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ASX ANNOUNCEMENT

Lithium Australia geophysics defines lithium/tantalum pegmatites at Lake Johnston Western Australia in collaboration with Poseidon Nickel Ltd (ASX:POS) and Lefroy Exploration Ltd (ASX:LEX)

Highlights:

- **Ring-shaped potassium anomalies coincide with mapped lithium-tantalum bearing pegmatites**
- **Multiple potassium anomalies without rock expressions are interpreted to be shallowly buried pegmatites**
- **Deep-seated and cross-cutting faults may represent the 'plumbing system' for the pegmatites**

Lithium Australia NL's (ASX: LIT) newly acquired airborne geophysics data from the infill airborne magnetic and radiometric completed in December 2016 has clearly identified known and possibly buried lithium-tantalum bearing pegmatites in the Company's Mt Day, Poseidon Nickel Ltd (ASX:POS) and Lefroy Exploration Ltd (ASX: LEX) Lake Johnston Projects, 420 km east of Perth. The survey covered areas of the Lake Johnston Greenstone Belt where the Maggie Hays Formation has been intruded by lithium-tantalum bearing pegmatites. Previous airborne geophysics was not detailed enough to understand the geological and structural setting of the pegmatites.

Based on the new 50 m line spaced data, the majority of the known lithium-tantalum bearing pegmatites are coincidental with ring-like, potassium radiometric anomalies (Figure 1). Pegmatite outcrops defined through satellite imagery interpretation and field reconnaissance, conducted by the LIT in September 2016 (LIT ASX release 25 October 2016), confirm that many of the pegmatite outcrops are circular in outcrop (Figure 2) and are possibly related to late-stage ring fractures. It is further interpreted that the low to moderate amplitude potassium anomalies without any rock expression are related to shallowly buried pegmatites.

Pegmatites exposures which have been defined through LIT's reconnaissance work, but do not have any potassium anomalism, are those which are predominantly sub-crop to float rather than outcrop.

During the September 2016 reconnaissance, LIT defined five additional lithium prospects; Whitten, Bulldog, Boundary, Trackside, and Floyd. All pegmatites are lepidolite-rich with varying amounts of lithium-bearing zinnwaldite. The geophysical survey has defined a number of exposed and shallowly buried pegmatites which greatly increase the exploration targets.

All the known lithium-tantalum bearing pegmatites either lie directly on or slightly juxtaposed to deep-seated faults and tension cross faults (Figure 3). It is postulated that the pegmatite ring structures are related to a period of movement along these faults, probably due to the emplacement of one of the smaller, 'S-type' pegmatite parent granites in the Maggie Hays Formation.

The survey was completed in collaboration with neighbouring tenement holders Poseidon Nickel Ltd and with LEX which also holds the gold and nickel rights over E63/1777. LIT holds the lithium rights over E63/1722 and E63/1723 in deal completed in October 2016 (LIT ASX release 18 October 2016).

In regard to regional development, LIT and Poseidon plan to share resources to expedite the exploration and resource definition for lithium, tantalite and nickel in the Lake Johnston area. Further exploration activities are planned for 2017.

Managing director, Adrian Griffin said:

"Lithium Australia continues to develop its outstanding lithium exploration projects to ensure an accessible pipeline of potential lithium feed. We are encouraged by these initial Lake Johnston survey results and are pleased with our collaboration with Poseidon and Lefroy."

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LIT is a dedicated developer of disruptive lithium extraction technologies. LIT has strategic alliances with a number of companies, potentially providing access to a diversified lithium mineral inventory. LIT aspires to create the union between resources and the best available technology and to establish a global lithium processing business.

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Competent Person Statement

The information in this report that relates to Exploration Results together with any related assessments and interpretations is based on information complied by Mr Derrick Kettlewell on behalf of Mr Adrian Griffin, Managing Director of Lithium Australia NL. Mr Kettlewell is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience relevant to the styles of mineralisation under consideration and to the activity which he has undertaken to qualify as a Competent Person.

Mr Griffin is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience relevant to the styles of mineralisation under consideration and to the activity being reported 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 Derrick Kettlewell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. The Company is not aware of any new information or data that materially affects the information in this report and such information is based on the information compiled on behalf of company Managing Director Mr Adrian Griffin.

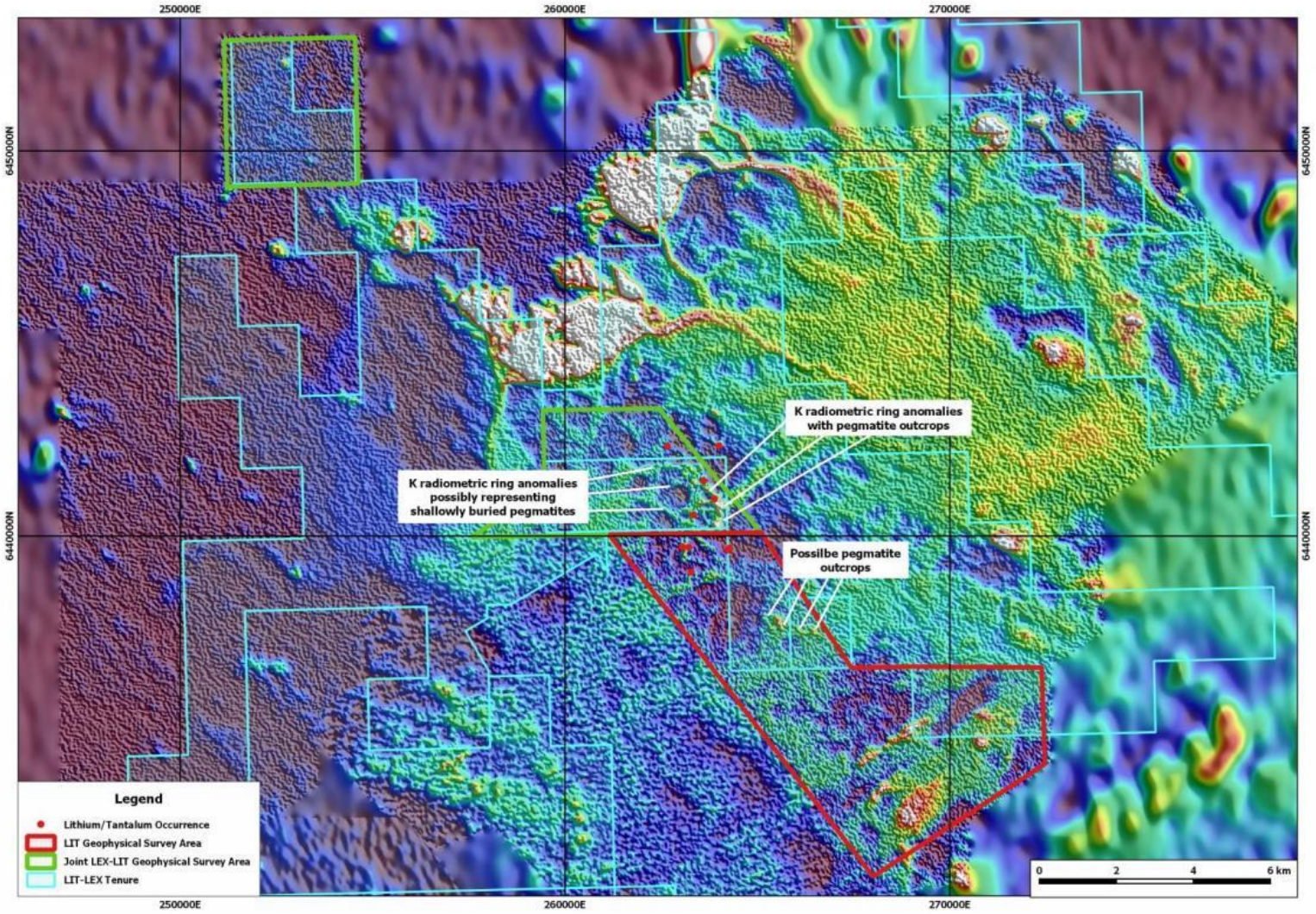

Figure 1: Lithium-Tantalum occurrences located on ring-structures anomalous in potassium

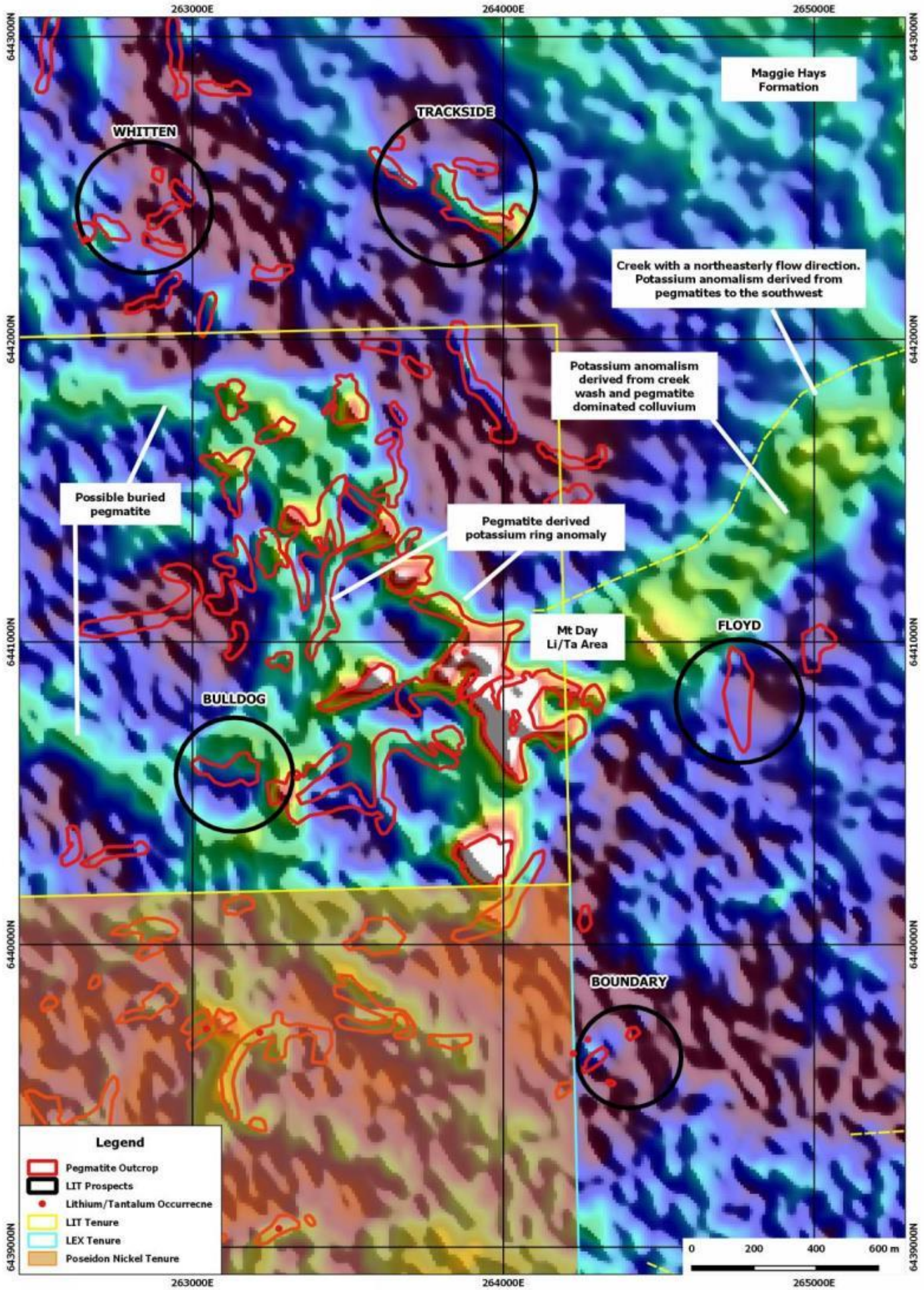

Figure 2: Pegmatite outcrops and possible shallowly buried pegmatites overlaid on potassium radiometric image – Mt Day area

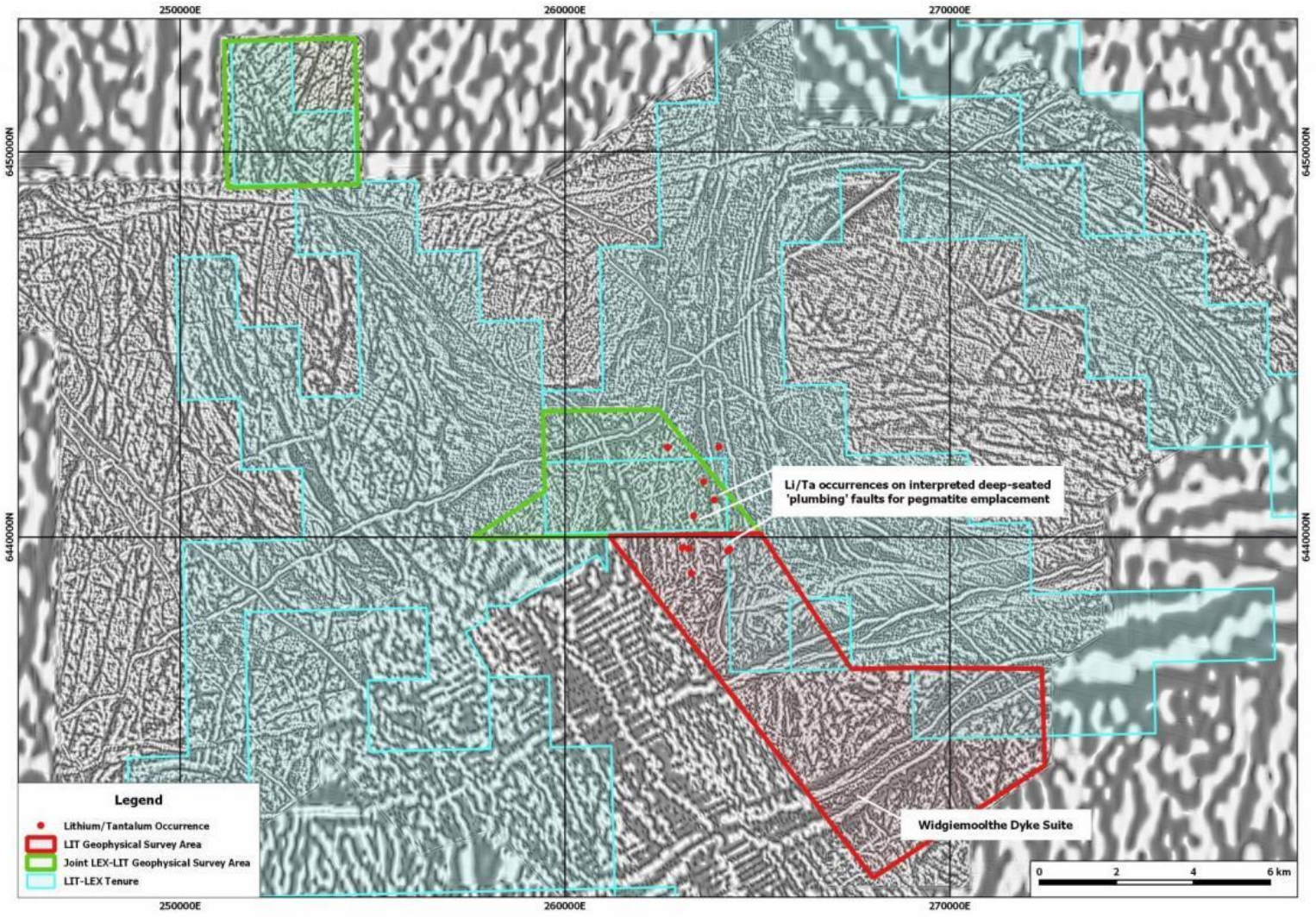

Figure 3: Lithium-Tantalum occurrences on / proximal to deep-seated faults represented by magnetic highs

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• G-822 Caesium vapour magnetometer • Scintrex Envi-Mag & Geometrics G-856 proton procession base station magnetometer. • RXS-4 spectrometers • 50 m line spacing
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Not Applicable
Drill sample recovery	• *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.*	• Not Applicable
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Not Applicable
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Not Applicable
Quality of assay data and	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• G-822 Caesium vapour magnetometer with a 20 Hz sampling rate.

laboratory tests	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	The base station was a Scintrex Envi-Mag & Geometrics G-856 proton procerssion magnetometer. • RXS-4 spectrometers with a 2 Hz sampling rate.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All data was checked on a daily basis by field staff and consultants. • Any data points that were questionable were re-surveyed.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Date points were located by GPS. • Elevation values were in AHD. • Expected accuracy is +/- 5 m for easting, northing and elevation co-ordinates. • The grid system was GDA94(MGA), zone 51.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Survey lines were 50 m apart with 500 m tie lines. • Magnetics data was collected in 0.05 second interval and Radiometric data at 0.5 second interval.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The survey was orientated 090-270 degrees with tie line direction 0-180 degrees.
Sample security	• *The measures taken to ensure sample security.*	• All data was collected by MagSpec Airborne Surveys with data provided to the Company's consultants.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been undertaken at this stage.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• There were two aeromagnetic and radiometric survey areas. Survey Area 1 is contained within E63/1722 and vacant Crown land while Survey Area 2 is contained within E63/1722, E63/1723, E63/1777, E63/1806, and vacant Crown land. • LIT has obtained the lithium rights for Lefroy Exploration Ltd E63/1722 and E63/1723 while Lefroy has obtained the gold and nickel rights for LIT E63/1777. • Survey Area 2 is also partially contained within Poseidon Nickel Ltd E63/1067, E63/1784, and M63/282.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Prior airborne magnetic and radiometric surveys were; Total coverage by Geoscience Australia (2005), and partial coverage by Amoco Minerals Aust Co (1981) and Monarch Resources Ltd (2003).
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Company is exploring for lithium.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Not Applicable.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	• Not Applicable.

	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not Applicable.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Figure 1 shows potassium results with lithium-tantalum occurrences. • Figure 2 shows potassium results with pegmatite outcrops, and LIT prospects. • Figure 3 displays reduced to pole, second vertical derivative aeromagnetic results with lithium-tantalum occurrences.
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.*	• Not Applicable.
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.*	• Previous ASX releases by LIT have detailed aspects of previous work undertaken at the project
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• At the time of reporting, the geophysical results were still being evaluated, but it is envisaged that in the short term further detail geological mapping and geochemical sampling is warranted to investigate potential additional lithium bearing pegmatites. In the longer term, drilling to test extensions at depth will be required.