 7.1.

Loan Funded Share Plan

Further to the Company's announcement made on 4 April 2023 (ASX: ARO Astro Board Re-organisation and Incentivised Renumeration Structure) and shareholder approval received at the Company's General Meeting, during the quarter the Company issued 10,440,000 Loan Funded Shares to directors and key management personnel of the Company.

Change of Company Name

Following the receipt of shareholder approval at the Company's General Meeting on 17 July 2023, the company name has been changed from 'Astro Resources NL' to 'Astute Metals NL'.

The name change has been registered with the Australian Securities and Investment Commission (ASIC) and Astute's shares commenced trading under the ASX code 'ASE' effective from 20 July 2023.

ASX Additional Information

The Company provides the following information pursuant to ASX Listing Rule requirements:

1. **ASX Listing Rule 5.3.1:** Exploration and Evaluation Expenditure spend during the quarter was $1,747,092. Full details of exploration activity during the 30 September 2023 quarter are set out in this report.

2. **ASX Listing Rule 5.3.2:** The Company confirms that there was no mine production and development activities for the quarter.

3. **ASX Listing Rule 5.3.5**: Payment to related parties of the Company and their associates during the quarter was $97,500 in cash.

The Company advises that this relates to remuneration of Directors only. Set out below is the following additional information in relation to the cash flow statement:

Name of Director	Nature of Payment	Amount ($) [excluding any GST]
Tony Leibowitz	Ongoing Executive Chairman fees	75,000
John Young	Ongoing Non-Executive Director fees	22,500
Vincent Fayad	Executive Director , Company Secretarial and Chief Financial Officer	-
Total		**97,500**

Table 5. Director's remuneration

Tenements

In accordance with Listing Rule 5.3.3, Astute provides the following Information concerning its exploration licences.

Appendix 1 sets out a list of the Company's exploration licences held at the end of the quarter.

End Notes

The information contained in this announcement related to the Company's past exploration results is extracted from, or was set out in, the following ASX announcements which are referred to in this Quarterly Activities Report:

References

Information contained in this announcement in relation to this transaction relates to past exploration results is extracted from, or was set out in, the following ASX announcements which were published under the name "Astro Resources NL", ASX code ARO and "Astute Metals NL", ASX code ASE:

Date of announcement	Name of announcement
13 July 2023	Acquisition of High-Grade Heavy Mineral Deposit
20 July 2023	Confirmation of Company Name Change and ASX Code
28 July 2023	Thick Lithium Claystone Host-Rocks Intersected at Altair
3 August 2023	Completion of High-Grade Heavy Mineral Sands Acquisition
3 August 2023	Commencement of Geophysics Survey at Georgina IOCG Project
23 August 2023	Broad Lithium Hits in First Altair Drill Hole opens new window
23 August 2023	Jack Track Bulk Testwork Produces Marketable HM Products
23 August 2023	Major Shareholder to Increase Stake in Astute
23 August 2023	Lithium Project and Diamond Project Update
23 August 2023	Completion of $1.35M Tranche 2 Placement
14 September 2023	Commencement of Scoping Study at Governor Broome
18 September 2023	Expansion of Lithium Footprint in Nevada

Table 6: Summary of announcements

References in this report to public third-party announcements are as follows:

[1] OTCMKTS: ABML 26 February 2023 'Technical Report Summary For The Tonopah Flats Lithium Project, Esmeralda..'

[2] TSX.V:LI 17 March 2023 'Tonopah Lithium Claims project NI 43-101 technical report – Preliminary Economic Assessment'

[3] ASX: INR 30 April 2020 'Ioneer Delivers Definitive Feasibility Study.'

[4] TSX: LAC 31 January 2023 'GM and Lithium Americas top Develop US-sourced Lithium Production'

Authorisation

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

More Information

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1 OTCMKTS: ABML 26 February 2023 'Technical Report Summary For The Tonopah Flats Lithium Project, Esmeralda..'
2 TSX.V: LI 17 March 2023 'Tonopah Lithium Claims project NI 43-101 technical report – Preliminary Economic Assessment'
3 ASX: ARO 27 June 2023 'Strong Lithium anomalism in initial Nevada Assays as drilling resumes'
4 Smith, S.M., Azain, J.S., Bueghly, Z.C., and Olinger, D.A., 2018, Reanalysis of Selected Archived NURE-HSSR Sediment and Soil Samples from Arizona, California, Idaho, Montana, Nevada, New Mexico, and Utah (ver. 8.0, May 2021): U.S. Geological Survey data release, https://doi.org/10.5066/F7765DHF
5 ASX:ARO 13 July 2023 "Astro Expands Governor Broome Mineral Sands Project with Strategic Acquisition of Adjoining High-Grade Heavy Mineral Deposit".
6 ASX: ARO 16 June 2021 'Bulk Testwork Program Delivers Further Positive Results for Governor Broome Heavy Mineral Project'
7 ASX: ARO 16 June 2021 'Bulk Testwork Program Delivers Further Positive Results for Governor Broome Heavy Mineral Project'
8 ASX: ARO 3 April 2023 'Significant polymetallic anomalism intersected at Georgina IOC Project, NT'
9 ASX: ARO 2 June 2023 'Georgina IOCG Project awarded Northern Territory Exploration Co-Funding Grants'
10 Australian Exploration Geoscience Conference Brisbane, 13-18 March 2023 'Fleet's real-time ambient noise tomography service trialled at Northern Star's Kalgoorlie Operations'
11 ASX: HGO 24 October 2022 'Hillgrove Resources Limited (ASX: HGO) report for the quarter ended 30 September 2022'
12 ASX: COD 20 April 2023 'ANT Survey Transforms Understanding of Emmie Bluff, IOCG'

Competent Persons

The information in this report that relates to:

Polaris, Altair and Cobre

The information in this report that relates to Polaris, Altair and Cobre projects Sampling Techniques and Data (Section 1) is based on information compiled by Mr Matthew Healy, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM Member number 303597). Mr Healy is a full-time employee of Astute Metals NL and is eligible to participate in a Loan Funded Share incentive plan of the Company. Mr Healy 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 Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Healy 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 report that relates to the Altair project Reporting of Exploration Results 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.

Georgina Basin

The information in this report that relates to Exploration Results associated with the NT Georgina project is based on information compiled by Mr Matthew Healy, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM Member number 303597). Mr Healy is a full-time employee of Astute Metals NL and is eligible to participate in a Loan Funded Share incentive plan of the Company. Mr Healy 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 Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Healy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Governor Broome

The information in this report as it relates to Mineral Resources and Exploration Results for the Governor Broome Project is based on information compiled by John Doepel, a Director of Continental Resource Management Pty Ltd (CRM), who is a member of the Australasian Institute of Mining and Metallurgy. Mr Doepel has sufficient experience in mineral resource estimation relevant to the style of mineralisation and type of deposit under consideration 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 Doepel consents to the inclusion in this announcement of the information in the form and context in which it appears.

APPENDIX 1 – List of Tenements

Holder	Project	Tenement	Location	Lease Status
Knox Resources Pty Ltd	Georgina Basin	EL32282	Barkly - NT	Granted
Knox Resources Pty Ltd	Georgina Basin	EL32281	Barkly - NT	Granted
Knox Resources Pty Ltd	Georgina Basin	EL32296	Barkly - NT	Granted
Knox Resources Pty Ltd	Georgina Basin	EL33376	Barkly - NT	Granted
Knox Resources Pty Ltd	Georgina Basin	EL33375	Barkly - NT	Granted
Knox Resources Pty Ltd	Georgina Basin	EL32285	Barkly - NT	Granted
Knox Resources Pty Ltd	Georgina Basin	EL32286	Barkly - NT	Granted
Knox Resources Pty Ltd	Georgina Basin	EL32280	Tennant Creek - NT	Application
Knox Resources Pty Ltd	Georgina Basin	EL32284	Barkly - NT	Application
Knox Resources Pty Ltd	Georgina Basin	EL32965	Barkly - NT	Application
Governor Broome Sands Pty Ltd	Governor Broome	Retention Licence R70/53	Nannup - Southern WA	Granted
Governor Broome Sands Pty Ltd	Governor Broome	Retention Licence R70/58	Nannup - Southern WA	Granted
Governor Broome Sands Pty Ltd	Governor Broome	Retention Licence R70/22	Nannup - Southern WA	Granted

APPENDIX 1 – List of Tenements

Holder	Project	Tenement	Location	Lease Status
Governor Broome Sands Pty Ltd	Governor Broome	Exploration Licence EL70/5872	Nannup - Southern WA	Granted
Governor Broome Sands Pty Ltd	Governor Broome	Exploration Licence EL70/5826	Nannup - Southern WA	Granted
Governor Broome Sands Pty Ltd	Governor Broome	Exploration Licence EL70/5200	Nannup - Southern WA	Granted
East Kimberley Diamond Mines	Lower Smoke Creek	E80/4120	Kimberley - Northern WA	Granted
Needles Holdings	Needles	Various claims	Nevada - USA	Granted
Needles Holdings	Cobre	Various claims	Nevada - USA	Granted
Needles Holdings	Red Mountain	Various claims	Nevada - USA	Granted
Needles Holdings	Kibby Basin	Various claims	Nevada - USA	Granted
Needles Holdings	Polaris	Various claims	Nevada - USA	Granted
Needles Holdings	Altiar	Various claims	Nevada - USA	Granted

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

ASTUTE METALS NL	
ABN	Quarter ended ("current quarter")
96 007 090 904	**30 September 2023**

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (3 months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation		
	(b) development		
	(c) production		
	(d) staff costs	(84)	(84)
	(e) administration and corporate costs	(382)	(382)
1.3	Dividends received (see note 3)		
1.4	Interest received	31	31
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Government grants and tax incentives	124	124
1.8	Other (provide details if material)		
1.9	**Net cash from / (used in) operating activities**	**(311)**	**(311)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements (including transaction costs)	(193)	(193)
	(c) property, plant and equipment		
	(d) exploration & evaluation	(1,747)	(1,747)
	(e) investments		
	(f) other non-current assets		

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
2.2	Proceeds from the disposal of: (a) entities (b) tenements (c) property, plant and equipment (d) investments (e) other non-current assets	85	85
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (bond payment – mining tenement)		
2.6	**Net cash from / (used in) investing activities**	**(1,855)**	**(1,855)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	3,267	3,267
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options		
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(159)	(159)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (Funds held on Trust)		
3.10	**Net cash from / (used in) financing activities**	**3,108**	**3,108**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	3,240	3,240
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(311)	(311)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,855)	(1,855)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	3,108	3,108

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**4,182**	**4,182**

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter $A'000	Previous quarter $A'000
5.1	Bank balances	1,170	1,745
5.2	Call deposits	3,012	1,495
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**4,182**	**3,240**

6.	Payments to related parties of the entity and their associates	Current quarter $A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	75,000
6.2	Aggregate amount of payments to related parties and their associates included in item 2	22,500

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

More information concerning the breakdown of the above payments to directors and their related parties can be found within the accompanying Quarterly Activities Report.

7.	Financing facilities *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	Total facility amount at quarter end $A'000	Amount drawn at quarter end $A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	**Total financing facilities**	-	-

7.5	**Unused financing facilities available at quarter end**	-

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

8.	Estimated cash available for future operating activities	$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	311
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	1,747
8.3	Total relevant outgoings (item 8.1 + item 8.2)	2,058
8.4	Cash and cash equivalents at quarter end (item 4.6)	4,182
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	4,182
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	2.03

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer:

Not applicable.

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

Not applicable.

8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answer: Not applicable.	
Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.	

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Date: **27 October 2023**

Authorised by: **The Board of Astute Metals NL**
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.