## ASX ANNOUNCEMENT

RELEASED 20 MARCH 2024



# New soil results define compelling lithium targets for drilling at Lake Johnston

## **Highlights**

- Infill and extension soil geochemistry results received for Jaegermeister
- Several lithium geochemical trends defined over a strike of ~ 8km
- Priority lithium targets defined substantially larger and of higher tenor
   than the anomalies that delivered the Burmeister Discovery
- Approvals for first drilling of new areas well advanced
- Approvals for infill drilling at Burmeister underway

TG Metals Limited (**TG Metals** or the **Company**) (ASX:TG6) is pleased to provide this update on exploration activities at the Lake Johnston Li-Ni-Au Project in Western Australia.

## **Lithium Soil Sampling**

Assays from the infill and extension soil geochemistry program at the Jaegermeister lithium prospect have been received. The aim of the sampling was to better define targets for the first drilling program.

Four (4) priority drill targets have been defined. All are larger and of higher grade than the soil anomaly which defines the high-grade Burmeister lithium discovery (Figure 1).

#### TG Metals CEO, Mr. David Selfe stated;

"There are numerous lithium geochemical anomalies at Jaegermeister that cover a very large area of approximately 8km by 3km. The key aim of this infill and extension program has been to define the highest priority targets that will be tested in the upcoming drill program. The four priority targets identified are the largest and most geologically connected.

The knowledge we have gained from the high-grade spodumene pegmatites at Burmeister has provided key understandings and it looks like our Burmeister discovery may be a small part of a much larger lithium mineralised system at Lake Johnston."

The Heritage clearances and required flora/fauna studies commenced at Jaegermeister in 2023 and remain on-going, impacted in part by recent rainfall events. Drilling of the defined targets is expected to be staged over the next few months, dependent on when approvals are received and favourable weather conditions. The Company's assessment is that initial drilling may commence as early as April 2024.



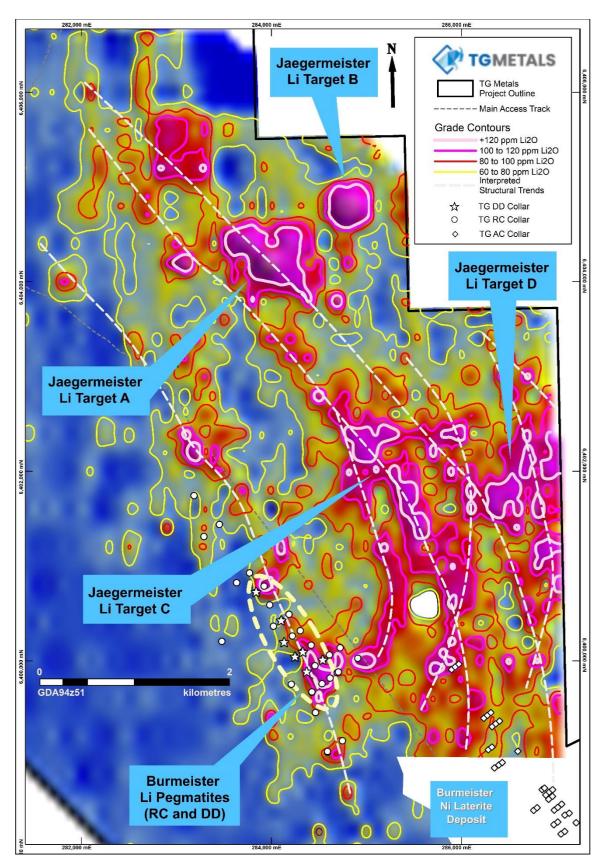


Figure 1 – Lithium soil assay contours, Lake Johnston Project. Datum: Zone 51 (GDA94).



## **Lithium Targets**

The prospectivity of the geochemical anomalies defined have been assessed relative to the high-grade lithium-pegmatite discovery at Burmeister. The Burmeister soil geochemical anomaly is approximately 500m long at greater than 120ppm Li<sub>2</sub>O. Drilling to date has identified spodumene-rich pegmatites over a strike of approximately 2km. This deposit has not been closed off in any direction and drilling is planned to continue. Only a select area of the Lake Johnston Project has been tested with soil sampling including lithium, Figure 2.

Four priority targets have been defined for the initial drilling at Jaegermeister.

- 1. **Target A** is a high tenor lithium soil anomaly that occurs on a prominent local elevation. The anomaly covers an area of 1000m by 800m with peak Li<sub>2</sub>O of greater than 200ppm.
- 2. **Target B** is a circular high tenor lithium anomaly and appears related to the Target A anomaly, is approximately 500m in diameter. Targets A and B are located within areas of outcrop, subcrop and thin skeletal soils.
  - These have similarities with the Burmeister discovery area, making these two targets the highest priority for drilling.
- 3. **Target C** is an anomaly approximately 1.5km in length, located on the western edge of an interpreted flood plain. It is interpreted to be an in-situ lithium in soil anomaly. The +120ppm Li<sub>2</sub>O anomaly is three times the size of the same amplitude anomaly over the top of the Burmeister lithium pegmatites, making Target C a large drill target.
- 4. **Target D** is located within relict flood plain (transported) material and as such there is reduced confidence in the soil anomalism. Despite this, the high tenor anomaly is within a structural and lithological trend extending from Target B.

Figure 3 shows the location points of the soil sample data, previous results and new results.

## **Next Steps**

Flora and fauna surveys have been completed and Heritage surveys recommenced following a pause due to rain on site. The maiden drilling at Jaegermeister will commence upon POW approval in areas already Heritage surveyed.

An infill drilling program at Burmeister is awaiting POW approval. A Heritage survey has recommenced to allow 100m infill drill lines. Flora and Fauna surveys have been completed.

Seismic trials over Burmeister and Jaegermeister to aid with drill targeting are due to commence in March and will run for approximately 10 days of data acquisition followed by five days of data interpretation.

The first metallurgical testwork is expected to commence in the coming weeks with core samples now at the metallurgical laboratory and a flowsheet for testwork set.



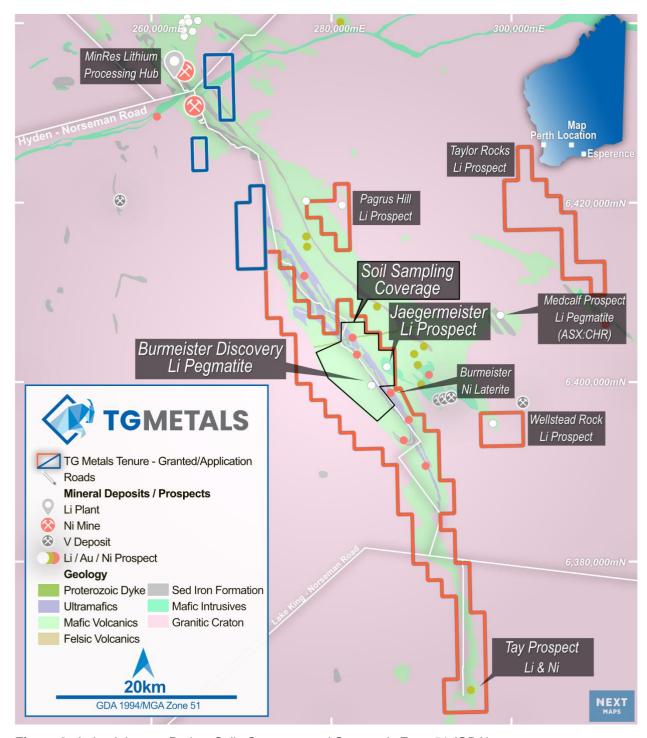


Figure 2 – Lake Johnston Project Soils Coverage and Surrounds Zone 51 (GDA).

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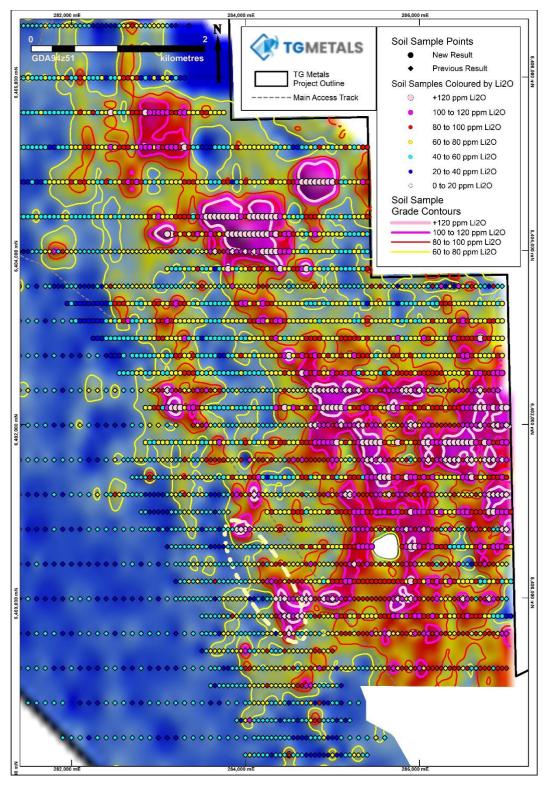


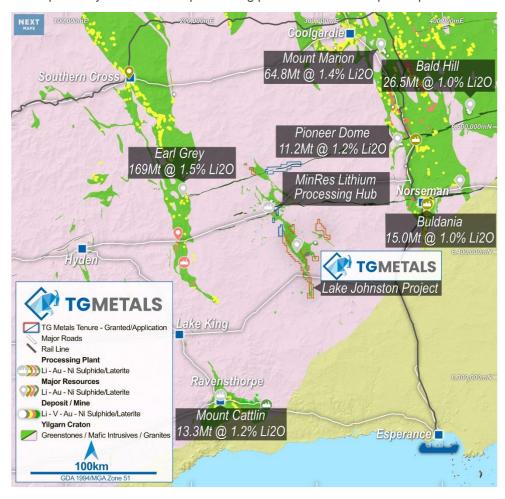
Figure 3 -Lake Johnston Soils with sample points. Zone 51 (GDA).

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#### **About TG Metals**

TG Metals is an ASX listed company focused on exploring for lithium, nickel and gold at its wholly owned Lake Johnston Project in the stable jurisdiction of Western Australia. The Lake Johnston Project, Figure 4, hosts the Burmeister high grade lithium discovery and several surrounding lithium prospects. Burmeister is in proximity to four lithium processing plants and undeveloped deposits.



**Figure 4** – Lake Johnston Project Location. Simplified Geology with regional lithium deposit locations Datum: Zone 51 (GDA94).

#### Authorised for release by TG Metals Board of Directors.

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#### **Competent Person Statement**

Information in this announcement that relates to exploration results, exploration strategy, exploration targets, geology, drilling and mineralisation is based on information compiled by Mr David Selfe who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Selfe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities that he is undertaking 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 Selfe has consented to the inclusion in this presentation of matters based on their information in the form and context in which it appears.

#### **Forward Looking Statements**

This announcement may contain certain statements that may constitute "forward looking statements". Such statements are only predictions and are subject to inherent risks and uncertainties, which could cause actual values, results, performance achievements to differ materially from those expressed, implied or projected in any forward looking statements.

Forward-looking statements are statements that are not historical facts. Words such as "expect(s)", "feel(s)", "believe(s)", "will", "may", "anticipate(s)" and similar expressions are intended to identify forwardlooking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company's prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

The Company believes that it has a reasonable basis for making the forward-looking Statements in the presentation based on the information contained in this and previous ASX announcements.

The Company is not aware of any new information or data that materially affects the information included in this ASX release, and the Company confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the exploration results in this release continue to apply and have not materially changed.



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## 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 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.	Soil samples were collected by spade (at approx. 20cm) and sieved in the field to 2mm to obtain up to 1kg of sample. The sample was placed in a pre-numbered calico bag and dispatched to All Points Sampling Pty Ltd (APS) warehouse in Wangara, WA. All samples were air dried in their calicos, before being passed through a secondary sieve of 80 mesh using a mechanical shaker to achieve a homogenised +100g sample. The +100g sample was placed in a labelled kraft packet (with same identification number on the calico). The kraft packets were sealed and submitted to Jinning laboratories Pty Ltd (Jinning Laboratories) in Maddington, WA for multielement analysis.
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Soil sample spacing was conducted on a 200m $\times$ 50m grid to infill the regional program conducted on a 400m $\times$ 100m grid. The infill and regional soils program are appropriate for first past exploration based on sampling conducted in the Lake Johnston region, for sample size and method. The pattern is aligned to the orientation of the target structures, whereby the sample points are across strike and spread out along strike. Sample replicates were analysed at a rate of 1:15 and Jinning Laboratories standards were reported and used by TG Metals Limited for QA/QC reporting.
	• Aspects of the determination of mineralisation that are Material to the Public Report.	No mineralisation was directly observed in the soil samples and determination of anomalism was solely dependent on Jinning Laboratories analysis. All samples for assay were submitted to a Certified Laboratory—Jinning Laboratoies Pty Ltd.
	• In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1	All samples were collected using a spade, penetrating 20cm of the surface cover. The samples were sieved in the field to capture 2mm pass and up

Criteria	JORC Code explanation	Commentary
Criteria	m samples from which 3 kg was pulverised to produce a 30 g charge for	to 1kg was placed in the pre-numbered calico. This sample was dispatched
	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.	to Perth APS headquarters in Wangara where all samples were sun dried before being passed through 80 mesh sieve using a mechanical shaker. This generated an approx. 100 gram sample which was placed in labelled kraft packet with the original sample id and dispatched to Jinning Laboratories for multielement analysis -Mixed Acid-digest ICP-OES / ICP-MS SCAN. Sample packets containing the sieved sample were sorted and pulverized to less than 75 microns and only 7g of the homogenised sample was used by Jinning Laboratories for analysis. The process involved the use of nitric, perchloric and hydrofluoric acids in the attack. Dissolution is achieved using hydrochloric acid. The use of hydrofluoric acid ensures the breakdown of silicate minerals. Although the digest approaches total dissolution of the sample, minor undissolved material can be encountered as white precipitates (BaSO4 from barite, Al2O3 from bauxite and sillimanite) and black grains (ilmenite, rutile, cassiterite, tantalite and chromite). In mineral exploration, the Mixed-Acid Digest multi-element analysis serves as a cost-effective proxy for mineralogy and offers valuable insights into pathfinder elements.
Drilling techniques	<ul> <li>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).</li> </ul>	No drilling results were included in this report
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No drilling results were included in this report.
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	No drilling results were included in this report.
	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.	No drilling results were included in this report.

Criteria	JORC Code explanation	Commentary
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Soil sample substrate was not recorded.
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	All observations are qualitative in nature.
	The total length and percentage of the relevant intersections logged.	No drilling results were included in this report.
Sub- sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	No drilling results were included in this report.
and sample preparation	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No drilling results were included in this report.
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples collected were hand sieved to 2mm in the field. Samples were transported to All Points Sampling Pty Ltd, air dried and passed through a secondary sieve of 80micron mesh using a mechanical shaker to achieve a homogenised 100g sample to be submitted to Jinning Laboratories for Mixed-Acid Digest. No further sample preparation was undertaken by All Points Sampling prior to lab submission. The final sieve size of 80micron mesh, approx. 100g was submitted to Jinning Laboratories for pulverising and multi-acid digest analysis.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	All samples were hand sieved to 2mm size fraction in the field. Samples were mechanically sieved in Perth to 80 mesh retaining +100g final size fraction material for analysis. Standards were inserted by Jinning Laboratories and sample replicates were analysed at a rate of 1:15
	<ul> <li>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.</li> </ul>	Field replicates were measured at a rate of 1:15

Criteria	JORC Code explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sieved field sample of +1kg was appropriate for the grain size of the surface material sample. The sample preparation technique and sample size were considered appropriate for the material being sampled.
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.	All samples were sent to Jinning Laboratories for multielement analysis (Mixed Acid-digest ICP-OES / ICP-MS SCAN) Sample packets were sorted and pulverized to less than 75 microns with 7g of the homogenised sample used for analysis. The process involved the use of nitric, perchloric and hydrofluoric acids in the attack. Dissolution is achieved using hydrochloric acid. The use of hydrofluoric acid ensures the breakdown of silicate minerals. Although the digest approaches total dissolution of the sample, minor undissolved material can be encountered. These include but not limited to, white precipitates (BaSO4 from barite, Al2O3 from bauxite and sillimanite) and black grains (ilmenite, rutile, cassiterite, tantalite and chromite.). In mineral exploration, the Mixed-Acid Digest multi-element analysis serves as a cost-effective proxy for mineralogy and offers valuable insights into pathfinder elements. This analytical method was chosen for consistency of data, as all soils completed by TG Metals Limited were analysed by Mixed Acid Digest ICP-OES / ICP MS SCAN
	• 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.	No other instruments or tools were used during this program.
	• 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.	Field replicates were analysed at a rate of 1:15. Jinning Laboratories inserted a series of standards which were reported and assessed by TG Metals Limited. First pass plots of sample replicate repeatability and standard results recorded against expected were within TG Metals Limited acceptable range.
Verification of sampling	• The verification of significant intersections by either independent or alternative company personnel.	No drilling results were included in this report.

Criteria	JORC Code explanation	Commentary
and assaying	The use of twinned holes.	No drilling results were included in this report.
,	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data was compiled and sorted in a master Microsoft Office Excel spreadsheet formatted with headers, to be uploaded into TG Metals Limited Micromine Database. Validation errors, if any, were rectified during import. All TG Metals Limited data and the Microcmine Database are backed regularly on a secure cloud storage.
	Discuss any adjustment to assay data.	All data below detection limit have been entered as zero. Assay data was received as % or ppm dependent on the natural elemental abundance. Li ppm was converted to Li2O for discussion purposes of similar industry trends and exploration results.
Location of data points	<ul> <li>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.</li> </ul>	All soil sample points were located using handheld GPS with a typical +-3m accuracy.
	Specification of the grid system used.	The field datum used was MGA_GDA94, Zone 51. All maps in this report are referenced to GDA94, Zone 51.
	Quality and adequacy of topographic control.	Topographic control was captured via an airborne imagery and LIDAR survey conducted by TG Metals in April 2023. X, Y sample location data was projected to the LIDAR DTM, and the subsequent Z value was assigned to the soil sample location.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Soil sample spacing was conducted on a 200m x 50m grid which is appropriate for first past exploration based on surface sampling completed by TG Metals Limited in the Lake Johnston region. The pattern is aligned on the orientation of MGA_GDA94, Zone 51 grid.
	• 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	Not applicable for soil sampling.

Criteria	JORC Code explanation	Commentary
	applied.	
	Whether sample compositing has been applied.	No sample compositing was completed.
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.	Soil sample spacing was conducted on a 200m x 50m grid to infill the regional program conducted on a 400m x 100m grid over the same area. The infill and regional soils program are appropriate for first past exploration based on sampling conducted in the Lake Johnston region, for sample size and method. The pattern is based on the orientation of the target structures, whereby the sample points are across strike and spread out along strike.
	• 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.	No drilling results were included in this report.
Sample security	The measures taken to ensure sample security.	All samples collected by APS personnel were assigned a sample id which was recorded against the geographical coordinates of the sample location. The samples were placed in pre-numbered calico bag, tied and delivered to the APS warehouse in Wangara. APS personnel sorted samples; air dried in their calico before passing through 80 mesh using a mechanical shaker. The final sieved component was placed in a pre-labelled kraft packet with same sample identification number as that recorded on the calico. Sample submission sheets and the sealed kraft packets were delivered to Jinning Laboratories in Maddington for multielement analysis. Jinning Laboratories strict sample tracking and checks ensured the sample received was reported.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Standards and replicates were cross checked against expected values to look for variances of greater than 2 standard deviations.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral Tenement	• 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 reported soil sampling program is located on exploration licence E63/1997. E63/1997 is 100% owned by TG Metals Limited. This area is under ILUA legislation, and the claimants are the Ngadju people whom TG Metals Limited has a Heritage Protection Agreement with. Permission was gained to complete the 'non-grounding program from the Ngadju people prior by written approval within the area shown in the figures contained in the body of this text. The area is also within PNR 84, a proposed nature reserve since 1982.
	• 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.	At the time of reporting there were no known impediments to obtaining a license to operate in the area other than TG Metals Limited abiding to conditions set by DEMIRS. The tenement is in good standing.
Exploration Done by Other Parties	Acknowledgement and appraisal of exploration by other parties.	Exploration in the area previously concentrated on nickel and gold conducted by Maggie Hays Nickel, Lionore International, Norilsk and White Cliffs Nickel. No recorded lithium exploration has occurred in the subject area in the past.
Geology	Deposit type, geological setting and style of mineralization.	The deposit type sought is to be Lithium-Cesium-Tantalum (LCT) spodumene bearing pegmatite. LCT mineralised pegmatites within the Yilgarn Craton are commonly low lying intrusives in ultramafic/mafic greenstone sequences of upper greenschist or amphibolite metamorphic facies.
Drillhole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: easting and northing of the drillhole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole down hole length and interception depth hole length.	No drilling results were included in this release.

Criteria	JORC Code explanation	Commentary
Data Aggregation Methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated	None used.
	• 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 aggregation should be shown in detail.	No data aggregation has been applied to the data in this release.
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	Lithium ppm (Li ppm) was converted to Li2O ppm for discussion purposes of the assay grades vs industry standards in reporting what constitutes anomalous assays.
Relationship Between Mineralisati on Widths and Intercept Widths	If the geometry of the mineralization with respect to the drillhole angle is known, its nature should be reported.	No drilling results are included in this release to provide any inference regarding the geometry of mineralisation.
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 drillhole collar locations and appropriate sectional views.	Refer to the figures in the body of the report.
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.	Soil sample results are reported in grade ranges in plan view in Figure 3 in the body text in conjunction with heat map contouring of the results.

Criteria	JORC Code explanation	Commentary
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.	No historical exploration for lithium has been conducted over the soil sampled area. As this is the initial phase of lithium exploration no other exploration data for lithium is available.
Further Work	The Nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large scale step-out drilling).	Reverse Circulation (RC) drilling is warranted to test the defined anomalies at surface to determine if lithium bearing pegmatites exist at depth in the soil sampled area. TG Metals Limited are currently completing Heritage and detailed Flora surveys in accordance with Program of Work (PoW) approval, TG Metals Limited Environmental Management Plan and Heritage Agreement with the Ngadju people.
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to the figures in the body of the report.