

ASX: **SLB** stelarmetals.com.au

25 March 2024 ASX ANNOUNCEMENT

High-grade rock chips from Caloola in northern Euriowie Pegmatite Field

Highlights

- High-grade lithium rock chip assays up to 2.8 % Li₂O from Caloola, located 7 km north of Trident.
- New large areas are prioritised for reconnaissance mapping and surface sampling.
- Additional rock chip and soil samples have been submitted for laboratory analysis, and results are pending.
- Petrological analysis of drill and surface samples is being undertaken to characterise lithium mineralogy and alteration.
- Stelar plans to undertake its second phase of drilling in mid-2024.

Stelar Metals Limited (ASX:SLB) ("**Stelar Metals**" or the "**Company**") is pleased to announce high-grade lithium rock-chip assays have been received up to 2.8% Li2O from Caloola, located 7 kilometres north of Trident (Figure 1). Expanded new areas have been prioritised for reconnaissance mapping and sampling over the coming months.

Trident was one of Australia's first lithium mining provinces, comprising pegmatites that have historically been mined for lithium and tin. The large scale of the lithium-rich pegmatite system at Trident, which is prospective for hard-rock lithium mineralisation, extends over a 20km strike length of the Euriowie Tin Pegmatite Field.

Stelar's inaugural reverse circulation (RC) drilling program at Trident in late 2023, which was designed to understand the morphology and orientation of the pegmatites, intersected significant lithium mineralisation, including 8m @ 1.16% Li2O (TRD001 8-16m)¹, as well as



broad mineralised intersections, including 34m @ 0.2% Li2O (TRD012 10-44m)¹. The Trident pegmatite is open to the north, where the pegmatite system thickens and deepens.

Stelar plans to use geological mapping, surface sampling, and an in-depth analysis of the inaugural drilling results to prioritise and design the second drilling program, which is scheduled for mid-2024.

Geological Mapping and Sampling

Geological mapping and sampling recommenced at Trident in January, and several large new pegmatite systems, such as Sabre and Pilgrim, were discovered that had generally been overlooked in the historic Government geological mapping.

The newly mapped pegmatites show similar zonation and exotic mineral assemblages as seen at the Trident Lithium Mine with quartz cores, feldspar-dominated intermediate zones and coarse mica wall rock zones in contact with hornfels schist. Rock chip and soil samples are still pending assay results to determine lithium fertility.

The latest rock chip results confirm high-grade lithium in the northern portion of the Euriowie Pegmatite Tin Field. Underground spoils from the Caloola South Pegmatite, located seven kilometres north of Trident, returned up to 2.8 % Li₂O in assays along with anomalous Cs, Rb, Sn, and Ta. Underground spoils are relatively limited in this area. As observed at Trident, weathered surface rock chip samples are often depleted in lithium. The high-grade rock chip samples previously reported around Trident were sourced from mine waste piles comprising fresher material derived from depth.

The Central and Northern areas of the Euriowie Pegmatite Field are dominated by a sixkilometre NNW-trending structural corridor that spans 800m in width and comprises a high density of multiple individual LCT-pegmatites with similar zonation to Trident, including exotic mineralisation. *Caloola* (*North, South, King, and Queen*) *is connected to Jubilee, Casino, Queen Victoria, and Badger* and forms a continuous pegmatite body. They are separated from Carnival in the south by an oblique reverse fault. The area has been extensively worked for tin by historic mining.



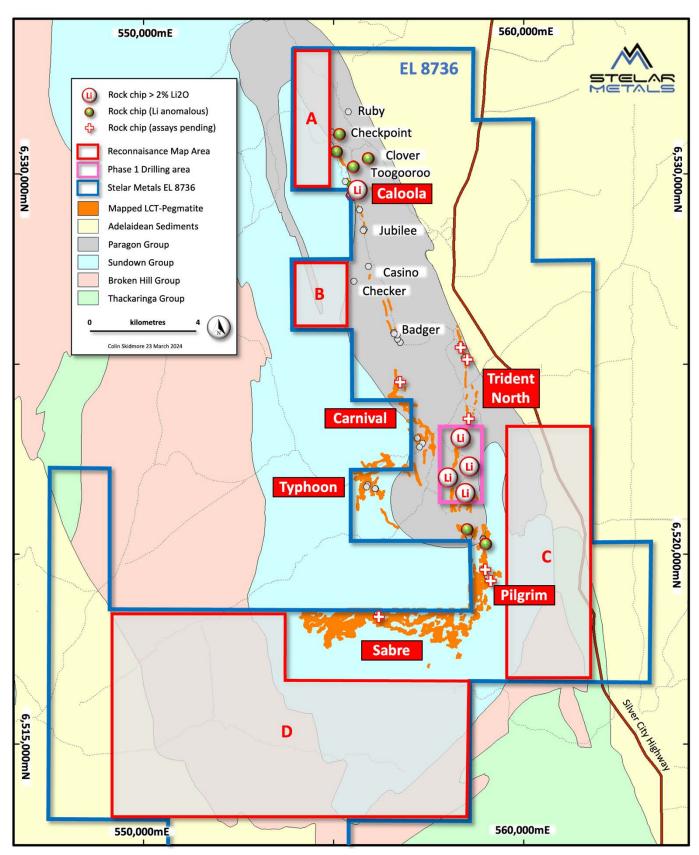


Figure 1: Rockchip locations and prioritised reconnaissance mapping areas



Sample	Pegmatite	Easting	Northing	Li ₂ O	Li	Cs	Rb	Sn	Та	Р
Number				%	ppm	ppm	ррт	ррт	ррт	%
R4085	Typhoon	555887	6521830		26	6.0	159	3.7	0.2	0.02
R4086	Typhoon	555891	6521829		21	10.1	306	21.9	2.3	0.03
R4087	Typhoon	555882	6521814		13	5.7	123	6.5	0.4	0.04
R4088	Typhoon	555867	6521794		11	3.7	142	7.2	0.4	0.05
R4089	Typhoon	555858	6521782		24	3.2	161	9.1	0.8	0.04
R4090	Caloola North	555074	6530569		434	677.4	2717	159.5	50.4	0.09
R4091	Caloola King	555299	6529814		145	64.7	581	249.7	92.6	0.31
R4093	The Ruby	555381	6531654		46	49.4	313	34.7	93.0	0.19
R4096	Grizzly	550855	6523693		14	5.1	180	1.8	2.4	0.84
R4100	Jubilee	555785	6528548		104	123.2	2220	376.1	105.3	0.02
R4102	Caloola South	555448	6529435	2.80%	13000	42.5	507	131.4	50.1	9.02
R4105	Caloola South	555431	6529474	0.22%	1033	81.1	1227	294.0	8.4	0.48
R4106	Jubilee	555791	6528552		125	43.6	377	60.4	53.4	0.3
R4107	Jubilee	555791	6528562		199	99.1	817	115.2	22.0	0.08
R4108	Caloola Queen	555675	6529075		95	78.9	881	77.7	94.6	0.27
R4109	Caloola Queen	555675	6529075		99	53.0	382	35.9	223.3	0.23
R4110	Caloola King	555425	6529726		250	178.3	1549	127.4	167.6	0.1
R4111	Checkpoint	554934	6531126		142	385.1	5257	444.3	81.0	0.07
R4112	Pinstripe	555114	6531008		376	114.1	1178	133.5	16.3	0.26
R4113	Toogooroo	555518	6530242	0.11%	522	71.6	1438	177.7	72.6	0.27
R4114	Toogooroo	555518	6530244		306	80.3	1263	136.2	60.6	0.21
R4115	Checker	555529	6527187		128	63.2	733	248.3	32.0	0.08
R4116	Casino	555913	6527580		193	86.1	527	108.3	72.1	0.69
R4117	Badger	556670	6525785		93	150.3	1880	187.4	47.1	0.17
R4118	Pilgrim	558885	6520478		22	4.1	72	20.9	1.7	0.02
R4119	Typhoon	556091	6521734		57	77.8	1004	561.4	37.8	0.05
R4120	Typhoon	556081	6521728		52	38.2	642	383.5	22.4	0.09
R4121	Trident	558269	6523048	1.49%	6900	358.1	1699	218.6	1711.0	5.87
R4122	Trident	558272	6523048	2.28%	10600	31.0	252	69.5	215.7	13.36



Sample	Pegmatite	Easting	Northing	Li2O	Li	Cs	Rb	Sn	Та	Р
Number				%	ppm	ppm	ppm	ppm	ppm	%
R4125	Trident	558346	6523145		130	86.0	148	42.0	2.3	10.84
R4126	Trident	558328	6523172		224	605.4	1710	146.0	251.0	0.45
R4127	Pathfinder	558532	6520560		290	63.1	790	193.8	13.4	0.18
R4128	Pilgrim	558925	6520415		29	7.2	148	9.3	1.6	0.09
R4129	Pilgrim	558928	6520403		73	34.8	367	19.4	4.1	0.07
R4130	Pilgrim	558948	6520362		39	11.4	385	15.0	1.2	0.09
R4131	Pilgrim	558983	6520343		36	13.0	358	10.8	1.9	0.08
R4132	Pilgrim	558995	6520275		225	138.7	1867	163.4	17.3	0.05
R4133	Pilgrim	558945	6520433		20	9.6	399	11.5	0.7	0.08
R4134	Clover	555896	6530392	0.15%	687	71.4	995	101.1	68.2	0.72
R4135	Toogooroo	555513	6530280		51	390.1	1417	155.1	76.4	0.22
R4137	Jubilee	555769	6528535		204	104.4	572	43.9	41.8	0.1
R4252	Pathfinder	558559	6520457		45	15.3	374	31.4	3.6	0.13

Table 1: Reconnaissance rock chip assay results for selected elements

The Next steps

Four new areas (Areas A to D, illustrated in Figure 1) have been prioritised for reconnaissance mapping and sampling, which have not yet been assessed. Additional sampling will be undertaken; several samples have already been sent for laboratory analysis.

Petrology, including XRD, is pending to determine the mineralogy from drilling and surface sampling.

The new pegmatites identified by the reconnaissance mapping and sampling will be ranked and prioritised for sampling infill and detailed zonation mapping to generate potential drill targets to be included in the second phase of drilling scheduled for mid-2024.



THIS ANNOUNCEMENT HAS BEEN APPROVED FOR RELEASE BY THE BOARD OF STELAR METALS LIMITED

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ABOUT STELAR METALS

Stelar Metals' experienced and successful lithium exploration and development team is targeting the discovery and production of the critical mineral lithium that is rapidly increasing in global demand to enable the world to achieve net zero emissions.

Stelar's Trident Lithium Project is located near mining, industrial, transport and green power infrastructure at Broken Hill in NSW. The Trident Lithium Project extends over the 20km strike length of the Euriowie Tin Pegmatite Field and is highly prospective for hard rock lithium mineralisation. Mapped LCT-type pegmatites vary in size but can be up to 100 metres wide and extend in outcrop for over 1 kilometre in length. Trident was one of Australia's first lithium and tin mining provinces, highlighting both the fertility and large scale of Stelar's lithium-rich pegmatite system.

EXPLORATION RESULTS

The information in this announcement related to Exploration Results is based on information compiled by Mr Colin Skidmore, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Skidmore is a full-time employee of Stelar Metals Ltd. Mr. Skidmore has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities 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 (the JORC Code (2012)). Mr. Skidmore consents to including matters in this announcement based on his information in the form and context in which it appears.

This announcement includes information related to Exploration Results prepared and first disclosed under the JORC Code (2012) and extracted from the Company's initial public offering prospectus, which was released on the ASX on 16 March 2022. A copy of this prospectus is available from the ASX Announcements page of the Company's website: <u>https://stelarmetals.com.au/</u>.

The Company confirms that it is unaware of any new information or data that materially affects the information in the relevant market announcement. Where the information relates to Exploration Results, the Company confirms that the form and context in which the competent person's findings are presented have not been materially modified from the original market announcement.



JORC Code, 2012 Edition – Table 1: Reconnaissance Surface Sampling

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample 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, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 All sampling was overseen by Stelar Metals Employees Duplicate samples were collected (I in 15 samples) Certified Reference Material was inserted in sequence every 1 in 20 samples. Blank Certified Reference Material was inserted in sequence every 1 in 50 samples. Sample preparation was conducted by Intertek Genalysis (Adelaide) using method SP1 where the sample received at the laboratory is weighed, dried, crushed to 3mm, pulverized to 75 micron and split to provide a adequate pulverized material for multi-element analysis. Soil samples are collected from 1-20cm depth along variably spaced traverses. ~250g of unsieved soil is collected in labelled paper bags however coarser fractions are generally discarded. Extensive meta data is recorded at each site. Random-grab rock-chips samples are collected as specimen samples over areas identified by the field geologist as being of interest. Samples are typically 0.5-3 kg in weight. Metadata collected records location and if the sample is "in-situ" or has been obtained from a waste rock dump. At each sample site (soil and rock-chip) Extensive metadata is collected including: Outcrop types, soil types, terrain types, cover type, cover characteristics, lag types, intensity of in-soil organic material along with notes and photos as necessary. Each sample collection is timestamped with the samplers details in the field database.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, 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 is oriented and if so, by what method, etc). 	No drilling reported.
Drill sample recovery Logging	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and 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/gain of fine/coarse material. Whether core and chip samples have been geologically and 	No drilling reported No drilling reported
	 geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	



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, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 The sample size and medium are considered appropriate for the purpose of outlining surface geochemical anomalies
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF 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 precision have been established. 	 Selected surface samples are sent to Intertek Genalysis in Adelaide for preparation and analysis ICPOES/MS for multielement geochemistry. Multielement analysed using Intertek's method 4A/MS48-Li which is a 4-acid digest followed by analysis using ICP-OES and MS for 48 elements. Analysis from geophysical tools are not reported Comprehensive QAQC component with Field Duplicate samples taken at every 15th sample; Certified Standards (selection of OREAS CRM's considered most appropriate for expected grade and composition) were inserted randomly in sequence for at every 20th sample submitted; blanks were inserted in sequence at every 50th sample submitted. Additionally, the laboratories provided their internal QAQC which included check samples, CRM's, blanks and repeats. Analysis of the duplicate samples was reasonable. Some significant variation was noted however this is considered consistent with the coarse grain nature of pegmatite mineralisation. There was no evidence of cross-contamination in the submitted blank samples. Intertek's analysis of reported elements performed well with all batches falling within the +/-3SD test of the expected value for the given standards (3 OREAS CRM's).
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 entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Alternative company personnel have verified significant intersections. Sample metadata including location, terrain, cover, rock and soil types, and sampling records are recorded directly into a FileMaker database system in the field which includes comprehensive interval validation procedures. No adjustments have been made to assay data. Li2O grades are derived from reported elemental values using an oxide conversion factor of 2.153
Location of data points	 Accuracy and quality of surveys used to locate drill 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. 	 All surface samples are located using a Garmin Map i66 handheld GPS with a horizontal accuracy ~3m The RL was generated from the LiDAR survey flown in November 2023. All data is reported in Geocentric Datum of Australia 1994 (GDA94) and Vertical Datum in Australian Height Datum (AHD). The map projection is MGA Zone 54. Aerometrex collected LiDAR and high-resolution orthoimagery over the entire Trident Area in November 2023. All datasets are levelled to the LiDAR survey
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 Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Reconnaissance surface sampling only No sample compositing was applied



Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which the 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. 	anomalies
Sample security	The measures taken to ensure sample security.	 Samples are packaged in labelled polyweave sacks secured by zip-ties that are delivered to the laboratory in-person my Stelar Metal's employees. Retained soil samples that are not sent to assay are preserved in labelled and zip tied polyweave sample bags at the company's exploration house in Broken Hill.
Audits or reviews	The results of any audits or reviews of sampling technique and data.	es • No audits or reviews have been undertaken



Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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. 	 The Trident Lithium Project is located on EL 8736, ~70km north of Broken Hill in the Euriowie Block. It is accessed by the Silver City Highway. EL 8736 is held in a joint venture with 90% held by BR2 Pty Ltd a wholly owned subsidiary of Stelar Metals Limited and 10% held by Oz Gold Group Pty Ltd a subsidiary of Everest Metals Corporation Limited (EMC). Trident is located on Bijerkerno Pastoral Lease which is owned by the Wilyakali Aboriginal Corporation (WAC) Stelar has a good working relationship with the WAC. Native Title is extinguished in the Trident Area. EL 8736 is a granted exploration license which is in good standing with the NSW Regulators.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Historic tin, tantalum and lithium mining of pegmatites at Euriowie was undertaken from 1880s to the 1960's. Amblygonite was first recognized at Lady Don in 1919. Trident was one of Australia's first lithium mining areas where amblygonite was mined between 1940s to the 1960's. Exploration work is limited to tin exploration by Carpentaria between 2007 and 2015 who primarily focused on a tin mineralisation scoping study at Mount Euriowie who completed 13 shallow RC holes (the only known drilling near the Trident Project). Carpentaria also undertook detailed pegmatite mapping and rock chip / channel sampling in the region. Lapidico collected four traverses of rock chips and 5 soil sampling traverses in 2016 that recorded high grade lithium assays at Trident, Scepter, Lady Don and Triumph Twenty Seven Co (now EMC) undertook a rock chip sampling program in 2021 but failed to obtain anomalous results
Geology	Deposit type, geological setting and style of mineralisation.	 Lithium mineralisation is targeted in pegmatites which are hosted by lower amphibolite to upper greenschist facies Paragon Group muscovite and andalusite schists. Pegmatites are thought to occur as anatectic melts derived from pro-grade metamorphism of the Willyama Super Group volcano-clastic metasediments during the MesoProterozoic D2 orogenic event
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. 	No drilling reported
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, 	 No data aggregation has been applied No resource evaluation has been undertaken Metal equivalent values are not reported.



Criteria	JORC Code explanation	Commentary
	 the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
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'). 	Reconnaissance surface sampling only reported
Diagrams	 Appropriate maps and sections (with scales) and tabulations 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. 	 Relevant rock-chip samples locations are illustrated in Figure 1 on this 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. 	See Table 1
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey 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. 	 High resolution ortho imagery and LiDAR was collected by AeroMetrex in late 2023. High resolution magnetics and 256-channel radiometrics was collected in mid 2023. PGN Consultants have assisted with the structural interpretation and drill hole planning of the Trident Area Detailed pegmatite zonation and structural mapping has been undertaken. Surface sampling (soil and rock chip) has been undertaken. Petrological and XRD analysis has been undertaken on rock chips. An inaugural drill program (2.630m of RC drilling) was completed at trident, Sceptre, Lady Don, Triumph, Stag and Gloria in December 2023. Drilling results were released as an ASX Announcement dated 7 February 2024.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale stepout 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. 	 Additional drill programs are currently being designed to further evaluate the lithium potential of the Trident Project. Detailed pegmatite zonation and structural mapping across the Euriowie Block is ongoing along with additional surface sampling.