

Burmeister achieves outstanding lithium concentrate with simple DMS processing

Spodumene concentrate of up to 6.31% Li₂O

Highlights

- Pre-conditioning of ore feed utilising ore sorting technology achieved an increase in Lithia head-grade of 15-39% and iron rejection of 65-70%
- Initial Heavy Liquid Separation (HLS) testwork on Burmeister lithium pegmatite supports the ability to produce a high grade, low impurity spodumene concentrate
- Excellent DMS (Dense Media Separation) spodumene concentrate results grading up to 6.31% Li₂O
- Results provide a positive start to underpin future engineering studies and confirmatory testwork
- On-going test work includes the application of semi-continuous DMS and flotation technology

TG Metals Limited (**TG Metals** or the **Company**) (ASX:TG6) is pleased to provide preliminary results from metallurgical testwork on the Burmeister deposit, within the Lake Johnston Lithium Project in Western Australia.

TG Metals CEO, Mr. David Selfe stated;

“These initial sighter metallurgical testwork on the Burmeister pegmatites are outstanding and support the potential to achieve a SC6 (6.0% Li₂O spodumene concentrate) concentrate utilising HLS processing technology that supports our initial assumptions “simple mineralogy equals simple processing”.

As we progress Burmeister, we aim to demonstrate a mineral resource conducive to open-pit mining and simple metallurgy, providing favourable economics for a spodumene lithium hard rock mining and processing operation.

A combination of Ore Sorting and HLS technology is the preferred processing method, over other more complex mineral processing flowsheets to produce a coarse, quality spodumene concentrate.

Flotation batch testwork is progressing on the combined fines and middlings size fractions of the crushed ore, and once complete, the company will have the basis of a preliminary flowsheet which is consistent with a low capital intensity approach.”

Lithium Testwork Overview

The Company engaged Independent Metallurgical Operations Pty Ltd (IMO) based in Western Australia, to assist in the development and support of sighter metallurgical testwork on core samples recovered from the Company's Burmeister deposit. Testwork was progressed at Metallurgy Pty Ltd an accredited commercial laboratory located in Perth WA. The results and testwork program were also overseen by an independent consultant Michael Rodriguez, who has over 35 years of practical and technical experience in the mining, minerals processing, hydrometallurgical and pyrometallurgical industries. The research and development testwork program was developed to determine the response to commercially demonstrated hard rock lithium processing methods available for the production of spodumene concentrate, including ore sorting, HLS/DMS (Dense Media Separation) and flotation with the use of magnetic separation technology for the rejection of iron and gangue. To date the requirement to apply a mica rejection circuit has not been necessary due to the lack of micas observed within the composite samples prepared from drilled core.

Below is a summary of the testwork results from drill core sample preparation, ore sorting through to the application of Heavy Liquid Separation (HLS) on the coarse fraction (-3.35mm - +1mm size fraction). The assay results from the flotation testwork on the fines component are pending as are the results of semi-continuous DMS testwork progressed at Bureau Veritas commercial facility in Perth.

The initial HLS testwork results with the application of dry magnetic separation technology applied, produced quality concentrate with a lithia grade ranging from **5.34% Li₂O to 6.31% Li₂O** from 3 drill core representative composite samples recovered from the Company's Burmeister deposit. Table 1 below summarises the magnetic separation results and full results are provided in Table 5. Figure 1 highlighting the magnetic and non-magnetic samples, bagged, prior to assay.

Table 1 – Summary HLS concentrate results post magnetic separation

	Product	Mass Rec %	Li ₂ O %	Lithia Rec %	Fe Grade %	Fe Rec %
Blended Sample 1	Non-Magnetic Concentrate	79.7	5.85	89	1.37	52
Blended Sample 2	Non-Magnetic Concentrate	87.1	6.31	94	0.98	56
Blended Sample 3	Non-Magnetic Concentrate	79.9	5.34	95	1.79	50

**Lithia recovery in Table 1 above is based on the magnetic separator feed*



Figure 1 – HLS testwork products on 3 blended composites post magnetic separation. Non-Mags = Spodumene concentrate, Mags = Basalt, mica and feldspar Waste (Gangue). Note: the assays for these samples are shown in full in Table 5.

Testwork Program Details

The core samples were taken from throughout the drilling completed so far on the Burmeister deposit. Figure 7 shows the location plan of the composite core samples used in the testwork program. The core samples were divided into 3 composites as per Table 2 below. Importantly the chosen core intervals were expanded to include waste Basalt to simulate dilution in mined ore feed. Figure 2 shows a simplified flowsheet of the testwork program.

Table 2 – Composites of Pegmatite and Basalt (dilution) taken from HQ diamond drill core

Comp	Hole ID	From	To	Interval	Receipt Mass	Total Mass	Total Int	Total Li ₂ O	Total Fe
		m	m	m	kg	kg	m	ppm	%
1	TGRCD0009	132	141.3	9.3	37	126	22.3	11,046	2.5
	TGRCD0032	86	99	13	89				
2	TGRCD0024	201.5	222.2	20.7	139	228	33.7	13,103	1.8
	TGRCD0033	137	150	13	89				
3	TGRCD0037	117.3	132	14.7	114	223	30.7	10,678	2.2
	TGRCD0043	138	154	16	109				

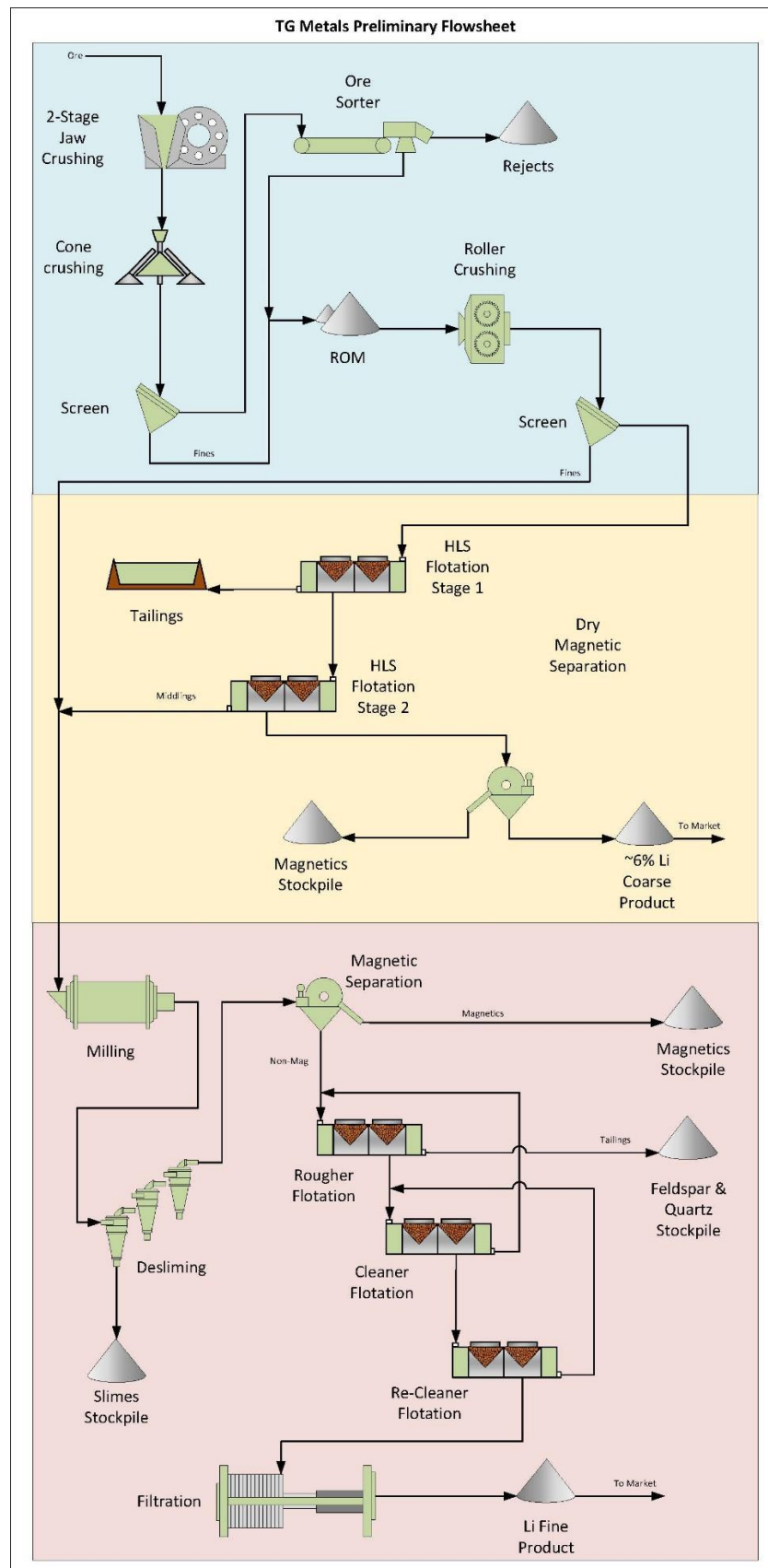


Figure 2 – Simplified testwork flowsheet

Ore Sorting

The first stage of the testwork involved crushing the core samples, from Table 2, to 100% passing 40mm and including 10% of waste wall rock (Basalt) to simulate an actual run of mine (ROM) feed including mining dilution. Mineralised composite samples were crushed and the -10mm size fraction was screened off prior to feeding the ore sorter. The composite samples were passed through a Steinert ore sorter utilising a combination of 3D Laser and XRT sensor technology targeting first pass impurity containing basalt removal. Figure 3 below shows the Steinert ore sorter used in the testwork. Two feed sizes were tested, -40mm - +25mm and -25mm - +10mm to determine optimal ore sorting feed size. Composites size splits are as per Table 3 below expressed as weight and percentage of total composite sample.

Table 3 – Ore Sorter feed composites – distribution by weight

Composite ID	-40+25 mm	-25+10 mm	-10 mm	Total
	kg	kg	kg	kg
Composite 1	19.6	67.9	27.0	114.5
Composite 2	26.7	115.8	47.7	190.2
Composite 3	38.2	109.0	45.2	192.4

Composite 1	17.1%	59.3%	23.6%	100.0%
Composite 2	14.0%	60.9%	25.1%	100.0%
Composite 3	19.8%	56.7%	23.5%	100.0%



Figure 3 – Steinert Ore Sorter used in the testwork



Figure 4 – Typical ore sorter products, pegmatite on the left to ore feed and basalt, feldspars and quartz on the right to waste. The photographs are of samples generated in-train and are therefore incomplete. Assays of the final products for each composite sample run are shown in Table 4.

The ore sorter worked exceptionally well, separating Basalt (gangue) from the pegmatite (ore feed), Figure 4 shows typical ore sorter products produced. Table 4 below shows the Ore Sorter results producing concentrates with a head grade increase to further downstream processing. The unsorted -10mm fractions were recombined with the Ore Sorter concentrates for the next stage HLS and DMS testwork. Lithia losses to the waste streams were minimal, ranging from 3.8% to 5.2% whilst the mass rejection was 14.1% to 24.4% resulting in a significant decrease in mass going forward in the process and consequent significant rejection of basalt waste.

Table 4 – Ore Sorter results for the 3 composite samples.

	Grade Sample ID	Sample Description	Mass Recovery %	Li ₂ O Grade %	Li ₂ O Recovery %	Fe Grade %	Fe Recovery %
Composite 1	+25mm Waste & +10mm Waste	Comp 1 Waste	23.6%	0.18	3.8%	7.20	70.5%
	+25mm Conc & +10mm Conc	Comp 1 Conc	52.6%	1.52	71.2%	0.42	9.1%
	+25mm & +10mm Conc & -10mm Fines	Comp 1 Conc+Fines	76.4%	1.42	96.2%	0.93	29.5%
Composite 2	+25mm Waste & +10mm Waste	Comp 2 Waste	14.1%	0.35	3.8%	7.55	64.4%
	+25mm Conc & +10mm Conc	Comp 2 Conc	60.7%	1.51	70.0%	0.41	15.1%
	+25mm & +10mm Conc & -10mm Fines	Comp 2 Conc+Fines	85.9%	1.47	96.2%	0.68	35.6%
Composite 3	+25mm Waste & +10mm Waste	Comp 3 Waste	24.4%	0.23	5.2%	6.26	69.9%
	+25mm Conc & +10mm Conc	Comp 3 Conc	51.8%	1.47	72.2%	0.45	10.8%
	+25mm & +10mm Conc & -10mm Fines	Comp 3 Conc+Fines	75.6%	1.32	94.8%	0.87	30.1%

* The recoveries quoted are for this stage of the process only and are not indicative overall Li₂O recoveries

Removal of non-pegmatite (basalt waste) in-pit prior to the process plant is an important step in controlling impurities, reduces transport and downstream processing costs. Furthermore this has a net positive impact on overall carbon footprint. Based on the composite samples tested the results in Table 4 confirm the application of ore sorting technology produced consistent and reproducible results.

HLS & DMS

Concentrates produced from the Steinert ore sorter were prepared to progress bench scale testwork utilizing Heavy Liquid Separation (HLS) technology. HLS, as defined here, is a precursor bench scale test method, used to define the recommended operating window prior to progressing semi-continuous Dense Media Separation (DMS) testwork.

Four (4) size fractions, 12.5mm, 9.5mm, 6.3mm and 3.35mm) and 3 heavy liquid densities, 2.7, 2.8 and 2.96g/cm³ were selected to determine the optimum size fraction and liquid densities to progress semi-continuous DMS testwork. All size fractions were wet screened to remove -1mm size fractions. The -1mm size fraction is combined with the middlings size fraction recovered from the DMS testwork prior to downstream further processing. The HLS media used was >80% lithium heteropolytungstate. Figure 5 below shows the HLS flowsheet applied to determine the optimum size fraction and heavy media solution density.

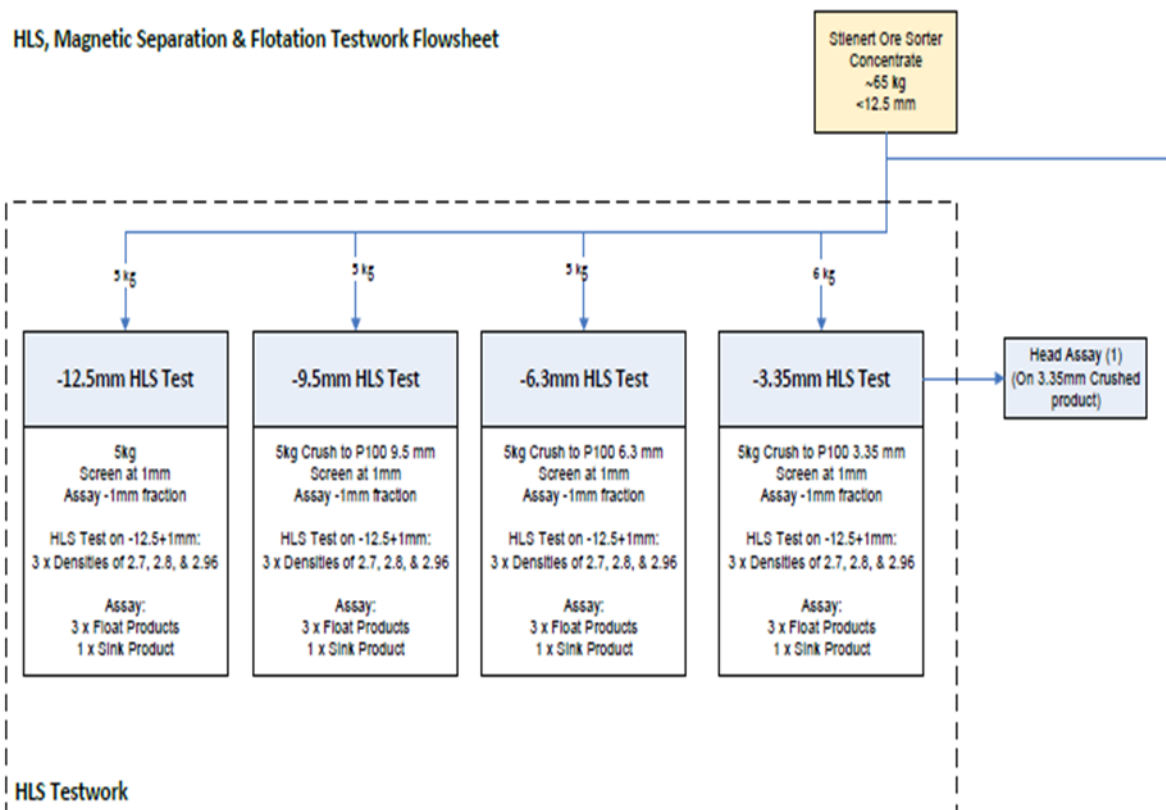


Figure 5 – Flow sheet for HLS optimisation from Ore Sorter concentrate feed

The optimum sizing was determined to be 3.35mm and the optimum HLS densities 2.7 and 2.96 g/cm³. These parameters were then applied to semi-continuous DMS testwork completed at Bureau Veritas.

Post the HLS separation the “sinks” coarse spodumene concentrate was passed through a dry magnetic separator at 6900 gauss to remove basalt and some minor micas, both impurities that would ordinarily follow the spodumene to final concentrate. To determine the best magnetic intensity to use, 3 gauss levels, 3000G, 5000G and 6900G were tested prior to the final 3 blended composite runs. 6900 gauss performed the best in these tests however higher magnetic intensities are possible with different equipment. Optimisation testwork is expected to reduce the Fe grade further and will be a focus for future metallurgical testwork. Table 5 below shows the results of the magnetic separation and what would be a final coarse concentrate. Note that the lithia recovery figures are for this stage process only.

Table 5 – HLS results post magnetic separation

Blended Sample 1	Product	Description	Mass	Lithia	Lithia	Fe	Fe
			Rec %	Grade %	Rec %	Grade %	Rec %
	Magnetic	Tails	20.3%	2.78	11%	4.98	48%
	Non-Magnetic	Concentrate	79.7%	5.85	89%	1.37	52%
	Calc'd Head		100.0%	5.23	100%	2.10	100%
	Assay Head			5.23		2.10	

Blended Sample 2	Product	Description	Mass	Lithia	Lithia	Fe	Fe
			Rec %	Grade %	Rec %	Grade %	Rec %
	Magnetic	Tails	12.9%	2.51	6%	5.17	44%
	Non-Magnetic	Concentrate	87.1%	6.31	94%	0.98	56%
	Calc'd Head		100.0%	5.82	100%	1.52	100%
	Assay Head			5.62		1.52	

Blended Sample 3	Product	Description	Mass	Lithia	Lithia	Fe	Fe
			Rec %	Grade %	Rec %	Grade %	Rec %
	Magnetic	Tails	20.1%	1.21	5%	7.03	50%
	Non-Magnetic	Concentrate	79.9%	5.34	95%	1.79	50%
	Calc'd Head		100.0%	4.51	100%	2.84	100%
	Assay Head			4.57		2.92	

* The recoveries quoted are for this stage of the process only and are not overall Li_2O recoveries

Observation of the “magnetic” and “non-magnetic” products shows that the highest lithia (Li_2O) grade concentrate has coincident lowest iron (Fe) grade and appears to be directly related to the amount of basalt removed during the magnetic separation process. This provides encouragement that improved basalt removal could increase the concentrate grade and reduce the deleterious elements.



DMS is a commercial scale separation process utilising the conventional principles of density separation, whereby a slurry of ore and dense media (in this case ferro-silicon) is pumped through a hydrocyclone to produce a higher density sinks underflow product and a lower density floats overflow product. As spodumene is a relatively high-density mineral ($>3\text{g/cm}^3$) compared to some of the associated gangue, the sinks contain the majority of the course spodumene as a quality spodumene concentrate. Magnetic separation was successfully applied on the HLS course spodumene concentrate this method will also be applied to the semi-continuous DMS “sinks” spodumene concentrates.

The DMS processes have been completed using equipment at Bureau Veritas Laboratories and assays for each of the staged fractions are pending. Figure 6 below shows the DMS unit and the production of “floats” (waste) and “sinks” (spodumene concentrate) prior to magnetic separation.

Preliminary flotation testwork on the combined fines and middlings size fractions has been progressed. Magnetic separation and de-sliming were subsequently completed on the flotation feed. Further optimisation testwork will be progressed following the release of recently completed de-sliming and magnetic separation testwork results are available.



Figure 6 – Top picture – DMS Unit. Bottom left picture – floats (waste) generation. Bottom right picture - sinks (spodumene concentrate) generation. Note: these photos are of incomplete DMS product streams generated and assays for the final products are pending. No grades or quality is implied.

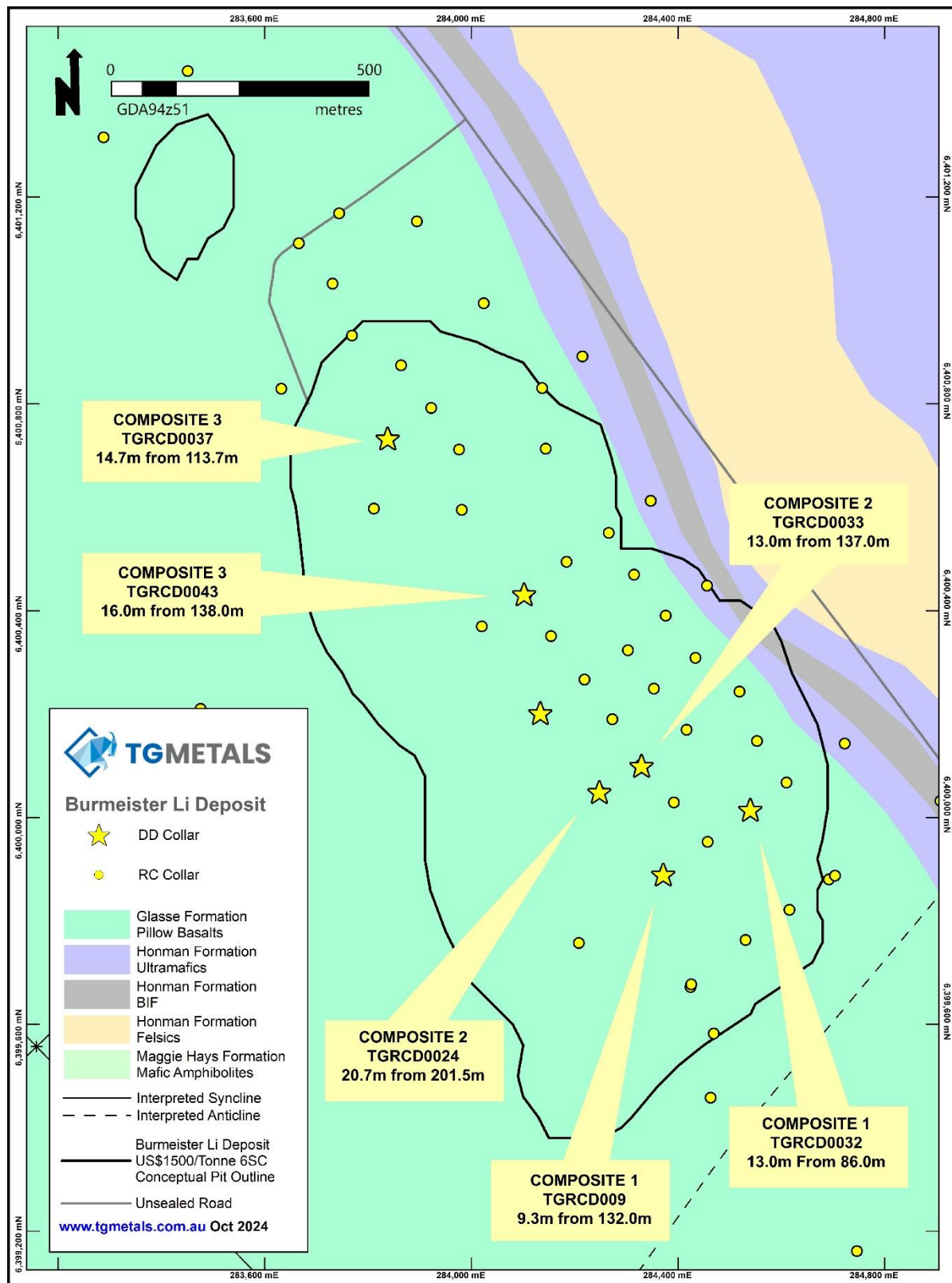


Figure 7 – Burmeister lithium pegmatite drilling showing DD holes used in the metallurgical testwork.
Datum: AMG Zone 51 (GDA94).



Next Steps

Assays for the semi-continuous DMS testwork, magnetic separation and de-sliming will be reported with the flotation testwork results in November, along with final overall process recoveries, concentrate grades and proportionate process splits between DMS and flotation.

Further flora and fauna surveys will be conducted in November over the Burmeister deposit and adjacent areas to prepare for resource development.

Reconnaissance field works are continuing on regional tenements as weather conditions allow with the aim of assessing all of the Lake Johnston tenure for further lithium pegmatites. Field crews are engaged on site on an ad-hoc basis.

Drilling at Lake Johnston remains suspended due to wet ground conditions. Review of site conditions and drill areas is ongoing. Whilst the priority area for Burmeister infill drilling is the southern section, it is most likely earlier access will be available on the western side of Jaegermeister, testing the potential thickening of the pegmatites. To this end a smaller drill program has been designed on Jaegermeister and will be deployed when ground conditions allow.

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 8, hosts the Burmeister high grade lithium deposit, Jaegermeister lithium pegmatites and several surrounding lithium prospects. Burmeister is in proximity to four lithium processing plants and undeveloped deposits.

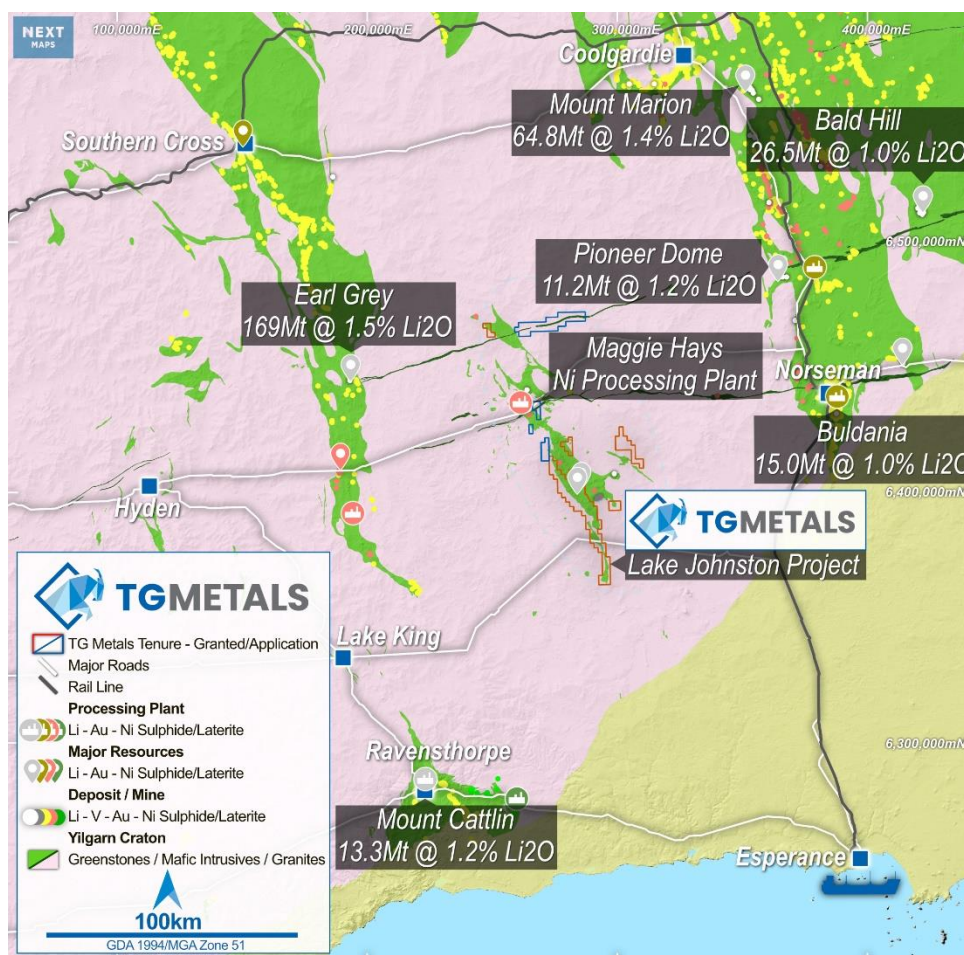


Figure 8 – Lake Johnston Project Location. Simplified Geology with regional lithium deposit locations
Datum: AMG Zone 51 (GDA94).

Authorised for release by TG Metals Board of Directors.

Contact

Mr David Selfe
Chief Executive Officer
Email: info@tgmets.com.au

Investor Relations

Evy Litopoulous
ResolveIR
Email: evy@resolveir.com



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 report of matters based on their information in the form and context in which it appears.

Information in this announcement that relates to metallurgical results, is based on information compiled by Mr David Selfe and has been reviewed by Mr Michael Rodriguez who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Rodriguez 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 Metallurgical Results. Mr Rodriguez has consented to the inclusion in this report 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 forward-looking 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	<ul style="list-style-type: none"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<ul style="list-style-type: none"> Diamond Drill (DD) Core (HQ diameter) was undertaken for exploration, metallurgical and ore sorting testwork. <p>Drill Core Exploration Sampling and Assay</p> <ul style="list-style-type: none"> DD core was sampled for assay and intervals were pre-determined by the supervising geologist based on lithology/mineralogy of the pegmatite. The core was cut into halves for TGRCD0009 and TGRCD0024 (242-250m). The remainder of the holes and intervals listed in Table 2 were cut with only quarter core submitted to the Jinning Laboratories for assay. The procedure was amended to quarter core once scope for metallurgical testwork was addressed. All samples were dispatched to Jinning Laboratories in Perth for analysis. Samples were sorted, crushed to -10mm, dried, and pulverized to less than 75 microns. All samples were analysed by Sodium Peroxide Fusion and ICP-OES analytical process. This process involves fusion of sample with sodium peroxide in a nickel crucible at ~650 degrees. It is then dissolved in dilute hydrochloric acid and the solution generated is analysed. This process provides complete dissolution of minerals including silicates. It should be noted that volatiles can be lost at high fusion temperatures. All assays for determination of minerlisation were analysed at Jinning Laboratories Pty Ltd. <p>Metallurgical Sighter Testwork Sampling</p> <ul style="list-style-type: none"> All remaining DD core assayed including contact lithology were dispatched to Metallurgy Pty Ltd in Welshpool for sighter testwork. All testwork was managed by Independent Metallurgical Operations Pty Ltd (IMO). Table 2 in the body text defines the 3 composite bulk samples

Criteria	JORC Code explanation	Commentary
		<p>generated from the HQ diameter diamond core across the Burmeister deposit.</p> <ul style="list-style-type: none"> The bulk sample composites were dominated by location as shown in Figure 7 in the body text. Each composite sample was stage crushed using a Jaw crusher to achieve a homogenous sample 100% passing 40mm. Each composite was dry screened and the following products were bagged and labelled for planned testwork: -10mm, +10mm to 25mm and +25mm to 40mm. <p><u>Steinert Australia - Ore Sorting</u></p> <ul style="list-style-type: none"> Screened samples +10mm to 25mm and +25mm to 40mm were dispatched to Steinart Australia ore sorter testing facility in Bibra Lake, WA. The -10mm screen for each composite was stored at Metallurgy Pty Ltd as this size fraction was not designated for ore sorting testwork. Preliminary scanning and optimisation by Steinert Engineers determined a combination of 3D Laser and XRT dual sensors technology was optimal for TG Metals bulk samples. These were presented to IMO, TG Metals Limited and the Independent Contractor prior to commencing the testwork. Each composite sample was fed into the Steinert Ore Sorter (Figure 3) with 'waste' and 'ore' stockpiles collected weighed and placed in labelled bags (Table 3). Sample from each composite and size fraction was dispatched for assay. <p><u>Heavy Liquid Separation (HLS)</u></p> <ul style="list-style-type: none"> Composite bulk samples were returned to Metallurgy Pty Ltd Laboratory in Welshpool. The 'waste' composites were stored whilst the 'ore' composites were combined with their -10mm crushed and screened to produce representative 12.5mm, 9.5mm, 6.5mm and 3.35mm sub-samples for HLS testwork. Each composite was screened with -1mm fines excluded for the HLS

Criteria	JORC Code explanation	Commentary
		<p>process.</p> <ul style="list-style-type: none"> Details of the bench scale HLS process have been addressed in the body text and in Figure 2 and 5. Sink and float samples were washed, dried and placed in labelled bags and a sample dispatched for assay. <p><u>Magnetic Separation</u></p> <ul style="list-style-type: none"> Prior to commencement of magnetic separation, the composite 'sink' samples were deslimed. The 'fines' were collected and weighed and stored. The methodology for the magnetic separation testwork is addressed in the body text and outlined in Figure 2 and 5. <p><u>Dense Media Separation (DMS)</u></p> <ul style="list-style-type: none"> 20kg of sample from composite two (2) was dispatched to Bureau Veritas accredited commercial facility to progress the semi-continuous DMS testwork. The testwork procedure is detailed in body text and in Figure 6. All samples for assay and results addressed in the body text were dispatched from Metallurgy Pty Ltd laboratory to Intertek Genalysis Perth. All samples underwent assay via sodium peroxide fusion (Nickel crucibles) and Hydrochloric acid to dissolve the melt. Analysed by Inductively Coupled Plasma Mass Spectrometry and Optical (Atomic) Emission Spectrometry.
Drilling techniques	<ul style="list-style-type: none"> <i>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).</i> 	<ul style="list-style-type: none"> Diamond core samples used were HQ in diameter and obtained from a diamond drill rig owned and operated by Raglan Drilling Pty Ltd. The diamond core was orientated at the rig using an inbuilt electronic orientation tool indicating the in-situ position of the core. The orientation line was annotated using a paint pen and marker blocks clearly labelled depth intervals. The driller is also experienced in determining core orientation in the event of tool failure.

Criteria	JORC Code explanation	Commentary																									
		<ul style="list-style-type: none">All DD holes were Reverse Circulation (RC) pre-collared to a depth determined by the supervising geologist.Drill hole orientation for the DD holes reported: <table><tr><th>Composite</th><th>Hole ID</th><th>Azimuth</th><th>Dip</th></tr><tr><td rowspan="2">1</td><td>TGRCD0009</td><td>222</td><td>60</td></tr><tr><td>TGRCD0032</td><td>230</td><td>60</td></tr><tr><td rowspan="2">2</td><td>TGRCD0024</td><td>49</td><td>60</td></tr><tr><td>TGRCD0033</td><td>140</td><td>60</td></tr><tr><td rowspan="2">3</td><td>TGRCD0037</td><td>55</td><td>60</td></tr><tr><td>TGRCD0043</td><td>45</td><td>60</td></tr></table>	Composite	Hole ID	Azimuth	Dip	1	TGRCD0009	222	60	TGRCD0032	230	60	2	TGRCD0024	49	60	TGRCD0033	140	60	3	TGRCD0037	55	60	TGRCD0043	45	60
Composite	Hole ID	Azimuth	Dip																								
1	TGRCD0009	222	60																								
	TGRCD0032	230	60																								
2	TGRCD0024	49	60																								
	TGRCD0033	140	60																								
3	TGRCD0037	55	60																								
	TGRCD0043	45	60																								
Drill sample recovery	<ul style="list-style-type: none">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.	<ul style="list-style-type: none">DD core recovered was visually checked by the driller to ensure core was obtained for each recorded interval drilled. Any loss or fractured core was noted by block markers and addressed with the supervising geologist. The estimated value (recovery) was recorded in the geological log sheet.Recovery of DD core was 99%, only minor loss when geological fractures were encountered in the mafic host rock. The recovery of core in the pegmatite was 100%. All holes were RC pre-collared from surface and diamond tails commenced in fresh competent rock.Raglan drillers are competent, understand the importance of sample recovery and ensure to deliver 100% complete core.No grade bias or poor sample recovery was observed with DD core samples.																									
Logging	<ul style="list-style-type: none">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.Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.The total length and percentage of the relevant intersections logged.	<p>TG Metals Limited geological logging system:</p> <ul style="list-style-type: none">Recognises fresh rock vs regolith.Is both qualitative and quantitative.Industry and geological standards were followed recording every detail observed.DD core was orientated to ensure all structural measurements using the ezy logger tool (contacts, deformation orientations) were made																									

Criteria	JORC Code explanation	Commentary
		<p>in reference to the orientation line.</p> <ul style="list-style-type: none"> All significant core intervals were measured from the depth markers using a tape measure and recorded in the geological log sheet. All core has been photographed for future reference. Quarter or half for core was submitted for assay. The remaining $\frac{3}{4}$ and $\frac{1}{2}$ core was submitted for metallurgical testwork. No reference diamond core of the interval was retained.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> Diamond core (HQ) was cut in half at 30 degrees from the orientation line. The half core with the marked orientation line was placed back into the tray, while the other half cut into quarters. A quarter of the core was then measured and cut into sample intervals as instructed by the supervising geologist. The samples for assay were sent to Jinning Laboratories for sample preparation and analysis. TG Metals Limited QA/QC procedure included inserting sample blanks (bought sand), and lithium standards (Geostats Pty Ltd). Laboratory sample replicates and standards were reported and have been included in TG Metals Limited QA/QC reporting. No sample duplicates were taken as all remaining core was required for bulk metallurgical sampling. Sample size was considered appropriate for lithology.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <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> <i>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.</i> 	<p>Drill Core Exploration Assay</p> <ul style="list-style-type: none"> Jinning Laboratories is a Certified Analytical Laboratory and Sodium Peroxide Fusion and ICP-OES analytical process is industry accepted and recommended for lithium mineralisation. TG Metals Limited inserted a sand blank at every 50th sample and bought lithium standards at every 25th interval for samples submitted. Jinning Laboratory included their own lithium standards, blanks and replicates at rates compliant to industry standards. These were reported and uploaded into TG Metals Limited Micromine database to be referred and used for internal QA/QC reporting.

Criteria	JORC Code explanation	Commentary
		<p>Metallurgical Test work</p> <ul style="list-style-type: none"> Metallurgy Pty Ltd and Bureau Veritas followed relevant operating procedures and methodology for all planned testwork. Experienced technicians were briefed prior to conducting the testwork and supervised by an IMO Engineer, Independent Metallurgist and TG Metals. <p>Metallurgical Sample Assay</p> <ul style="list-style-type: none"> Metallurgy Pty Ltd dispatched labelled and bagged samples for assay to Intertek Genalysis Perth for sodium peroxide fusion (Nickel crucibles) and Hydrochloric acid to dissolve the melt. Analysed by Inductively Coupled Plasma Mass Spectrometry and Optical (Atomic) Emission Spectrometry.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> Significant assay intersections were determined by the presence logged spodumene in core and >1.0% Li ppm assay results. Twin holes have been drilled at Burmeister in both RC and DD to allow correlation of the assay results between drilling styles and provide more confidence for resource modelling. All primary logging and assaying data was recorded on a MS Excel worksheet (geological log) and loaded into Micromine for validation. Data is retained as a flat table in the Micromine Database. The original MS Excel spreadsheet have been retained. Micromine and server backups are completed weekly. TG Metals has not adjusted any reported assay data other than to convert Li ppm to Li₂O%.
Location of data points	<ul style="list-style-type: none"> <i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> The location of each hole was recorded at the collar with a Garmin Montana 750i Handheld GPS. Accuracy is +/- 3m. This was followed by DGPS pickup of each collar by a contract surveyor. Downhole Gyro measurements were recorded at 5m intervals by Ragland Drilling and provided to supervising geologist via email and or data transfer.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> The field datum used was MGA_GDA94, Zone 51. All maps in this report are referenced to GDA94.
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>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.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> The Burmeister Deposit drill spacing was a nominal 50m across strike and between 100m -200m along strike. The current spacing is not sufficient for a Mineral Resource Estimate (MRE), but will allow expansion into a minimum 100m x 50m pattern which will be considered sufficient for a MRE. No samples were composited except for metallurgical testwork.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i> 	<ul style="list-style-type: none"> The pattern was rotated to ensure the long axis (200m) was along strike, while the short axis (100-50m) was across strike of the targeted mafic/pegmatite areas. Drilling was angled to intercept mineralised pegmatites on an expected shallow dip and as close to true width. No sampling bias was assumed.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<p>Drill Core Exploration Sample</p> <ul style="list-style-type: none"> Labelled diamond core trays were transported to Windy Hill Camp core yard for logging and to be cut in the core shed. Quarter core intervals for assay were placed into labelled bags and recorded on a sample submission sheet. The sample_id's were also recorded in TG Metals Limited Micromine database for the hole and interval (m) sampled. Calicos were secured in labelled polyweave bags and a bulka to be dispatched to Jinning Laboratories in Perth by a TG Metals Limited staff member. <p>Metallurgical Testwork Sample</p> <ul style="list-style-type: none"> Metallurgy laboratory labelled samples as soon as they were collected, following their sampling protocol and operating procedures. TG Metals Limited representative and Independent Contractor were present during all testwork process (Ore sorting, Heavy Liquid Separation (HLS) and Magnetic Separation) and witnessed sound sample handling and labelling.

Criteria	JORC Code explanation	Commentary
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> Standards and blanks were cross checked against expected values to look for variances of greater than 2 standard deviations. No audits have been undertaken to date.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral Tenement	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> The reported area is located on exploration tenement E63/1997. It is 100% owned and operated by TG Metals Limited. This area is under ILUA legislation, and the claimants are the Ndadju people whom TG Metals has a Heritage Protection Agreement in place. The area is also within PNR 84, a proposed nature reserve since 1982. At the time of reporting there are no known impediments to obtaining a license to operate in the area, and TG Metals Limited tenements are in good standing.
Exploration Done by Other Parties	<ul style="list-style-type: none"> <i>Acknowledgement and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> Exploration in the area previously concentrated on nickel and gold by Maggie Hays Nickel, Lionore International, Norilsk and White Cliff Nickel. Black Resources Pty Ltd commenced desktop assessments on potential lithium target areas however no ground testing had been completed.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> 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/amphibolite metamorphic facies.

Criteria	JORC Code explanation	Commentary
Drillhole Information	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Refer to tables and figures in the body text.
Data Aggregation Methods	<ul style="list-style-type: none"> <i>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</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> None used. All assays reported as received. Not relevant, exploration results are not being reported.
Relationship Between Widths and Intercept Widths	<ul style="list-style-type: none"> <i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i> 	<ul style="list-style-type: none"> Not relevant, exploration results are not being reported.
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Not relevant, exploration results are not being reported.
Balanced Reporting	<ul style="list-style-type: none"> <i>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</i> 	<ul style="list-style-type: none"> Not relevant, exploration results are not being reported.

Criteria	JORC Code explanation	Commentary
<i>Exploration Results.</i>		
Other Substantive Exploration Data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Metallurgical data compiled and presented in the body text is based on the testwork completed by Metallurgy, Steinert Australia and Bureau Veritas. The project/testwork was supervised by independent contractor Michael Rodriguez. TG Metals Limited representatives were also present as observers while the testwork was completed.
Further Work	<ul style="list-style-type: none"> <i>The Nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Flotation testwork results, along with outstanding assays for Dense Media Separation and Magnetic Separation to be reported in November. Targeted Flora and Fauna surveys to be conducted over the Burmeister deposit to prepare for resource development Drilling to recommence once ground conditions and weather are favourable for an uninterrupted program. Refer to the body text 'Next Steps' for more detail.