# ASX ANNOUNCEMENT



# Exploration Update Lake Johnston Lithium Project WA

- Program of Work applications approved for drilling of lithium pegmatite targets at Jaegermeister and Burmeister
- Additional soil sampling defines a new lithium drill target
- Seismic survey interpretation underway
- Metallurgical testwork progressing

TG Metals Limited (**TG Metals** or the **Company**) (ASX:TG6), is pleased to provide this update on exploration on the Lake Johnston Project, Western Australia.

Program of Work (PoW) applications have been approved by DEMIRS for infill drilling to 100m x 100m at the Burmeister lithium deposit and for the maiden drilling program at Jaegermeister. Drill pad clearing contractors have mobilised to site and drill rig mobilisation is expected to occur mid-June. Two RC drilling rigs will be deployed to Jaegermeister Targets A and B and Burmeister infill drilling. This is to make up for delays experienced due to inclement weather interruptions and a longer than expected environmental approval process.

The Company has completed infill soil sampling at the Jaegermeister prospect which has resulted in the definition of a new anomaly, Target E, see Figures 1 and 2. This anomaly lies to the north of Target A and has been included in the coverage of the recently acquired seismic field data. Consequently, the number of priority drilling targets has expanded to five (5) at Jaegermeister.

The results from the recently completed seismic survey are in the final stages of interpretation. The interpretations are being conducted by expert independent consultants and are expected to be available within two weeks. The interpretations will guide the existing planned drilling and new phases of drilling over both Burmeister and Jaegermeister, the seismic coverage is shown in Figure 1. The geological model will be continually updated as drilling data comes in and is matched to the seismic interpretation.

The first stage of metallurgical testwork has been completed, preparing the composite drill core samples for Heavy Liquid Separation (HLS) and Flotation tests by removing basalt wall rock via ore sorting. This "pre-conditioning" has become standard for lithium pegmatite where the baren wall rock is easily distinguishable from the pegmatite host. Results of these tests will be reported once finalised.

TG Metals CEO, Mr. David Selfe stated; "The team is excited to recommence drilling. In particular, the first holes into the priority targets at the Jaegermeister prospect, are greatly anticipated. Further soil sampling has grown and improved the Jaegermeister targets, which contains multiple soil anomalies bigger than the Burmeister Lithium Deposit initially presented.

With such a large area of lithium soil anomalism to drill test, we're confident that the use of seismic geophysics will fast-track our targeting. We've completed two reconnaissance 2D seismic lines; one along the Burmeister trend and a longer one along the Jaegermeister trend. If successful, this technique will not only minimise the drilling required for further discovery and resource definition, but it will also provide a very good understanding of the pegmatite system at Lake Johnston and its size potential.



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Figure 1 – Lithium soil anomalies showing new Target E. Datum: Zone 51 (AGD84)





## Soil Sampling Infill

Soil sampling previously conducted and reported in ASX announcement 20 March 2024, was infilled with further soil sampling to better define the lithium soil anomalies. This was primarily conducted over targets A, B and the newly defined Target E, see Figure 2 for previous results and new results. The results have improved the definition of the Targets A and B anomalies which have expanded from the previous interpretations and has increased the confidence in the area now known as Target E. Whilst the new Target E has lesser numbers of samples above 120ppm Li<sub>2</sub>O than the other targets, the location is on a topographic high and the elongated shape in a NW-SE direction typifies the soil anomalies present above the Burmeister lithium pegmatites. Targets A and B will be tested with the first drilling approved for Jaegermeister, Target E will require additional PoW applications in order to test this anomaly.

The infill soil sampling for the Burmeister and Jaegermeister areas has concluded at this stage. Further drill targeting is likely once the results of the seismic survey data interpretation become available. The two seismic data lines run the length of the Burmeister deposit and take in Jaegermeister Targets E, A and C as shown in Figure 1.

### **Next Steps**

Following PoW approvals and ahead of drill rigs mobilising to site, the TG Metals field crew are on site making preparations for drill pads and access tracks. Two RC drilling rigs will initially be deployed to catch up on planned drilling which has been delayed due to weather and other factors.

Interpretation of the seismic survey results is well advanced and expected to conclude within two weeks. As drilling results come to hand the geological model will be updated in conjunction with the seismic interpretations of pegmatites and structural features. This will aid in ongoing refinement of drill planning and assist in future ore body modelling.

Metallurgical testwork on Burmeister diamond drill core samples at Independent Metallurgical Operations (IMO's) facilities in Perth has advanced with initial ore sorting completed and next phase of DMS to commence shortly. This will be followed by flotation tests on the composite samples. The aim of the testwork is to determine which concentration methods are best suited to the unique high spodumene mineralogy of the Burmeister ore and the proportions applicable to each technique. First results will be reported in the coming weeks as various stages of testwork are finalised.

A remote weather station has been installed at Burmeister. This device will record ongoing weather and climate information for 12 months and beyond. An important precursor for project development studies.



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Figure 2 – Infill soil samples and anomalies Datum: Zone 51 (AGD84)





#### **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 (**Figure 3**) in the stable jurisdiction of Western Australia. The Lake Johnston Project boasts the significant Burmeister lithium deposit and proximity to current producing lithium mines, processing plants and additional geochemical and geophysical targets for immediate exploration.



Figure 3 – Lake Johnston Project Location

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

#### Contact

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#### **Competent Person Statement**

Information in this announcement that relates to exploration results, exploration strategy, 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.



# 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 x 50m grid to infill the regional program conducted on a 400m x 100m grid. The infill and regional soils program are appropriate for first past exploration 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. Jinning Laboratories standards and sample replicates were 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 based on Jinning Laboratories multielement analysis. All samples for assay were submitted to a Certified Laboratory– Jinning Laboratories 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 m samples from which 3 kg was pulverised to produce a 30 g charge for	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 to 1kg was placed in the pre-numbered calico. This sample was dispatched

Criteria	JORC Code explanation	Commentary
	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 was achieved using hydrochloric acid. The use of hydrofluoric acid ensure the breakdown of silicate minerals. Although the digest approaches tota 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.
	• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	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/regolith was not recorded.
5	• 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 anaylsed at a rate of 1:15.
	• 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.	Jinning sample replicates were measured at a rate of 1:15.

• 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.
• 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 anaylsed 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.
	<ul> <li><i>Iaboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable</i></li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of sampling	• The verification of significant intersections by either independent or alternative company personnel.	No drilling results were included in this report.
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 Exc spreadsheet formatted with headers, to be uploaded into TG Meta Limited's Micromine Database. Validation errors, if any, were rectifie during import. All TG Metals Limited data and the Micromine Database a backed up regularly on a secure cloud storage.
	• Discuss any adjustment to assay data.	All data below detection limit have been entered as zero. Assay data wa received as $\%$ or ppm dependent on the natural elemental abundance. ppm was converted to Li <sub>2</sub> O for discussion purposes of similar industri trends and exploration results.
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.	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 reportance referenced to GDA94, Zone 51.
	• <i>Quality and adequacy of topographic control.</i>	Topographic control was captured via an airborne imagery and LIDA survey conducted by TG Metals in April 2023. X, Y sample location da 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 appropriate for first past exploration based on surface sampling complete by TG Metals Limited in the Lake Johnston region. The pattern is aligne on the orientation of MGA_GDA94, Zone 51 grid.

Criteria	JORC Code explanation	Commentary
	• 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.	Not applicable for soil sampling.
	• 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.

JORC Code explanation	Commentary
• 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 by Jinnin Laboratories and TG Metals Limited.
rting of Exploration Results	
JORC Code explanation	Commentary
• 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-ground disturbing 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.
• 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.
• 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 hosted in ultramafic/mafic greenstone sequences of upper greenschist or amphibolite metamorphic facies.
	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> <li>rting of Exploration Results</li> <li>JORC Code explanation</li> <li>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.</li> <li>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.</li> <li>Acknowledgement and appraisal of exploration by other parties.</li> </ul>

Criteria	JORC Code explanation	Commentary
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.
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.

Criteria	JORC Code explanation	Commentary
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 2 in the body text in conjunction with heat map contouring of the results.
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 historical 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 over the soil sampled area.
	• 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.