ASTUTEMETALSNL

18 September 2023

ASTUTE EXPANDS NEVADA LITHIUM FOOTPRINT

High-grade soil samples of up to 1,640ppm lithium at newly staked Cobre Project, with Red Mountain Project also added to the portfolio

Key Highlights

- **Soil sample results at recently staked Cobre Project grade up to 1,640ppm lithium.**
- **Newly staked Red Mountain Project is located 195km north-east of the Polaris and Altair Projects.**
- **Both project areas contain mapped Ts3 sedimentary host rocks prospective for lithium clay mineralisation.**
- **Exploration drill holes to be permitted at Cobre ahead of a planned Q4 drilling campaign.**
- **Soil sampling campaign planned for Red Mountain.**

Astute Metals NL (ASX: ASE) ("ASE", "Astute" or "the Company") is pleased to advise that it continues to advance its lithium exploration strategy in Nevada, USA, with the successful addition of two new highly prospective lithium exploration areas and encouraging results from a fast-tracked soil sampling program at the newly staked Cobre Project.

Astute Executive Chairman, Tony Leibowitz, said:

"We are continuing to build our strategic presence within the USA's lithium exploration 'hot-spot' in Nevada. The successful staking of the Cobre and Red Mountain Projects marks another step in our systematic and patient approach to building a long-term battery materials business in North America. A fast-tracked soil sampling program has returned highly encouraging results from Cobre, vindicating our approach and providing a solid foundation for upcoming drilling. In addition, the Company will actively engage for expansion opportunities to further enhance the overall potential of this Project."

Background

The Company has been working to actively expand its lithium exploration footprint since the staking of the Polaris and Alair Projects in Q1 this year[1]. Following a desktop project generation exercise, the Company conducted reconnaissance and surface sampling campaigns over a number of areas considered prospective for lithium claystone deposits based on mapped geology and historical surface sample data sourced from the US Geological Survey. This work resulted in the identification of two areas that warranted staking of claims. The first, Cobre, was staked during August, and the Company is in the process of completing the staking process at the second project, Red Mountain.

Cobre Soil Sampling

Following the recent staking of the Cobre Project, the Company conducted a soil sampling program in order 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 to the Company were highly encouraging, with a peak value of 1,640ppm lithium, and 23 results of over 100ppm lithium, which is considered highly anomalous (Figure 1). 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.

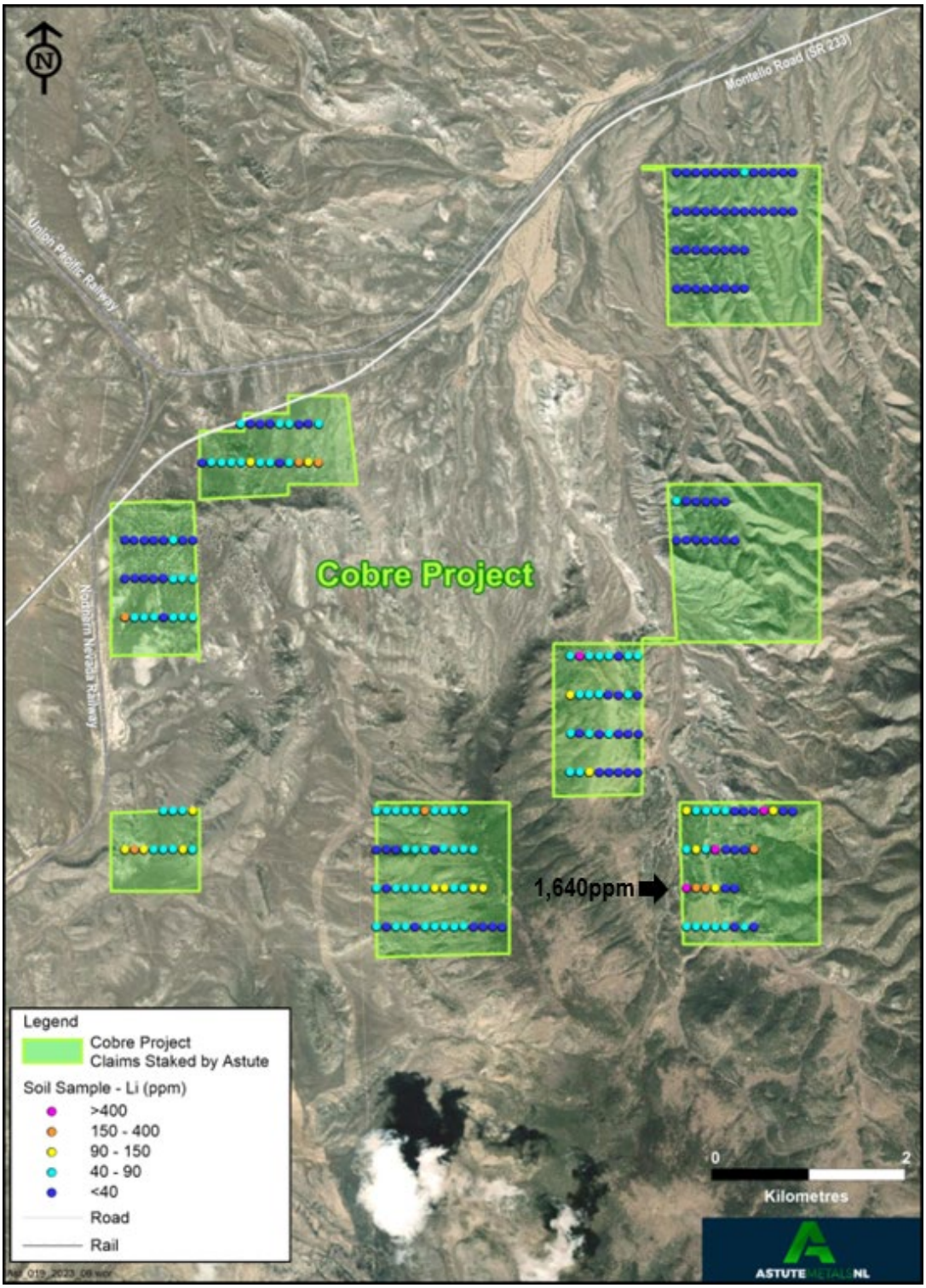

Figure 1. Soil sample lithium geochemistry, Cobre Project claims outline and aerial image.

Red Mountain Project Staking

The Company has recently completed physical staking of a project in eastern central Nevada given the name 'Red Mountain' (Figure 2). 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[2].

The Company is in the process of finalising its claims forms and expects to file these with Nye County in the coming days. The Company is aware of a competitor that 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 a substantial part of the area.

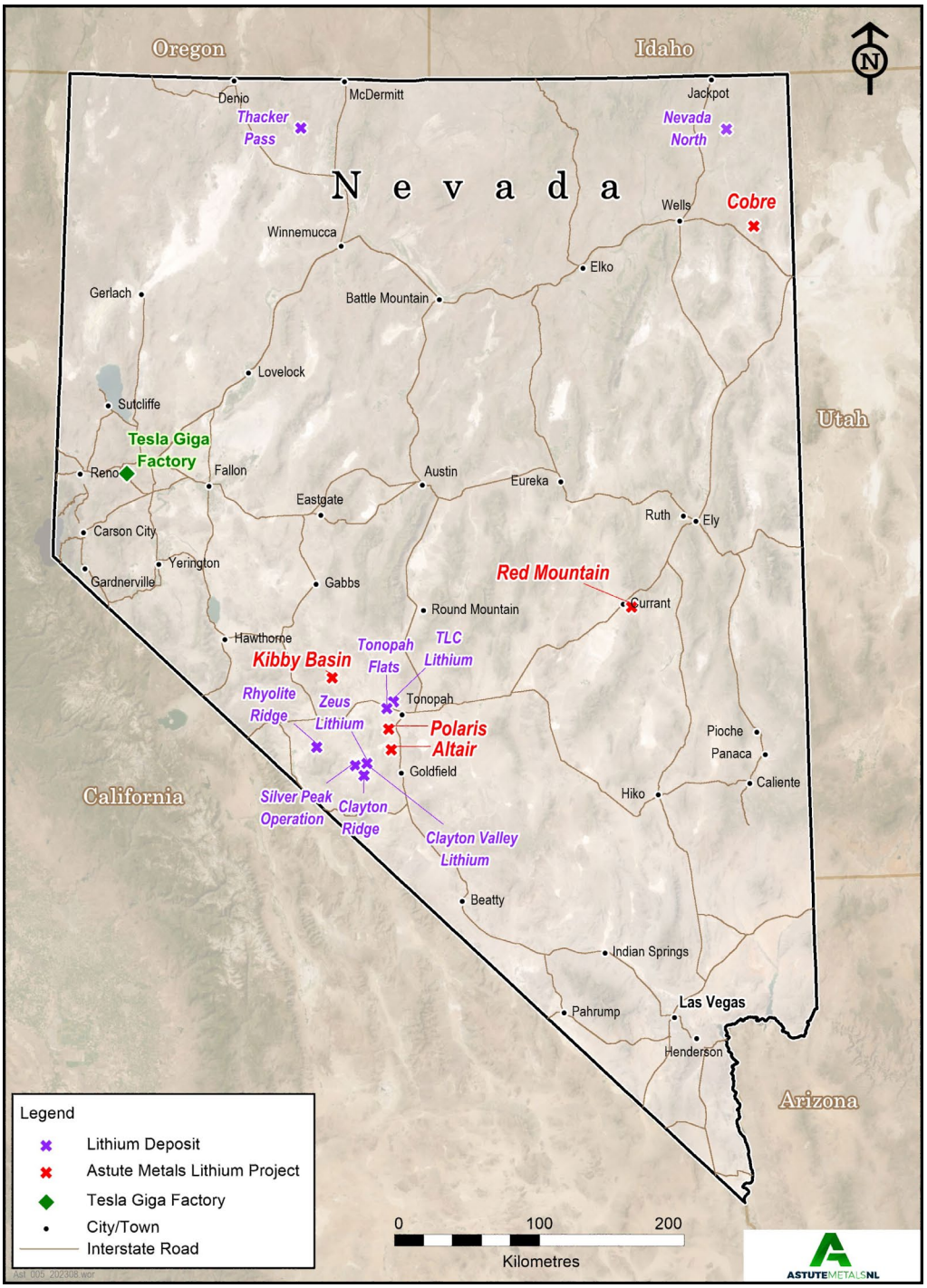

Figure 2. Astute Metals Nevada Lithium Project locations and lithium deposits.

Next Steps

Over the coming month, the Company will plan drill locations at Cobre, undertake site inspections, and submit permitting documentation to the Bureau of Land Management (BLM) with a view to drilling initial holes at the project in Q4 2023. In parallel with drill planning activities, the Company is also actively reviewing opportunities in the region to add to and/or consolidate the Project.

After the Red Mountain claims have been filed with Nye County, the Company will aim to:

- resolve the claim areas that it is entitled to, including notifying the competitor of its position; and
- commence a soil sampling campaign in order to identify lithium anomalies and generate targets for drilling in the 2024 calendar year.

1 ASX: ARO 3 March 2023 'Astro Advances Lithium Strategy with Key Appointments and Expansion of Highly Prospective Nevada Lithium Portfolio'
2 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

Authorisation

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

More Information

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Competent Persons

The information in this report that relates to 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 Reporting of Exploration Results (Section 2) 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.

APPENDIX 1 - JORC Code, 2012 Edition – Table 1

Section 1 - Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialisedindustry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheldXRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensuresample 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 (eg '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, suchas where there is coarse gold that has inherentsampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Soil samples were conventional, and taken from the B-Horizon, (where present) after removal of the A-Horizon and sieved using a 12-mesh sieve. A nominal 0.5kg of sample was collected at each sample location. Claystone hosted lithium deposits are thought to form as a result of the weathering of lithium-bearing volcanic glass within tertiary-aged tuffaceous lacustrine sediments ofthe mapped Ts3 unit. Inputs of lithium from geothermal sources have also been proposed.
Drilling techniques	Drill type (eg core, reverse circulation, open-holehammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core isoriented and if so, by what method, etc).	Not applicable
Drill sample recovery	Method of recording and assessing core andchip sample recoveries and results assessed. Measures taken to maximise sample recoveryand ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gainof fine/coarse material.	Not applicable
Logging	Whether core and chip samples have been geologically and geotechnically logged to alevel of detail to support appropriate MineralResource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative innature. Core (or costean, channel, etc) photography. The total length and percentage of the relevantintersections logged.	Not applicable

Criteria	JORC Code explanation	Commentary
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, rotarysplit, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparationtechnique. Quality control procedures adopted for all sub-sampling stages to maximise representivityof samples. Measures taken to ensure that the sampling isrepresentative of the in situ material collected,including for instance results for field duplicate/second-half sampling.	Full samples (i.e. samples were not split) were submitted to ALS Laboratories in Elko for preparation and analysis.
Quality of assay data and laboratory tests	Whether sample sizes are appropriate to thegrain size of the material being sampled. The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial ortotal. For geophysical tools, spectrometers, handheldXRF 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precisionhave been established.	Samples were analysed by method ME-MS41 which is an ICP-MS method employing an aqua-regia digest. Aqua-regia is not considered a 'total' digest for many elements however is considered fit for purpose for lithium and has been used extensively by other parties exploring for lithium claystone deposits in the USA. Assay quality was monitored using pulp blanks, as well as certified reference materials (CRMs) at a range of lithium grades. Pulp blank results indicated no material contamination of samples from the analytical process. CRM results were within 3 standard deviations of certified values. No systematic bias nor other accuracy related issues were identified.
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 entryprocedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Samples were assigned a unique sample identification number prior to sample despatch Lithium-mineralised claystone Certified Reference Materials (standards)and pulp blanks were inserted into the sample stream at regular intervals (1:25 ratio) to monitor lab accuracy and potential contamination during analytical processes
Location of data points	Accuracy and quality of surveys used to locatedrill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	Sample locations were pre-determined by overlaying a grid and using hand-held GPS to navigate to points. Locations are reported in NAD83 UTM Zone 11. Expected site location accuracy is +/- 10m

APPENDIX 1 - JORC Code, 2012 Edition – Table 1

Criteria	JORC Code explanation	Commentary
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 MineralResource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	Not applicable
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.	Claystone beds are regionally sub-horizontal withshallow dip of <5° although locally this may vary
Sample security	The measures taken to ensure sample security.	Sampling was undertaken by exploration technical services group Rangefront Mining Services. Samples were collected by Rangefront personnel and returned to the Rangefront offices in Elko, Nevada, for addition of QC entities and were delivered directly to ALS Laboratories Elko
Audits or reviews	The results of any audits or reviews of samplingtechniques and data.	Not applicable

APPENDIX 1 - JORC Code, 2012 Edition – Table 1

Section 2 - Reporting of Exploration Results

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.	Cobre claims held in 100% Astute subsidiary Needles Holdings Inc. Claims located on Federal (BLM) Land Claim numbers (198 in total) are as follows: COB001-018, COB035-053, COB101-110, COB199-216, COB260-268, COB305-322, COB339-356, COB375-392, COB411-426, COB429-446, COB465-482, COB501-516
Exploration done by other parties	Acknowledgment and appraisal of exploration byother parties.	No known lithium exploration conducted on Polaris or Altair areas. Exploration conducted in the region by other explorers referenced in announcement body text
Geology	Deposit type, geological setting and style of mineralisation.	The principal target deposit style is claystone hosted lithium mineralisation. Claystone hosted lithium deposits are thought to form as a result of the weathering of lithium-bearing volcanic glass within tertiary-aged tuffaceous lacustrine sediments of the mapped Ts3 unit. Lacustrine environments formed as a result of extensional tectonic regime that produced 'basin and range' topography observed across the stateof Nevada. Inputs of lithium from geothermal sources have also been proposed.
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
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 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 shownin detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
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 (eg 'down hole length, true width not known').	Not applicable
Diagrams	Appropriate maps and sections (with scales) andtabulations 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.	Included in ASX announcement
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.	This release describes all relevant information
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysicalsurvey 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.	This release describes all relevant information
Further work	The nature and scale of planned further work (eg 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.	Soil sample results will be used to design, permit and drill exploration holes aimed to intersect lithium mineralisation in the subsurface

APPENDIX 2 – Cobre Project
Soil Sample Locations and Assays

ASTUTEMETALSNL

Sample ID	Li (ppm)	Easting	Northing	Sample ID	Li (ppm)	Easting	Northing
75385	146	718300	4549200	78556	30.8	719901	4553198
78311	220	718300	4551601	78557	59.2	719998	4553200
78204	35.3	718300	4552003	78565	44.9	720000	4553599
78535	38.8	718300	4552401	78558	175	720099	4553201
78534	38.6	718397	4552399	78566	36.9	720100	4553597
75386	174	718400	4549200	78568	36.6	720197	4553604
78312	47	718400	4551598	78559	96.5	720198	4553201
78205	20.4	718403	4552006	78239	130.5	720301	4553199
78508	116	718497	4549199	78569	52.4	720302	4553601
78207	28.3	718499	4552004	78457	43.6	720899	4548800
78313	55.4	718501	4551599	78447	62.3	720899	4549599
78533	13.8	718502	4552400	78392	40.2	720900	4548400
78507	48.6	718599	4549199	78448	35.8	720900	4549200
78208	36.9	718599	4552003	78393	38.8	721000	4548400
78532	12.2	718599	4552399	78458	38.6	721001	4548801
78314	52.8	718601	4551600	78426	35.3	721001	4549201
78209	28.7	718698	4552004	78446	67.1	721001	4549600
78506	82	718699	4549198	78394	46.1	721100	4548400
78227	50.2	718699	4549599	78459	80.8	721100	4548800
78315	34	718701	4551600	78427	32	721101	4549200
78531	33.3	718702	4552400	78445	60.7	721101	4549601
78228	59.6	718797	4549600	78395	49.3	721200	4548400
78505	88.7	718799	4549202	78460	67.8	721200	4548800
78316	60	718800	4551599	78428	56.3	721200	4549201
78211	42.8	718801	4551995	78444	51.2	721200	4549600
78530	69.1	718801	4552400	78396	37.8	721299	4548400
78212	61.1	718893	4552001	78461	67.5	721300	4548800
78229	67.4	718898	4549603	78429	48.9	721300	4549199
78317	44.1	718898	4551602	78443	57.1	721301	4549601
78529	36.4	718899	4552400	78442	248	721399	4549601
78504	111.5	718900	4549199	78462	78.3	721400	4548800
78503	77.2	718999	4549199	78430	44.8	721400	4549200
78318	55.8	719002	4551601	78397	40.1	721401	4548402
78213	44.2	719002	4551997	78398	66.9	721500	4548401
78528	37.3	719002	4552400	78463	101.5	721500	4548800
78230	108	719003	4549599	78441	47.8	721500	4549600
78248	28.4	719100	4553200	78431	35.9	721501	4549200
78249	49.7	719195	4553201	78432	48.1	721593	4549210
78250	53.8	719299	4553197	78440	49.6	721599	4549600
78551	58.2	719398	4553200	78399	62.1	721600	4548400
78552	87.7	719501	4553202	78439	47.3	721600	4549600
78553	117.5	719599	4553203	78437	47.1	721694	4549604
78561	29.7	719599	4553602	78433	56	721700	4549199
78554	50.4	719698	4553200	78466	63.1	721701	4548800
78562	23.8	719699	4553599	78400	51.9	721704	4548399
78555	49.2	719800	4553200	78451	85.7	721797	4548405
78563	35.1	719800	4553603	78467	48.3	721800	4548800
78564	44.1	719899	4553601	78434	61	721800	4549201

APPENDIX 2 – Cobre Project
Soil Sample Locations and Assays

ASTUTEMETALSNL

Sample ID	Li (ppm)	Easting	Northing	Sample ID	Li (ppm)	Easting	Northing
78436	44.2	721802	4549608	78539	33.6	724002	4555000
78452	33.4	721900	4548400	78636	25.6	724097	4555402
78435	48.4	721900	4549200	78172	41	724100	4548400
78468	91.2	721901	4548800	78157	1640	724100	4548801
78453	36.3	722000	4548401	78003	79.9	724100	4549200
78469	114.5	722000	4548800	78114	101.5	724100	4549599
78454	36.5	722100	4548400	78200	29.4	724100	4552802
78455	31	722200	4548399	78354	26.7	724100	4555800
78290	65.9	722898	4549999	78261	22.2	724101	4552401
78289	66.2	722899	4549999	78538	12.5	724101	4555002
78051	135	722899	4550798	78351	27.6	724101	4556200
78182	51.3	722900	4551200	78156	228	724199	4548803
78063	44.4	722904	4550401	78355	24.5	724199	4555800
78064	34.2	722996	4550402	78002	108	724200	4549200
78291	60.3	723000	4550000	78637	34.1	724200	4555399
78053	72.1	723000	4550799	78050	21.1	724200	4556200
78183	581	723000	4551199	78173	47.1	724201	4548400
78054	53.5	723096	4550800	78260	27.1	724201	4552401
78184	57.9	723098	4551200	78251	29.3	724201	4552798
78292	98.1	723099	4550000	78113	44.5	724202	4549599
78065	48.6	723099	4550395	78537	22.8	724202	4554999
78055	49.1	723199	4550803	78174	55.2	724299	4548400
78293	31.5	723200	4550001	78638	24.8	724299	4555400
78185	85.5	723200	4551198	78154	170	724300	4548797
78066	29.7	723201	4550397	78001	75.7	724300	4549201
78056	23.8	723294	4550801	78259	35.4	724300	4552400
78067	49.1	723299	4550396	78356	24.5	724300	4555800
78294	21.1	723300	4550000	78049	28.5	724300	4556200
78186	45.2	723300	4551200	78101	71.2	724302	4549601
78068	39.8	723399	4550397	78252	30.1	724302	4552800
78295	17.5	723400	4550000	78536	29.9	724302	4554999
78057	35.2	723400	4550798	78257	29.5	724399	4552399
78187	17.6	723400	4551199	78640	24.2	724399	4555399
78069	22	723499	4550398	78639	24.7	724399	4555400
78296	20.5	723500	4550000	78175	51.9	724400	4548399
78058	43.2	723500	4550800	78153	96.6	724400	4548800
78188	70	723500	4551200	78008	674	724400	4549200
78189	80.6	723597	4551200	78357	25.9	724400	4555800
78190	85.5	723597	4551200	78048	26.3	724400	4556201
78059	24.2	723598	4550797	78102	55	724401	4549602
78195	22.6	723600	4550000	78634	24.5	724401	4554998
78070	24	723605	4550397	78253	38.6	724402	4552799
78091	72	723959	4551996	78641	31.3	724498	4555401
78262	13.2	724000	4552400	78176	56.6	724500	4548400
78199	40.7	724000	4552801	78358	26.2	724500	4555800
78635	22.2	724000	4555398	78047	25.4	724500	4556200
78353	10.7	724000	4555800	78152	34.3	724501	4548801
78352	23.3	724001	4556201	78104	69.9	724501	4549598

APPENDIX 2 – Cobre Project
Soil Sample Locations and Assays

ASTUTEMETALSNL

Sample ID	Li (ppm)	Easting	Northing
78254	25.9	724501	4552800
78256	26.2	724502	4552400
78633	28.1	724502	4555006
78011	33.8	724511	4549201
78177	25.8	724599	4548400
78151	17.9	724599	4548798
78642	36.5	724599	4555402
78046	34.3	724599	4556200
78009	29.2	724600	4549200
78632	30.2	724600	4555000
78359	27.7	724600	4555799
78105	21.4	724601	4549599
78255	25.7	724601	4552398
78106	18.3	724698	4549597
78012	35.2	724700	4549200
78631	22.5	724700	4555001
78643	24.8	724700	4555400
78360	26.8	724700	4555799
78045	57.3	724700	4556200
78178	63.2	724701	4548399
78179	24.8	724798	4548402
78107	37.9	724798	4549600
78362	25.8	724799	4555800
78013	172.5	724800	4549201
78044	29.1	724800	4556200
78363	22	724900	4555800
78043	39	724900	4556200
78108	472	724902	4549602
78109	118	724999	4549598
78364	24.4	725000	4555800
78042	30	725000	4556199
78111	27.5	725099	4549599
78365	30.3	725100	4555800
78041	26.5	725100	4556200
78112	27.7	725199	4549597
78366	22.2	725200	4555800
78039	27.7	725200	4556200