

# ANALYSIS CONFIRMS SPODUMENE AT OSBORNE JV

Follow-up field work continues to target new pegmatite trends and extensions of known trends

### Highlights:

- XRD analysis confirms lithium predominantly hosted in spodumene
- Spodumene now confirmed in both Northern and Southern Trends
- Recently completed rock chip sampling returned <u>1.8% to 3.6% Li<sub>2</sub>O<sup>1, 2</sup></u>
- Northern trend (Kobe) 7.5km strike identified, Southern Trend also open
- On ground team are continuing with reconnaissance sampling and mapping aimed at;
  - o identifying new pegmatite trends
  - Extending the known pegmatite trends
- Planning for maiden Ruth Well lithium drilling program is progressing with;
  - Work programs approved for Ruth Well and Osborne tenements
  - Application for heritage clearance underway

**GreenTech Metals Ltd** (ASX: **GRE**) (**GreenTech** or **the Company**) is pleased to update the market with respect to the recent laboratory XRD analysis of a known lithium bearing sample collected within the **Osborne JV** tenement E47/3719, a joint venture (51% GRE: 49% ARV) held with Artemis Resources Ltd (**ASX: ARV**). The Osborne JV sits to the east of the Company's Ruth Well Project (Figures 1 and 2).

<sup>1</sup> Greentech Metals Ltd, ASX Announcement 7 July 2023

#### BOARD & MANAGEMENT

ASX: GRE

Guy Robertson Non-executive Director Thomas Reddicliffe Executive Director Rod Webster Non-executive Director Guy Robertson Company Secretary

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<sup>&</sup>lt;sup>2</sup> Greentech Metals Ltd, ASX Announcement 24 July 2023



### Spodumene confirmed in both Northern and Southern Trends

A lithium bearing rock chip sample was provided for mineralogical analysis at ALS Global Laboratories. Recent geochemical analysis undertaken by ALS on behalf of the Company reported lithium assays in the range 1-1.8% at Kobe and up to 3.6% Li<sub>2</sub>O at the adjoining Osborne JV. The higher-grade sample was submitted for mineral characterization by the XRD technique. The XRD analyse reveals that Spodumene is the dominant lithium bearing mineral in the sample.

Sample Id	% Li <sub>2</sub> O	% Spodumene	% Other Major Component	Lab
23CR038	3.6	44	43 Qtz	ALS

#### Table 1. Summary of XRD Result<sup>2</sup>

From XRD analyses on the rock chips to date, the dominant lithium mineral on the Ruth Well Project is spodumene which provides a positive aspect to the Company's exploration and future development potential.

#### Project analysis work continues

GRE's field team are continuing with reconnaissance sampling and mapping aimed at both identifying new pegmatite trends as well as extending the known pegmatite trends.

**New potential lithium targets** have been identified from both historic and new datasets. Some of these targets are located to the south of the Kobe trend and lie within the Company's **100% owned** tenements.

The location of these targets may suggest a separate mineralised event to the Kobe trend and also separate to the new pegmatite trend recently reported (see ASX release dated 24 July) on the Osborne JV tenement where peak assays returned **3.6% and 2.3% Li<sub>2</sub>O<sup>2</sup>**.

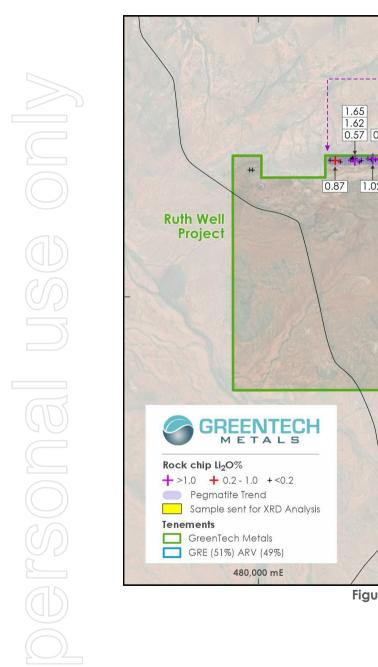
#### Exploration plans – progressing towards drilling

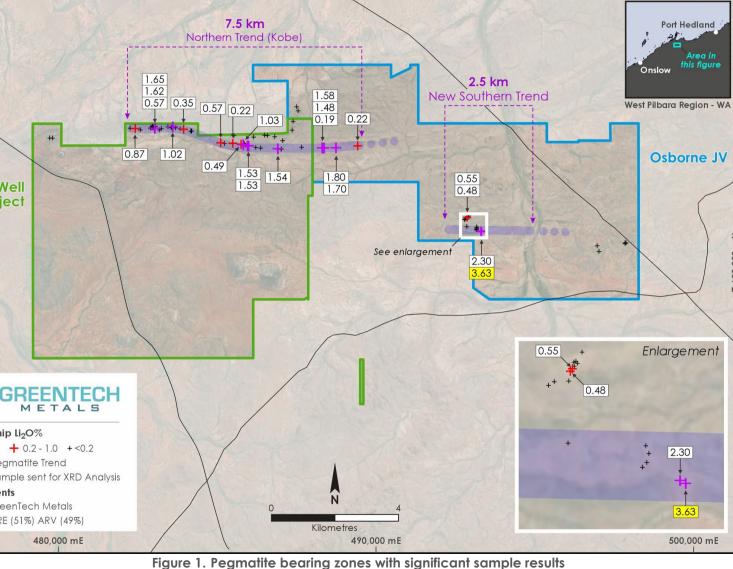
GRE continues to advance quickly towards the commencement of its maiden lithium drilling program at Ruth Well. Program of works have been submitted and approvals received for all tenements and a Heritage Clearance submission has been lodged with the Ngarluma Aboriginal Corporation to undertake heritage surveys to allow the undertaking of drill programs.

The Company's Ruth Well Project lies approximately 20km from Karratha which provides the Company with an extensive range of logistical and support facilities in close proximity to the Company's projects.



7,690,000 mN







Roebourne

Point Samson

> **AZURE LITHIUM** DISCOVERY

100-240mt@

7,720,000 mN

7,700,000 mN

7,680,000 mN

7,660,000 mN

Port Hedland

West Pilbara Region - WA

Onslow

GREENTECH

Tenements

GreenTech Metals

Azure Minerals Mineral Occurances Pegmatite Trend

Gold 0 0 Silver

.

GRE (51%) ARV (49%)

PGE - Nickel - Copper

520,000 mE

Area in this figu

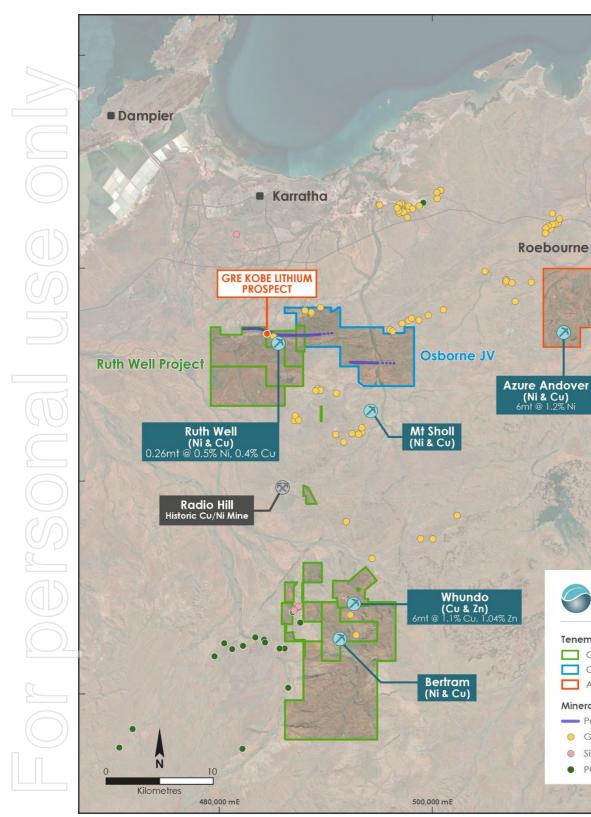


Figure 2. GreenTech Project Location, West Pilbara region



This announcement has been approved for release by the Board.

### **ENDS**

For Further Information: Mr Thomas Reddicliffe **Executive Director** info@greentechmetals.com.au

#### About GreenTech Metals Limited

The Company is an exploration and development company primarily established to discover, develop, and acquire Australian and overseas projects containing minerals and metals that are used in the battery storage and electric vehicle sectors. The Company's founding projects are focused on the underexplored lithium, nickel, copper and cobalt in the West Pilbara and Fraser Range Provinces.

The green energy transition that is currently underway will require a substantial increase in the supply of these minerals and metals for the electrification of the global vehicle fleet and for the massive investment in the electrical grid, renewable energy infrastructure and storage.

#### **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.



# 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	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Reconnaissance style rock chip sampling taken opportunistically from pegmatite outcrop.</li> <li>This announcement discusses the findings of a reconnaissance site visit with a view to determining the lithium potential of the Company's tenements and which included the collection of rock chip samples.</li> <li>Pegmatite was identified in outcrop.</li> <li>The rock chip samples were restricted to outcrop of pegmatite rocks.</li> <li>Samples were dispatched to ALS Global Laboratories in Perth for analysis.</li> </ul>
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>	<ul> <li>Not applicable.</li> <li>This announcement does not relate to drilling carried out by Greentech Metals Ltd.</li> <li>No mention is made in this announcement of exploration results including drilling conducted by other companies on nearby tenements.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	Not applicable as no details on any drilling carried out by GreenTech Metals are included in this announcement.
Logging	<ul> <li>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.</li> </ul>	Not applicable due to the reconnaissance nature of the sampling.



		METAL
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	
	<ul> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
Sub-sampling techniques and sample preparation	<ul> <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</li> </ul>	<ul> <li>Rock chip samples were dispatched to ALS Global Laboratories in Perth for analysis using their ME_MS89L 55 element technique.</li> <li>The laboratory reported the use of standards and blanks as part of the analyses for QA/QC.</li> <li>The samples were opportunistic in nature and taken from insitu outcrop.</li> <li>Samples were approximately 0.5kg to 1kg in weight.</li> <li>The samples were considered generally representative of the outcrop being sampled.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>sampled.</li> <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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Rock chip samples were dispatched to ALS Global Laboratories in Perth for analysis using their ME_MS89L 55 element technique.</li> <li>The laboratory reported the use of standards and blanks as part of the analyses for QA/QC.</li> <li>No standards or blanks were submitted by the company.</li> <li>The mineralogy of 1 lithium bearing sample was determined by XRD analyse undertaken by ALS Global Laboratory.</li> <li>The lithium bearing sample was determined by XRD analysis to be predominantly spodumene</li> </ul>
		<ul> <li>ALS XRD: Sample Preparation</li> <li>The sample was pressed into a back-packed sample holder to minimis preferred orientation of the particles. Powder X-ray diffraction (XRD) we used to analyse the sample and a combination of matrix flushing and reference intensity ratio (RIR) derived constants was used in the quantification of the minerals identified in the sample.</li> <li>Analytical Procedure XRD - Panalytical Empyrean Radiation - Co Kα 1.789 Å XRD Generator - 40 kV 40 mA Angular Range - 5 to 77 °20 Time/Step - 120 s</li> </ul>



Verification of sampling and assaying <ul> <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> <li>Location of data points</li> <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> <li>Data spacing and distribution</li> <li>Whether the data spacing for reporting of Exploration Results. and distribution</li> <li>Whether the deventation of sampling achieves unbiased sampling of possible structures and the extent to which this is furnown, considering the deposite structure</li> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is furnown, considering the deposite should be assessed and reported if material.</li> <li>Sample security</li> <li>The results of any audits or reviews of sampling techniques and data. reviews</li>	<ul> <li>sampling and assaying</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> <li>Location of data points</li> <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> <li>Data spacing or reporting of Exploration Results.</li> <li>Whether the data spacing and distribution of gredocontinuity appropriate for the further and poted in this is sufficient to establish the degree of geological and grade continuity appropriate for the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>Not applicable due to the reconnaissance nature of the samplin</li></ul>			Divergence Slit - 1° Anti-Scatter Slit - 7.5mm Slit Type - Fixed Detector - PIXcel in linear mode Rotation Speed - 60 rpm
data points       surveys), trenches, mine workings and other locations used in Mineral Resource estimation.       appropriate for the reconnaissance nature of the sampling.         9       Specification of the grid system used.       appropriate for the reconnaissance nature of the sampling.         9       Data spacing for reporting of Exploration Results.       • Not applicable due to the reconnaissance nature of the sampling.         9       Data spacing for reporting of Exploration Results.       • Not applicable due to the reconnaissance nature of the sampling.         9       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 attempt has been made to demonstrate geological or grade continuity the there is anyling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.       • Not applicable         9       • 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.       • Sample security is by way of chain of custody.         8       • The results of any audits or reviews of sampling techniques and data.       • No review of the sampling techniques has been undertaken.	data points       surveys), trenches, mine workings and other locations used in Mineral Resource estimation.       appropriate for the reconnaissance nature of the sampling.         9       Quality and adequacy of topographic control.       appropriate for the reconnaissance nature of the sampling.         9       Data spacing of reporting of Exploration Results.       • Not applicable due to the reconnaissance nature of the sampling.         9       Data spacing for reporting of Exploration Results.       • Not applicable due to the reconnaissance nature of the sampling.         9       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 due to the reconnaissance nature of the sampling.         0       Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.       • Not applicable         1       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.       • Sample security is by way of chain of custody.         2       • The results of any audits or reviews of sampling techniques and data.       • No review of the sampling techniques has been undertaken.	sampling and	<ul> <li>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> </ul>	
<ul> <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> <li>Whether sample compositing has been applied.</li> <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> <li>Sample security</li> <li>The measures taken to ensure sample security.</li> <li>No review of the sampling techniques and data.</li> <li>No review of the sampling techniques has been undertaken.</li> </ul>	<ul> <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> <li>Whether sample compositing has been applied.</li> <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> <li>Sample security</li> <li>The measures taken to ensure sample security.</li> <li>No review of the sampling techniques and data.</li> <li>No review of the sampling techniques has been undertaken.</li> </ul>	data points	surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used.	
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<ul> <li><i>security</i></li> <li><i>Audits or</i></li> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> <li>No review of the sampling techniques has been undertaken.</li> </ul>	<ul> <li><i>security</i></li> <li><i>Audits or</i></li> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> <li>No review of the sampling techniques has been undertaken.</li> </ul>	data in relation to geological	<ul> <li>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</li> </ul>	Not applicable
		•	The measures taken to ensure sample security.	Sample security is by way of chain of custody.
			• The results of any audits or reviews of sampling techniques and data.	No review of the sampling techniques has been undertaken.



## **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	<ul> <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, wildemess 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> <li>The Ruth Well project tenements cover an area of 39km<sup>2</sup> and comprises granted tenements: 47/4387, E47/3341, E47/3719 and P47/1929.</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>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <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>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <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 4m wide.</li> <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>
Drill hole Information	<ul> <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:</li> </ul>	Not applicable as no drilling has been undertaken



	<ul> <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> <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>	
Data aggregation methods		Not applicable
Relationship between mineralisation widths and intercept lengths	<ul> <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 (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Not applicable as surface sampling is reconnaissance in nature.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	All the appropriate maps are provided in the body of this announcement.
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>This announcement discusses the findings of recent reconnaissance samplin and associated assays.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>All the meaningful exploration data has been included in the body of this announcement.</li> </ul>
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	<ul> <li>GreenTech plans to conduct further ground reconnaissance and sampling in the short term to determine the surface extent both laterally and along strike</li> </ul>



 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. and also the economic potential of the prospect. Trenching and drilling will also be undertaken if warranted.