

29 November 2023

## **MAIDEN DIAMOND DRILL HOLE COMPLETED OSBORNE JV DRILLING CONTINUES AT OSBORNE AND KOBE PEGMATITE TRENDS**

### **Highlights:**

- Osborne pegmatites intersected in stratigraphic diamond hole - hole completed at 810.2m depth
- **Pegmatite intersections up to 24.6m thick, approx. 550m down dip** of Osborne lithium pegmatite surface outcrops
- Three zones identified down dip of Wally and Osborne targets each comprising **multiple stacked occurrences of pegmatite**
- Heritage report for the recently completed initial heritage survey has been received enabling access for drilling at both Osborne and Kobe
- XRD analyses have previously confirmed **spodumene bearing** pegmatite at Kobe and Osborne
- Diamond drilling is continuing at the Osborne JV (GRE 51%; ARV 49%)
- GreenTech's West Pilbara lithium projects are **to the west of and in proximity to Azure Minerals (ASX: AZS) Andover Discovery**

**GreenTech Metals Ltd** (ASX: **GRE**) (**GreenTech** or **the Company**) is pleased to advise that the lithium pegmatite focused maiden Diamond Drilling (DDH) program at the **Osborne JV** tenement E47/3719, a joint venture (51% GRE: 49% ARV) held with Artemis Resources Ltd (ASX: **ARV**) is continuing as planned with the first hole completed to a depth of 810.2m.

The Osborne JV sits to the east and adjoins the Company's Ruth Well Project (Figures 3 to5).

The Company has several more diamond drill holes to complete as part of this maiden drill program. These drill holes will be sited at both the Osborne and Kobe pegmatite trends, aimed at providing stratigraphic/structural information and subsurface characteristics of these pegmatite zones. This data will assist with refining the detailed follow-up drill program scheduled for early next year.

#### **BOARD & MANAGEMENT**

**ASX: GRE**

**Guy Robertson**

Non-executive Director

**Thomas Reddcliffe**

Executive Director

**Rod Webster**

Non-executive Director

#### **CONTACT US**

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## **Management Commentary**

### **Executive Director Thomas Reddicliffe commented:**

*"We are pleased that our drilling program is on track and that preliminary drill core observations, coupled with the surface rock chip  $\text{Li}_2\text{O}$  grades and the scale of the Kobe and Osborne zones, support our view that this is a large lithium mineralising event. We are continuing with the current exploratory drill hole program along with the testing of mineralised zones when intersected which we expect to be completed this year. The commencement of a targeted and more detailed program of drilling within the broader Osborne and Kobe zones will be in the new year following the receipt and analysis of results from this current program."*

### **Details of Drill hole 23GTDD001**

The initial drill hole 23GTDD001 was sited to the north of the Southern Pegmatite zone (Table 1) at a location previously heritage cleared for drilling. The hole was drilled to the south at a declination of  $40^\circ$  to primarily test the Osborne trend and also intersect the Wally trend albeit in a position where surface mapping indicates the Wally trend is attenuated (Figures 1 and 2). The hole was designed to further understand host rock geology and test down dip structural controls of surface outcropping lithium pegmatites previously identified from recently completed mapping and chip sampling programs. The drill hole was terminated at 810.2m depth.

The Southern LCT pegmatite zone sits within the Osborne JV Project tenements and comprises a total combined 4km of pegmatite strike along which previous rock chip samples have returned assay results of up to **3.63%  $\text{Li}_2\text{O}$ <sup>1</sup>**.

### **The initial observations from this drill hole appear very encouraging and are summarised as follows:**

- Multiple zones of north dipping stacked pegmatites have been identified down dip of Wally and Osborne.
- Individual pegmatite drill hole intersection widths range up to 24.6m
- A zone at least 57m wide comprising a series of closely stacked pegmatites has been intersected below 753m depth.
- Preliminary interpretation suggests the Osborne pegmatite outcrop zone extends from surface down dip for at least 550m.
- Hole terminated within a pegmatite zone at 810.20m indicating the system remains open at depth

Detailed logging and sampling of 23GTDD001 has commenced and samples will be submitted for analysis this week.

<sup>1</sup>ASX Announcement, Greentech Metals, 24 July 2023

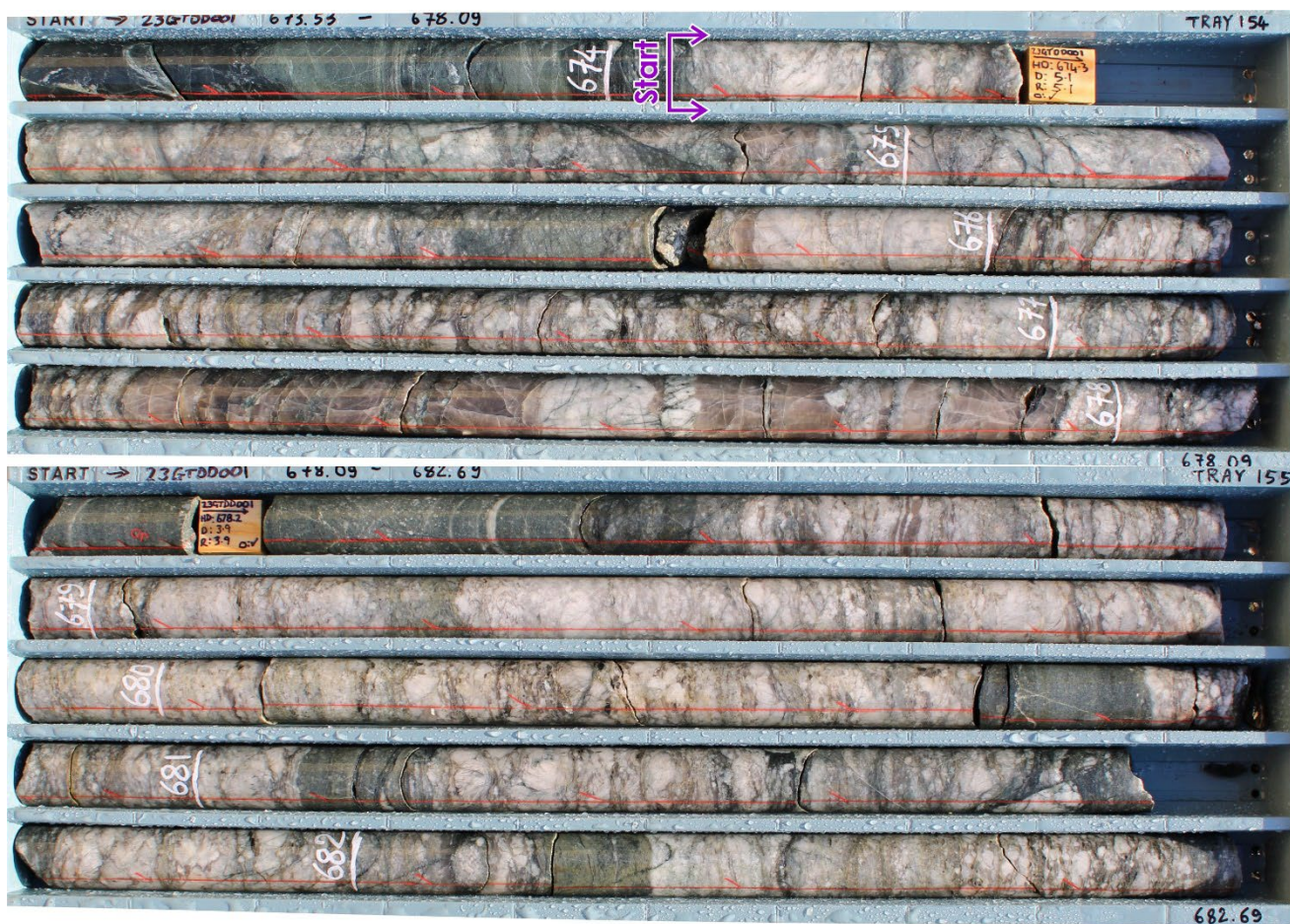


Photo 1: Part section of ~24.6m drill intersect of mica-quartz-feldspar pegmatite zone between 674m to 698.6m depth (Drill hole 23GTDD001). Intercept width approximates true thickness. Preliminary interpretation suggests this correlates with the southern surface expression of the Osborne pegmatite zone located approximately 550m up dip from this intersection.

### **Forward Exploration Program**

The Company has commenced a second diamond drill hole in the Southern Pegmatite Zone designed to test a thicker part of the Wally trend approximately 350m east of 23GTDD001 (Figure 1). The Company also aims to complete two stratigraphic diamond drill holes on the Kobe Zone as part of this maiden program.

A follow-up RC drill program is anticipated to commence in the first quarter of 2024. The design and implementation of this more detailed drill program will incorporate results and information gained from the current drill program. The Company has approved programs of work (PoW's) and heritage clearances which facilitate current and future drill programs on the project tenements.

The Company is looking forward to continuing the exploration efforts at both Kobe and Osborne and will distribute all results and assays to market after they are received and assessed.



Technical information included in this announcement has previously been provided to the market in releases dated:

15 June 2023	High Grade Lithium Discovered at Ruth Well Project
15 June 2023	Appointment of Lithium Advisors to Drive Exploration
29 June 2023	Greentech Metals Lithium Corporate Update
7 July 2023	Further High Grade Lithium Encountered at Ruth Well
10 July 2023	Lithium Bearing Pegmatites Identified West Pilbara JV
24 July 2023	Further High-Grade Lithium Assays Reported At Osborne JV
1 September 2023	Analysis Confirms Spodumene at Osborne JV
5 September 2023	New Lithium Targets at Ruth Well and Osborne JV
5 October 2023	Further High Grade Lithium Assays at Osborne JV
30 October 2023	Further High Grade Rock Chip Results Kobe
6 November 2023	Drilling Commences Osborne Joint Venture Lithium project

This announcement has been approved for release by the Board.

#### ENDS

For Further Information:

Mr Thomas Reddicliffe  
Executive Director  
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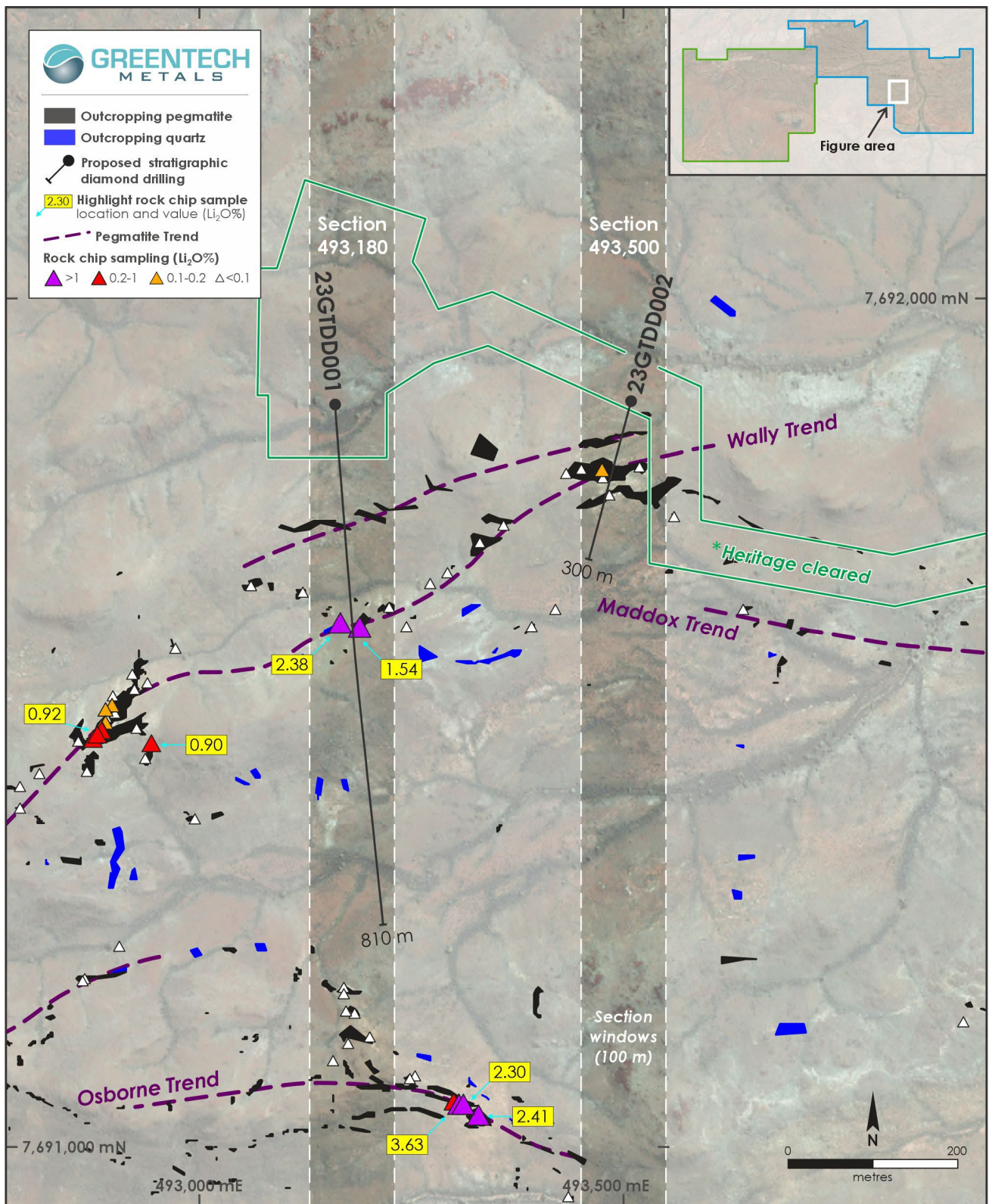
Mr Guy Robertson  
Company Secretary  
+61 407 983 270

#### About GreenTech Metals Limited

Greentech Metals is an exploration and development company focused on the discovery, development, and opportunistic acquisition of critical minerals particularly those used in battery storage and electric vehicles. The Company's founding projects are focused on lithium, nickel, copper and cobalt which have been underexplored in the West Pilbara and Fraser Range Provinces.

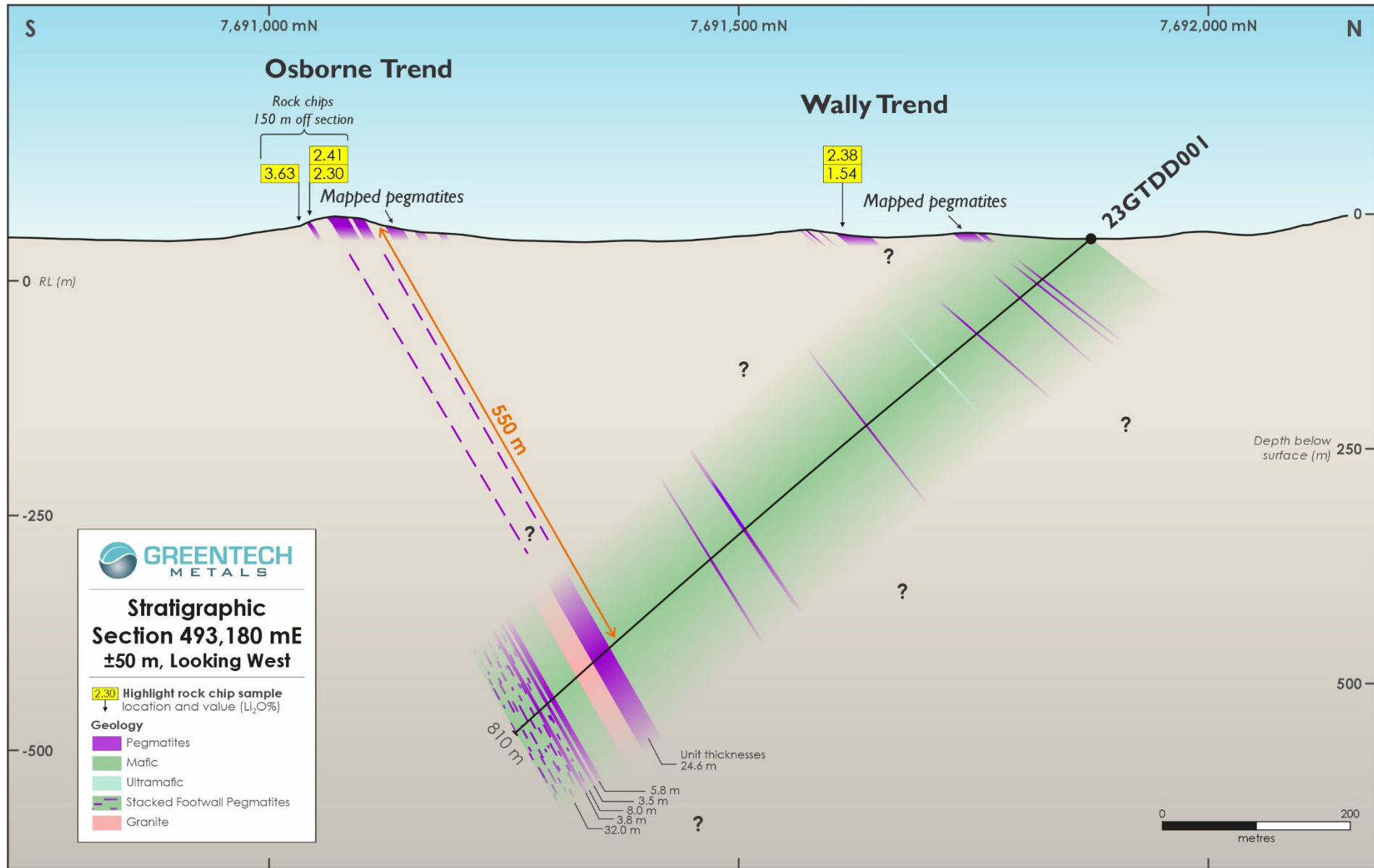
#### Competent Person Statement

Thomas Reddicliffe, BSc (Hons), MSc, a Director and Shareholder of the Company, is a Fellow of the AUSIMM, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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'. Thomas Reddicliffe consents to the inclusion in the report of the information in the form and context in which it appears.



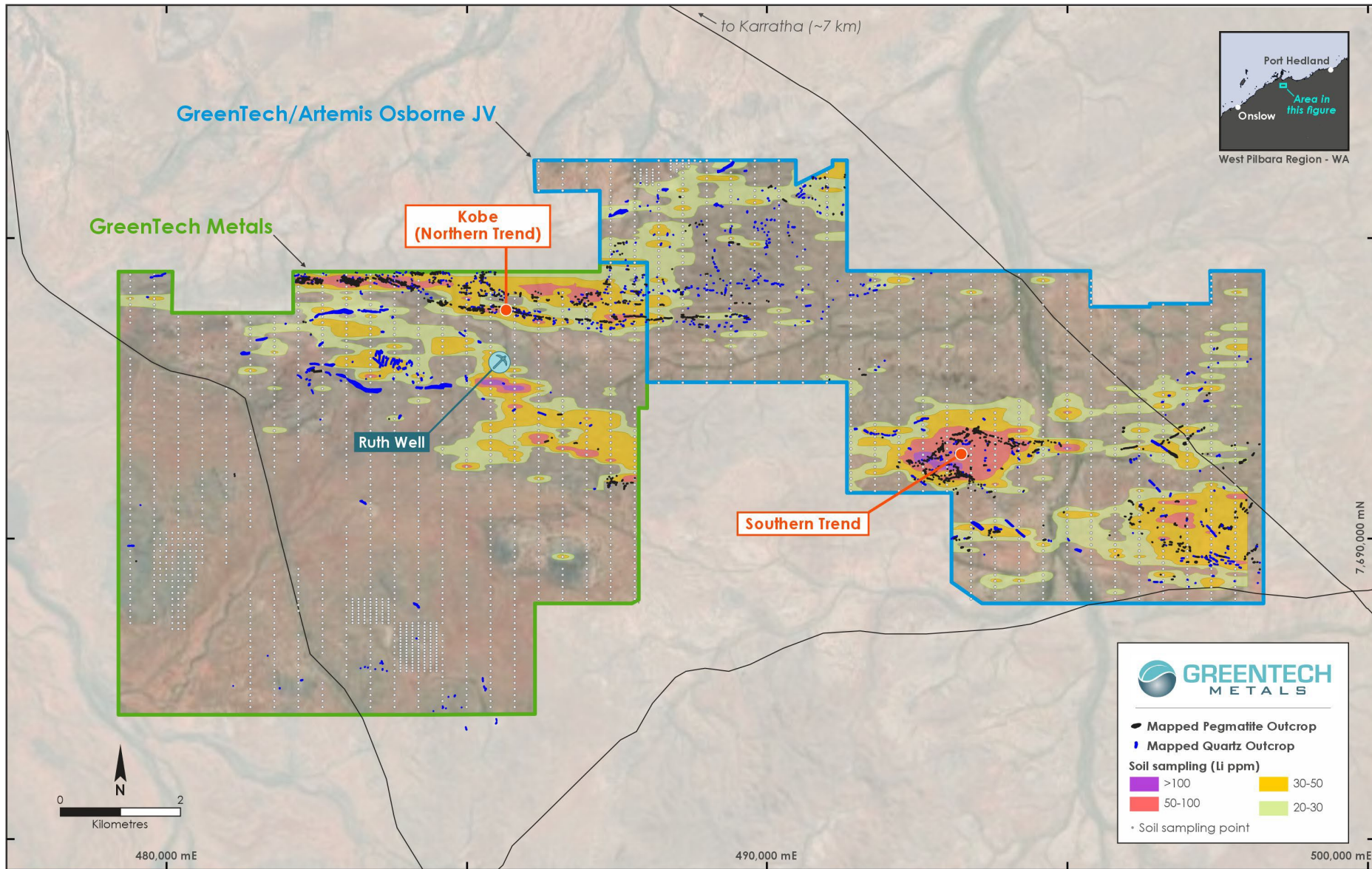
\*Heritage Cleared in 2022 for Osborne nickel project

**Figure 1.** Diamond Drill hole Plan showing drill hole traces - Osborne and Wally Targets



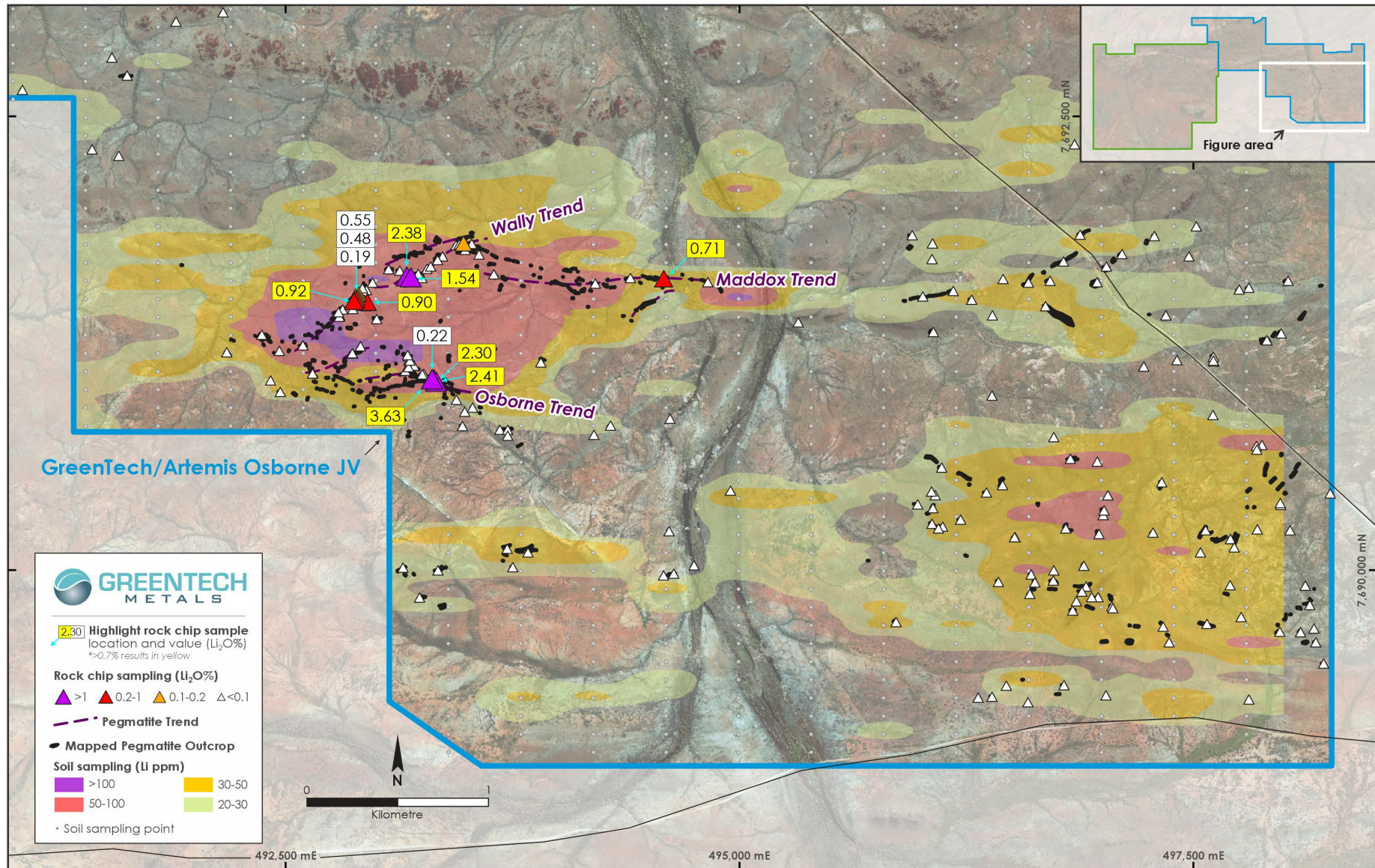
**Figure 2:** Schematic Cross Section 23GTDD001





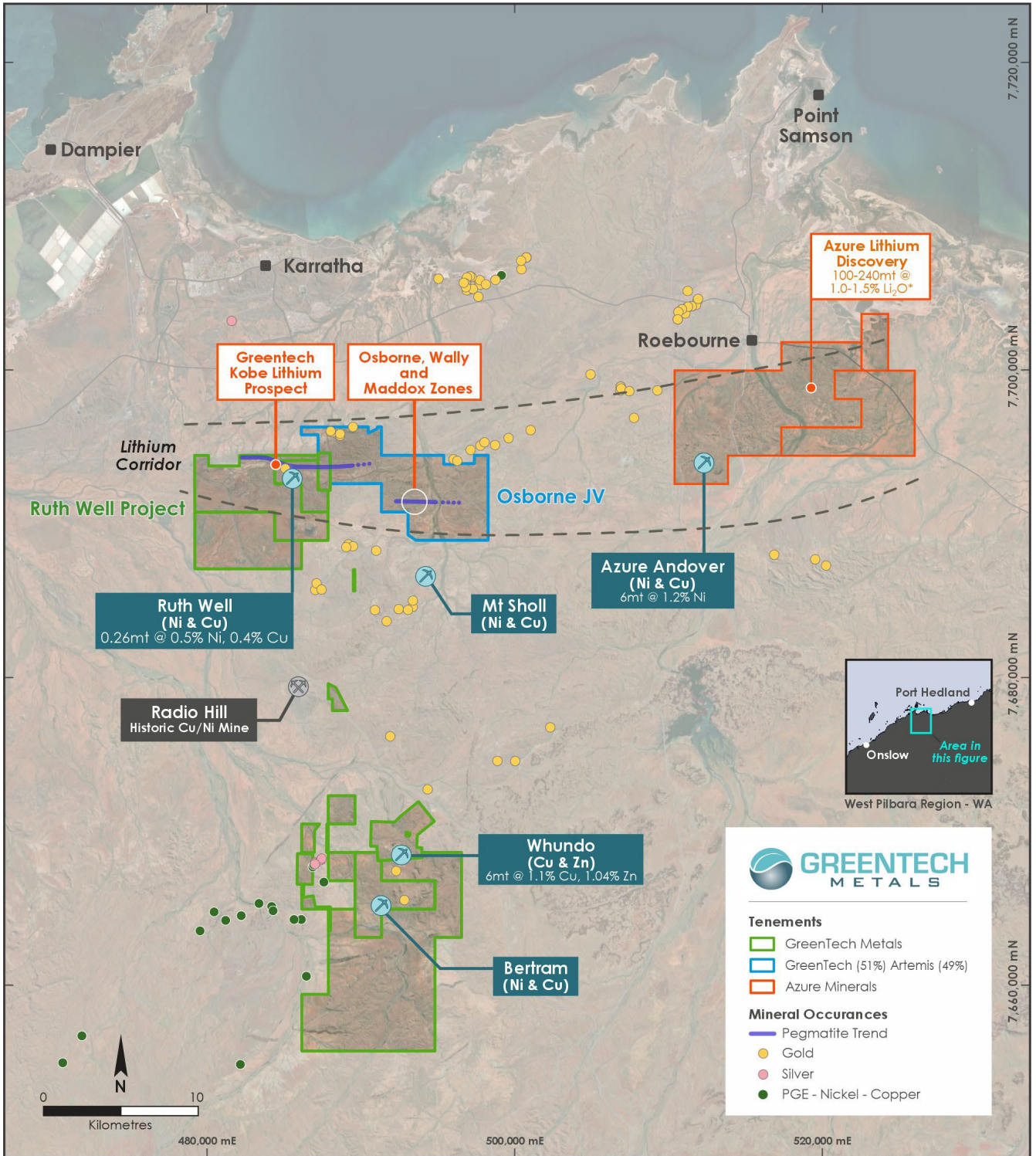
**Figure 3.** Historic Soil Geochemistry and recently Mapped Pegmatite Swarms highlighting Northern & Southern Pegmatite





**Figure 4.** Historic Soil Geochemistry and recently Mapped Pegmatite Swarms highlighting Southern Pegmatite Trends at Osborne JV





**Figure 5.** GreenTech Project Location, West Pilbara Region

## Appendix

**Table 1:** Details of Diamond Drilling

Drill Hole ID	Location		RL(m)	Depth	Dip	Azimuth
	GDA East	GDA North				
23GTDD001	493160	7691875	45.4	810.2	-40	176
23GTDD002	493509	7691879	38.9	Planned 300	-50	195

### Notes

Coordinate system GDA94z50, obtained by handheld GPS, accuracy +/- 3m





## 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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><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></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable.</li> <li>This announcement relates in part to drilling carried out by Greentech Metals Ltd for which no laboratory results are available.</li> <li>No mention is made in this announcement of exploration drilling sample results including drilling conducted by other companies on nearby tenements.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling was undertaken by Greentech but no laboratory results are available and are not discussed or included in this announcement.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No drill core sample assay results are available and hence these are not discussed in this announcement.</li> </ul>

	<ul style="list-style-type: none"> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• No sampling of drill core has been completed</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• No sampling of drill core has been completed .</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Sample points were determined by hand held GPS which is considered appropriate for the reconnaissance nature of the sampling.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable.</li> </ul>



	<ul style="list-style-type: none"> <li>• Whether sample compositing has been applied.</li> </ul>	
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> <li>• The sampling of drill core has yet to be completed and is not discussed in this announcement.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Sample security is by way of chain of custody.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• No review of the sampling techniques has been undertaken.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>• The Ruth Well project tenements cover an area of 85km<sup>2</sup> and comprises granted tenements: 47/4387, E47/3341, E47/3719, P47/1929 and P47/1998.</li> <li>• The tenements are owned 100% by GreenTech Metals subsidiary company GreenTech Holdings Pty Ltd with the exception of tenement E47/3719 which is subject to a Greentech Metals/Artemis Resources 51%/49% Joint Venture</li> <li>• The tenements are in good standing with DMIRS and there are no known impediments for exploration on these tenements.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>• Numerous exploration parties have held the area covered by the current GreenTech tenure previously. There is no reported previous exploration for lithium bearing pegmatites on the tenements.</li> <li>• No other exploration companies generated data was used in this release.</li> <li>• Regional RTP aeromagnetics and geology from Geological Survey of WA.</li> <li>• The area was previously explored by Fox Resources Ltd and Artemis Resources Ltd with both focussed on nickel exploration.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• The lithium bearing pegmatite zone trends WNW-ESE and is hosted by strongly sheared sediments of the Regal Formation.</li> <li>• The pegmatites occur as intermittent lenses in strongly sheared sediments assigned to the Regal Formation and are located approximately 3km to the north of the Sholl Shear Zone.</li> <li>• The pegmatites are steeply dipping and up to 20m wide.</li> </ul>

	<ul style="list-style-type: none"> <li>The project area is underlain by the Archean Pilbara Craton, specifically the West Pilbara Superterrane (WPST) of Hickman (2016). The 3280-3070 Ma WPST comprises numerous tectonostratigraphic packages (Sholl, Regal and Karratha Terranes and the Whundo and Nickol River Basins) and igneous complexes that have been variously affected by several tectonic events. The easterly to east-north easterly trending Sholl Shear Zone (SSZ) is a boundary for the regional rock packages. Metamorphic grade is higher to the north of the SSZ, suggesting the present-day surface shows a slightly deeper crustal level on the north side.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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:           <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>



<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <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 drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All the appropriate maps are provided in the body of this announcement.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <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 Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• This announcement discusses the findings of recent reconnaissance sampling and associated assays.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• All the meaningful exploration data has been included in the body of this announcement.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• GreenTech plans to conduct further ground reconnaissance and sampling in the short term to determine the surface extent both laterally and along strike and also the economic potential of the prospect. Drilling is also being undertaken.</li> </ul>