24 July 2023



## FURTHER HIGH-GRADE LITHIUM ASSAYS - UP TO 3.6% Li<sub>2</sub>O -REPORTED AT OSBORNE JV IN WA

NEW LITHIUM PEGMATITE TREND HAS POTENTIAL TO SIGNIFICANTLY EXPAND SCALE OF EXISTING DISCOVERIES

## <u>Highlights:</u>

- Reconnaissance rock chip sampling at the Osborne JV **confirms new high**grade lithium trend
- Assays return up to <u>3.6% Li<sub>2</sub>O pegmatite hosted mineralisation</u>
- Significant recent sampling assays recorded include:
  - o **3.6% Li₂O** (Sample No 23CR038)
  - o 2.3% Li₂O (Sample No 23CR039)
  - o 0.55% Li₂O (Sample No 23CR044)
  - o 0.48% Li₂O (Sample No 23CR045)
- Samples have been submitted for XRD analysis to confirm the lithium mineralogy
- Groundwork indicates that this lithium mineralisation is a **separate mineralised trend** to the initial Kobe discovery
- New lithium pegmatite discovery potentially expands the scale of the existing lithium project area at Ruth Well and Osborne JV
- Historic data sets are being assessed to potentially identify new lithium pegmatite trends and extensions within the broader Ruth Well project area
- Preparations and approvals for maiden drilling program are advancing

**GreenTech Metals Ltd** (ASX: **GRE**) (**GreenTech** or **the Company**) is pleased to report that it has received assay results from a further 30 reconnaissance samples taken at its West Pilbara Lithium Projects (**Ruth Well and Osborne JV**). These latest samples were collected from within the **Osborne JV** tenement E47/3719, a joint venture (51% GRE: 49% ARV) held

#### BOARD & MANAGEMENT

ASX: GRE

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

#### CONTACT US

info@greentechmetals.com.au greentechmetals.com.au Level 8, 99 St Georges Tce, Perth WA 6000



with Artemis Resources Ltd (**ASX: ARV**). The Osborne JV sits to the east of the Company's Ruth Well Project (Figures 2 and 4).

The existing Kobe Prospect sits within the Company's Ruth Well Project tenements and extends eastward into the Osborne JV tenement located in the West Pilbara region of Western Australian, where previous rock chip samples have returned assay results of up to **1.8% Li<sub>2</sub>O<sup>1</sup>** (Figure 2).

The results from these latest reconnaissance rock chip samples have returned excellent lithium grades of **up to 3.6% Li<sub>2</sub>O** (Figures 1 and 2, Table 1).

Ground reconnaissance has also confirmed that the Osborne pegmatite bearing zone is a **separate mineralised east west tending zone** to the south of the Kobe trend and potentially represents an expansion to the extent of lithium mineralisation in the project areas.

#### Management Commentary

#### Executive Director Thomas Reddicliffe commented:

"GreenTech is very encouraged by the discovery of this second lithium pegmatite trend at the Osborne JV with Artemis. Initial assays from this new lithium pegmatite trend indicate a potentially higher grade lithium trend than our original discovery, and highlights the potential to discover further lithium pegmatite zones within the existing tenement package.

GreenTech has established a great foundation in this growing lithium province in the West Pilbara and these latest results further reinforce our belief that there is significant lithium pegmatite potential on our tenements."

#### Kobe Lithium Prospect Reconnaissance Program Summary

Recently completed reconnaissance sampling completed at the Osborne tenement was designed to follow on from previous reconnaissance programs that targeted the pegmatite zone extending from the Ruth Well tenements into GreenTech's adjoining Osborne JV tenement.

This follow-up batch of 30 samples was dispatched to the ALS Global laboratory in Perth for a 25-element analysis with seven of the samples returning positive results for lithium mineralisation and including two samples with assays reporting greater than 1% Li<sub>2</sub>O. Test work is being undertaken by ALS by way of XRD analysis on the two high grade samples to confirm the lithium mineralogy. The results for these samples will be reported when the analytical results are received.

The following significant sample assays were received for this recent program:

- o **3.6% Li₂O** (Sample No 23CR038)
- o **2.3% Li₂O** (Sample No 23CR039)
- o 0.55% Li₂O (Sample No 23CR044)
- o **0.48% Li₂O** (Sample No 23CR045)

<sup>1</sup>ASX Announcement, Greentech Metals Ltd, 7 July, 2023 <sup>2</sup>ASX Announcement, Greentech Metals Ltd, 15 June, 2023





#### Potential for More High-Quality Targets at Ruth Well

Using the information gained from the discovery of the two lithium pegmatite trends, the Company is reviewing historic datasets with a view to potentially identifying new lithium pegmatite trends, and extensions to the known trends, within the broader Ruth Well and Osborne Project areas.



Figure 1. Rock Sample 23CR038 (Refer to Assay Table for Lithium Analysis)

#### Forward Exploration Program

The Company is currently mobilising field crews to site to undertake the following exploration activities over the coming weeks in the lead up to the maiden drilling program:

- Mapping
- Ground reconnaissance
- Rock chip and soil sampling
- Drill target identification

Preparations relating to regulatory requirements have also commenced to enable the undertaking of a maiden drilling program. The Company has submitted multiple program of works (PoW's) which will facilitate the commencement of drilling once approved.

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

This announcement has been approved for release by the Board.





#### ENDS

For Further Information:

Mr Thomas Reddicliffe Executive Director +61 8 9486 4036 info@greentechmetals.com

Mr Dan Smith Company Secretary +61 8 9486 4036

### 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 nickel, copper and cobalt in the West Pilbara and Fraser Range Provinces.

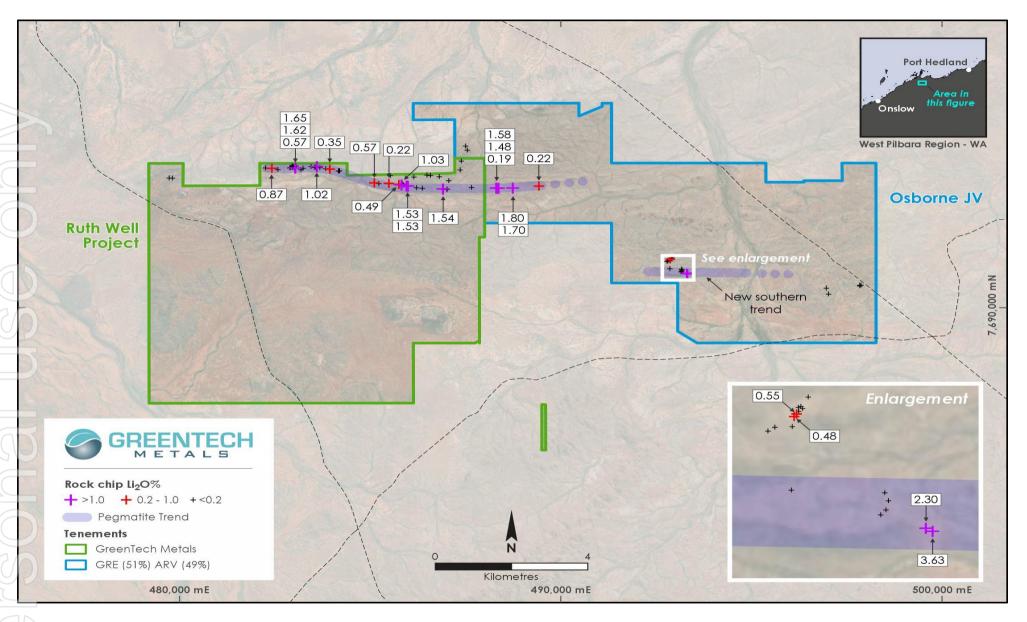
The green energy transition that is currently underway will require a substantial increase in the supply of these minerals and metals for the electrification of the global vehicle fleet and for the massive investment in the electrical grid, renewable energy infrastructure and storage.

#### **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.

æ





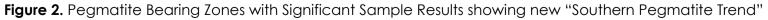






Figure 3. Sampling Pegmatite Outcrop at Rock Sample Site 23CR038



6\_**\_⊄** 





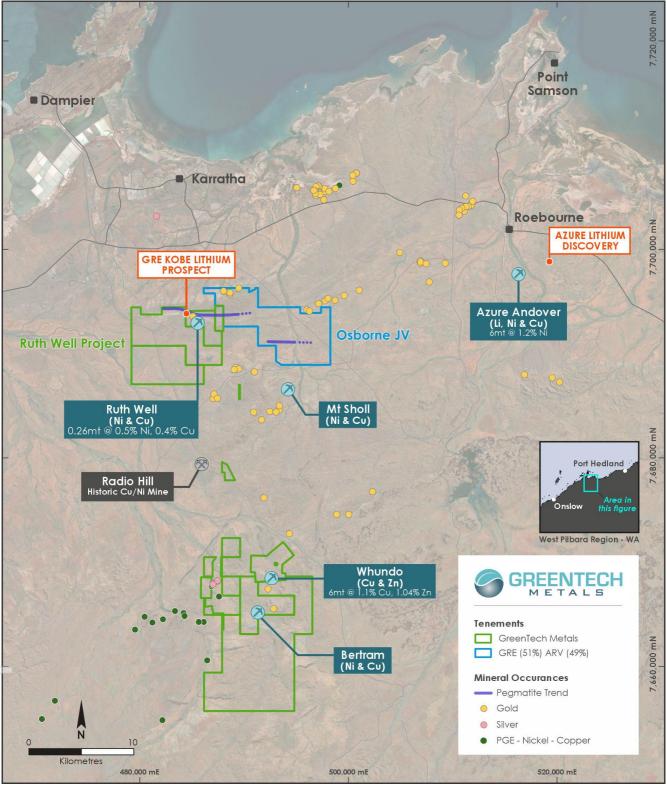


Figure 4. GreenTech Project Location, West Pilbara Region

7 \_\_\_\_\_œ



### Appendix

Table 1: Sample Details and Assay Results

	Sample				Cs	Li	Li2O	Nb	Rb	Sn	Та
Site ID	Туре	Easting	Northing	Datum	ppm	ppm	%	ppm	ppm	ppm	ppm
23CR033	Rock chip	497874	7690692	GDA94z50	10.2	20	0.00	20	2820	6	3.7
23CR034	Rock chip	497845	7690687	GDA94z50	5.3	20	0.00	63	866	9	10.1
23CR035	Rock chip	497847	7690668	GDA94z50	6.7	20	0.00	71	1570	21	13.5
23CR036	Rock chip	497026	7690416	GDA94z50	7.4	40	0.01	97	856	27	13.5
23CR037	Rock chip	496969	7690602	GDA94z50	1.9	40	0.01		58.1		1.1
23CR038	Rock chip	493328	7691039	GDA94z50	64.2	16850	3.63	16	320	12	8
23CR039	Rock chip	493306	7691051	GDA94z50	52.5	10700	2.30	27	956	45	17.5
23CR040	Rock chip	492902	7691512	GDA94z50	52.6	150	0.03	40	2220	88	45.3
23CR041	Rock chip	492896	7691520	GDA94z50	246	530	0.11	25	7230	61	29.3
23CR042	Rock chip	492888	7691516	GDA94z50	188.5	890	0.19	60	6220	124	299
23CR043	Rock chip	492889	7691501	GDA94z50	128.5	510	0.11	35	3630	110	44.7
23CR044	Rock chip	492882	7691490	GDA94z50	298	2550	0.55	48	8430	119	62
23CR045	Rock chip	492874	7691480	GDA94z50	307	2230	0.48	77	8140	204	148.5
23CR046	Rock chip	492920	7691556	GDA94z50	2	20	0.00	32	35.8	5	59.2
23CR047	Rock chip	493158	7691103	GDA94z50	4	20	0.00		25.1	6	0.6
23CR048	Rock chip	493175	7691122	GDA94z50	9.1	20	0.00	17	506	11	10.4
23CR049	Rock chip	493183	7691157	GDA94z50	9.3	350	0.08	71	445	15	33.6
23CR050	Rock chip	493171	7691188	GDA94z50	2.1	20	0.00	181	35.3	11	95.4
23CR051	Rock chip	492865	7691198	GDA94z50	1.3	10	0.00	25	13	5	81.8
23CR052	Rock chip	492868	7691442	GDA94z50	88.2	240	0.05	50	3930	77	97.2
23CR053	Rock chip	492811	7691440	GDA94z50	1.3	30	0.01	31	19.6		271
23CR054	Rock chip	492788	7691425	GDA94z50	1.3	90	0.02	37	7.7	9	66.3



-Œ



# 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>	<ul> <li>Not applicable as no details on any drilling carried out by GreenTech Metals are included in this announcement.</li> </ul>
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.



•	<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> </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>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_MS91L 25 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 two lithium bearing samples is being determined by XRD analysis undertaken at ALS Laboratories.</li> <li>A previous lithium bearing sample from the project area was determined by XRD analysis to be spodumene</li> <li>XRD: Diffraction patterns were obtained using a Bruker D8 Discover diffractometer using CuKα radiation (40 kV and 40 mA) and scanning from 4 to 90° 20 in 0.015° 20 steps, counting for 1.08 s/step for a total scan time of ≈100 minutes/scan • Samples were prepared for random-powder XRD analysis by front loading of pulverised material into a plastic mount • Diffraction patterns displayed in the following slides are presented over the 5–60° and 10°33° 20 angle-range to better display some of the less intense peaks • To correct for 20 shifts in the diffraction patterns was shifted using quartz as the internal standard.</li> <li>TIMA automated mineralogy : Mineral and element distribution maps of two polished round mounts (25 mm diameter) were obtained using the TIMA (Tescan Integrated Mineral Analyser), automated mineralogy system at the John De Lataeur Centre.</li> </ul>





Verification of sampling and	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul> <li>Duplicate samples of the lithium bearing pegmatite have been submitted to ALS Laboratories in Perth for XRD analysis.</li> </ul>
assaying	The use of twinned holes.	The results of these verification analyses are awaited.
ussaying	<ul> <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>	
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hol 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> <li>Sample points were determined by hand held GPS which is considered appropriate for the reconnaissance nature of the sampling.</li> </ul>
Data spacing and distribution	<ul> <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> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>No attempt has been made to demonstrate geological or grade continuity between sample points.</li> </ul>
Orientation of data in relation to geological structure	<ul> <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>	Not applicable
Sample security	The measures taken to ensure sample security.	Sample security is by way of chain of custody.
Audits or reviews	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, wilderness or national park and environmental settings.</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> </ul>



	•	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.		The tenements are in good standing with DMIRS and there are no known impediments for exploration on these tenements.
Exploration done by other parties		Acknowledgment and appraisal of exploration by other parties.	•	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. No other exploration companies generated data was used in this release. Regional RTP aeromagnetics and geology from Geological Survey of WA. The area was previously explored by Fox Resources Ltd and Artemis Resources Ltd with both focussed on nickel exploration.
Geology	•	Deposit type, geological setting and style of mineralisation.	•	The lithium bearing pegmatite zone trends WNW-ESE and is hosted by strongly sheared sediments of the Regal Formation. 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. The pegmatites are steeply dipping and up to 4m wide. 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 boundar 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.
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: <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> </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>	•	Not applicable as no drilling has been undertaken



Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum</li> <li>and/or minimum grade truncations (eg cutting of high grades) and cut-off</li> <li>grades are usually Material and should be stated.</li> </ul>	Not applicable
	<ul> <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> </ul>	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between	These relationships are particularly important in the reporting of Exploration     Results.	Not applicable as surface sampling is reconnaissance in nature.
mineralisation widths and	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	
intercept lengths	<ul> <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>	
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>	This announcement discusses the findings of recent reconnaissance sample and associated assays.
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>	All the meaningful exploration data has been included in the body of this announcement.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	GreenTech plans to conduct further ground reconnaissance and sampling ir the short term to determine the surface extent both laterally and along strike and also the economic potential of the prospect. Trenching and drilling will al be undertaken if warranted.