ASX ANNOUNCEMENT

22 August 2023

CUFE DELIVERS SIGNIFICANT INITIAL REE, NIOBIUM (43.93% Nb) AND LITHIUM ROCKCHIP RESULTS FROM NORTH DAM PROJECT

HIGHLIGHTS

- Early exploration on E15/1495 has produced rock chip sample results anomalous in Rare Earth Elements (**REE**) (up to 1,770ppm Total Rare Earth Oxides (**TREO**)), Niobium (43.93% Nb), Tantalum (14.53% Ta) and Lithium Oxide (up to 3,206 ppm Li_2O).
- 40% of outcrops within the E15/1495 tenement have been investigated through rock chip sampling and geological mapping which confirms the presence of Lithium Cesium Tantalum (**LCT**) type, highly fractionated pegmatites.
- Target zones of anomalous Li_2O supported by historical soils and auger work have been identified and will be a focus of upcoming exploration works.
- High niobium/tantalum columbite and tantalite chips collected from a shallow stream potentially indicate a nearby source location and is under further investigation.
- A broad zone of weathered pegmatites has reported anomalous REE, with Critical Rare Earth Oxides (**CREO**) (Nd_2O_3 + Pr_6O_{11}) making up to 37.8% of the TREO.

CuFe Ltd (ASX: **CUF**) (**CuFe** or the **Company**) is pleased to advise it has commenced exploration within E15/1495, North Dam Project, over several field and reconnaissance trips, located 29kms south of Mineral Resources Mt Marion Mine, and 50km south, south east of the township of Coolgardie (see Figure 1).

CuFe Executive Director, Mark Hancock, commented *"The results and speed at which our Geology team have generated these results is very pleasing and while its early days, show the potential of this tenement to host deposits of a variety of future facing minerals. There is a lot of outcrop to cover across this tenement and the team are busy on the ground gathering information to help zone in on the more prospective areas, with the aim of planning subsequent drill programs and further works."*

First pass investigations to date have included general reconnaissance, outcrop mapping and rock chip sampling with a significant area across the tenement yet to be covered. 267 rock chips have been collected from North Dam across outcropping pegmatites and weathered regolith.

The tenement hosts numerous pegmatites, ranging in thickness. Typically, the pegmatites outcrop as upright North, North-West (**NNW**) trending bodies, coincident with more regional trends, however cross cutting East-West structurally controlled bodies have also been identified. Typical pegmatite mineralogies include quartz, mica, feldspar, albite but also include tourmaline, beryl, columbite and tantalite.

A broad rock chip sampling program has been undertaken as an early stage of exploration works (see Figure 2). The results and summary are as follows:

1. Anomalous REE values, in areas of heavily weathered pegmatites and saprolitic outcrops. Eight notable results (See Figure 1 and Table 1) above 500 ppm TREO were collected from outcrops situated along a series of NNW trending pegmatites. The weathered nature of the pegmatites prevents the widths from being determined, however the interpreted corridor has a length of

1.3km from S188 to S42. The highest TREO was recorded in S188 (See Figure 3 and 4). CREO (Nd_2O_3 + Pr_6O_{11}) are as high as 37.8% of the TREO within S263.

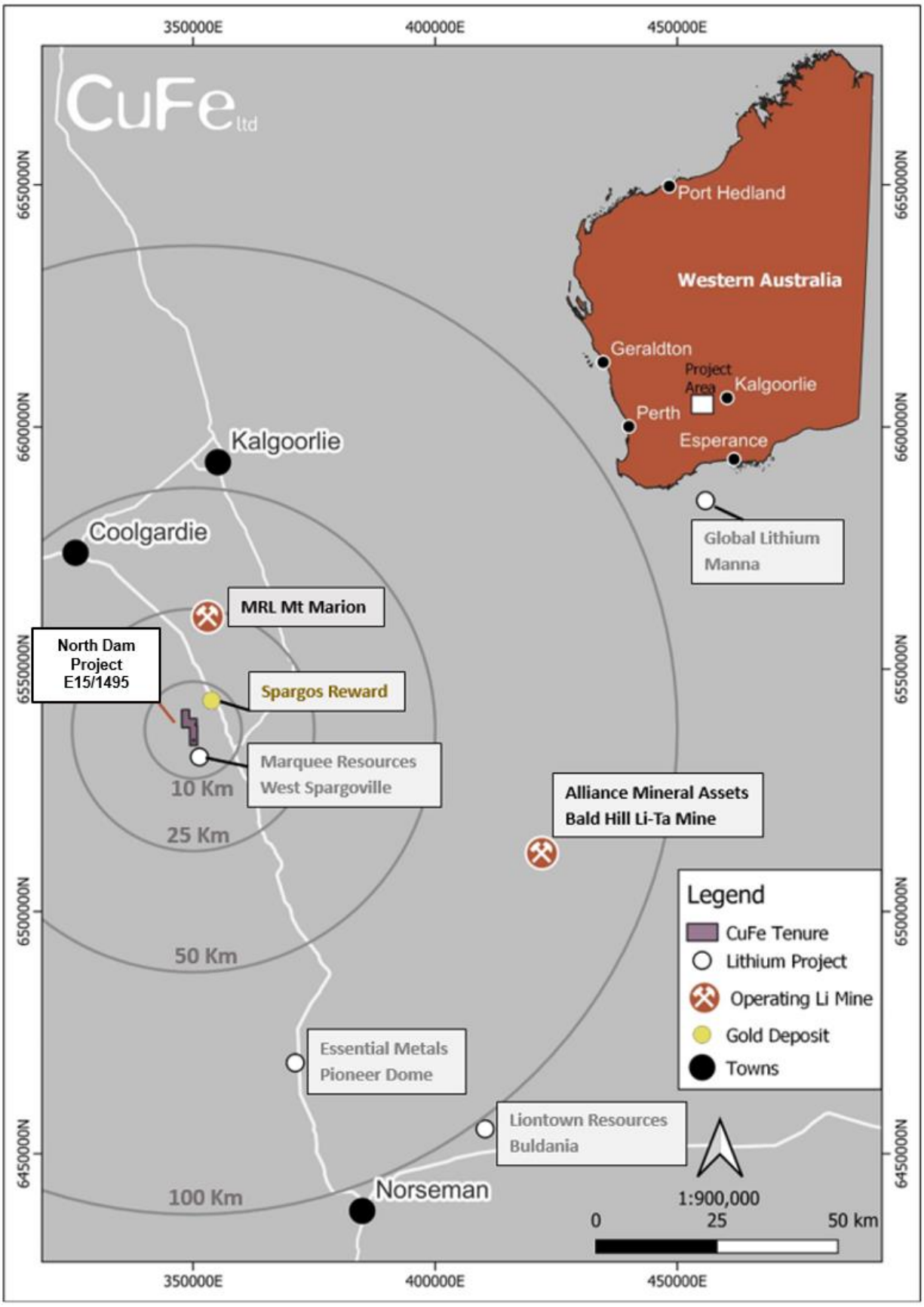

Figure 1: North Dam Project – E15/1495 Location.

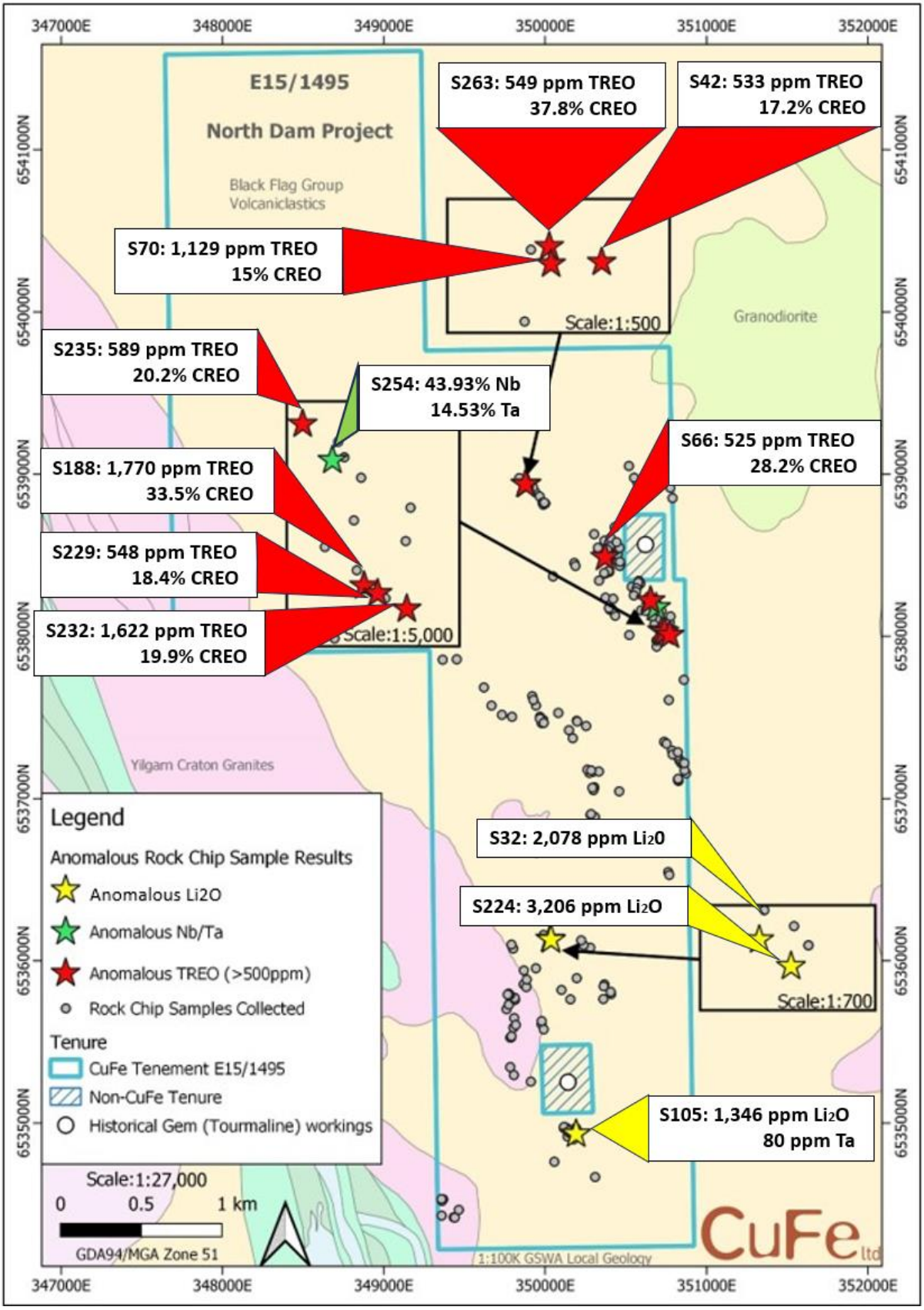

Figure 2: E15/1495 Sample locations and anomalous chemistry.

SAMPLE ID	EASTING	NORTHING	TREO* (ppm)	CREO** (ppm)	% CREO
S42	349884	6538937	533	92	17.2
S66	350372	6538487	525	148	28.2
S70	349878	6538937	1,129	169	15.0
S188	350724	6538034	1,770	592	33.5
S229	350740	6538025	548	100	18.4
S232	350773	6538007	1,622	322	19.9
S235	350654	6538219	589	119	20.2
S263	349878	6538939	549	207	37.8

**TREO Total Rare Earth Oxide (La_2O_3+Ce_2O_3+Pr_6O_{11}+Nd_2O_3+Sm_2O_3+Eu_2O_3+Gd_2O_3+Tb_4O_7+Dy_2O_3+Ho_2O_3+Er_2O_3+Tm_2O_3+Yb_2O_3+Lu_2O_3+Y_2O_3)*
**CREO Critical Rare Earth Oxide (Nd_2O_3+Pr_6O_{11})

Table 1 – Anomalous (>500ppm TREO) REE results.

Figure 3: S188 rock chip sample containing 1,770 ppm TREO and 33.5% CREO (350,724mE, 6,538,034mN).

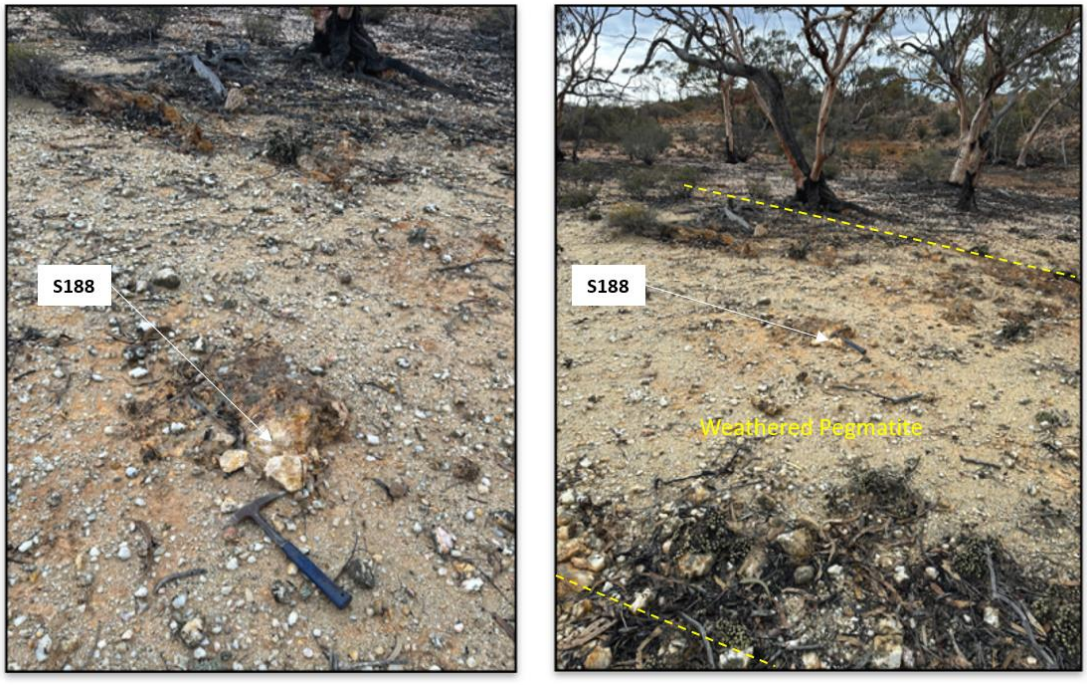

Figure 4: S188 sample taken from weathered pegmatite (350,724mE, 6,538,034mN).

2. Presence of columbite and tantalite and high-grade Niobium and Tantalum of 43.93% and 14.53% respectively (see Table 2). Columbite and tantalite chips were collected from an open stream bed represented in sample S254 (see Figure 5), the area sampled comprised 78m^2 over 97m of the stream bed (see Figure 6). It is noted that this sample is not representative of the original source location concentration and has been selectively collected from the stream bed and is inherently biased. What it does show is the presence of columbite locally as the chips have been weathered out and deposited at surface in the stream bed. An outcropping pegmatite approximately 15m upstream (see Figure 6) from the creek bed collection point has been identified as a potential source of the columbite and tantalite and is being investigated and sampled as part of future exploration works.

SAMPLE ID	EASTING	NORTHING	Nb (%)	Ta (%)
S254	350688	6538177	43.93	14.53

Table 2 – S254 columbite and tantalite rock chip chemistry from stream collection.

Figure 5 – Columbite and tantalite chips that comprise sample S254 and the narrow stream bed from which they were selectively collected (350,688mE 6,538,177mN). The chips were collected along 97m of this stream bed.

Figure 6: Outcropping pegmatite upstream from S254 collection points (350,701mE, 6,538,181mN).

3. Anomalous lithium results (>1,000 Li_2O ppm) returned from a complex pegmatite system in the south of the North Dam tenement. Rock chip sample S105 reported anomalous lithium (0.13% Li_2O and 80 ppm Ta), identified to be from small spodumene crystals within the sample (see Figure 7, also responsive to UV light (note the mineral species has not been determined using quantitative methods). The sample also showed anomalous results for caesium, tin and tantalum along with other lithium path finder elements, including beryl confirming the presence of LCT pegmatites (see Table 3). Samples S32 and S224 that reported 2,077 and 3,206 ppm Li_2O were micaceous and the lithium bearing mineral could not be identified. Pegmatites in this area (see Figure 8) are coincident with historical auger soils program undertaken by Ramelius Resources between 2005 and 2007 (WAMEX reports A072453 and A075421). Although this program was centred around gold exploration historical data it included analysis for lithium. Anomalous lithium from the Ramelius Resources work (up to 306 ppm Li_2O) in conjunction with the recent rock chip samples and pegmatite mapping has helped define a target zone for further work and potentially first pass drilling (see Figure 9).

Figure 7: Sample S105 showing small spodumene crystals (350,192mE 6,534,931mN)

Sample ID	*Easting*	*Northing*	*Li_2O ppm*	*Ta ppm*	*Sn ppm*	*Cs ppm*	*Be ppm*	*Nb ppm*	*Rb ppm*
S105	350192	6534931	1,346	80	216	107	361	69	614
S32	350031	6536132	2,077	0	70	41.2	12	204	2,226
S224	350036	6536128	3,206	15	120	79	15	289	3,424

Table 3: Anomalous lithium (>1,000 Li_2Oppm) geochemistry and key path finder elements.

Figure 8: Pegmatite Outcrops within the southern zone (350,181mE 6,534,941mN left image and 349,811mE 6,535,770mN right image).

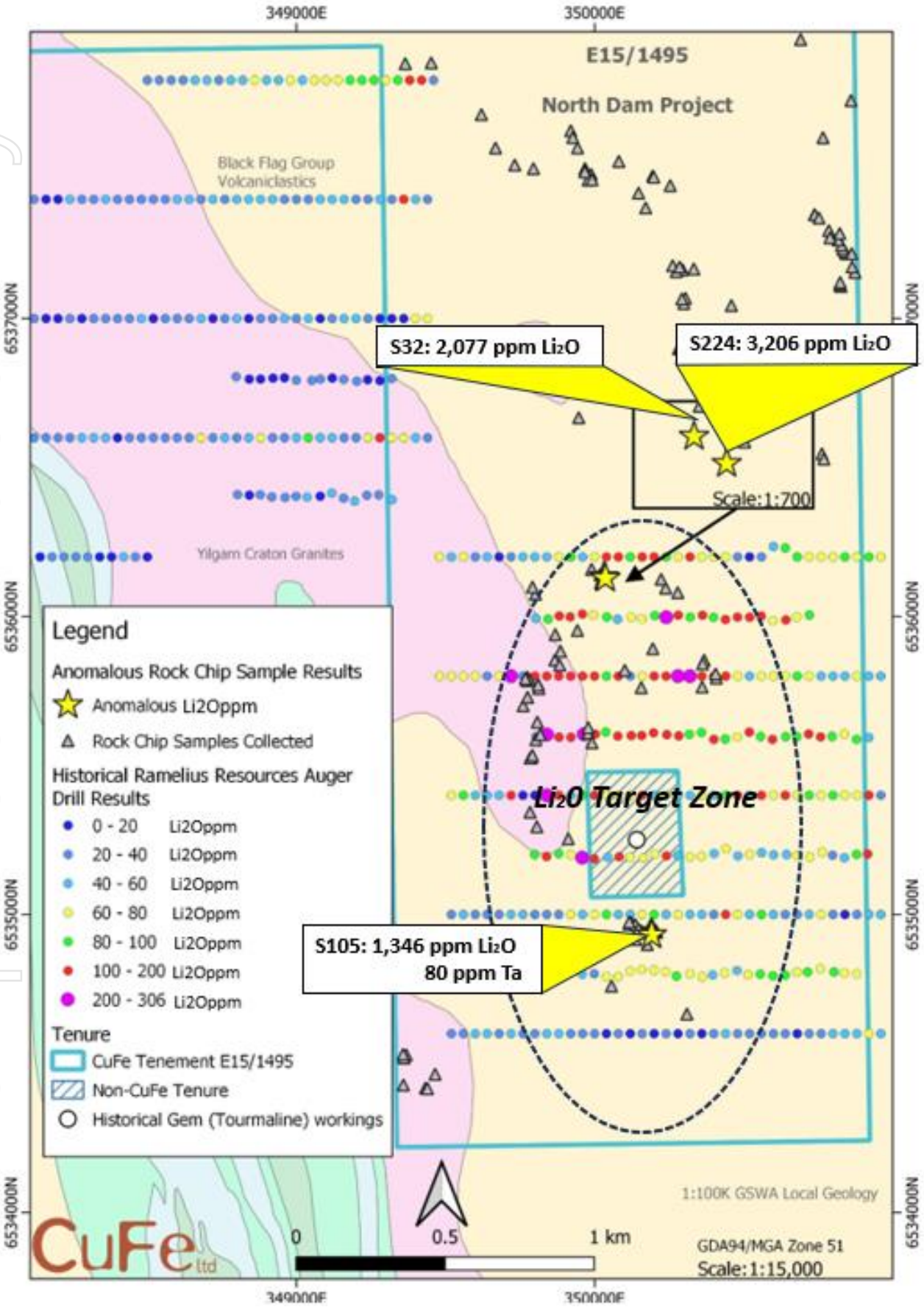

Figure 9: Historical Soil/Auger Sampling anomalies and recent rock chip results.

Next Steps

Exploration across North Dam will continue with the aim to cover all the outcropping pegmatites and narrow in on target zones in aim of defining drill targets for the next level of exploration. It is well known for depositions of this nature in this area to be depleted in lithium at surface and drilling is required early in the exploration process.

Released with the authority of the CuFe Board.

COMPETENT PERSON

The information in this report that relates to geology is based on, and fairly represents, information which has been compiled by Matthew Ramsden, a Member of the Australasian Institute of Geoscientists and a full-time employee of CuFe Ltd. Matthew Ramsden has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken 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'. Matthew Ramsden consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

Table 4: Anomalous REE rock chip results >500 ppm TREO.

Sample ID	Easting	Northing	La_2O_3 PPM	Ce_2O_3 PPM	Pr_6O_{11} PPM	Nd_2O_3 PPM	Sm_2O_3 PPM	Eu_2O_3 PPM	Gd_2O_3 PPM	Tb_4O_7 PPM	Dy_2O_3 PPM	Ho_2O_3 PPM	Er_2O_3 PPM	Tm_2O_3 PPM	Yb_2O_3 PPM	Lu_2O_3 PPM	Y_2O_3 PPM	TREO PPM	CREO PPM	CREO %
S42	349884	6538937	BDL	418.15	20.66	70.92	11.13	1.97	5.76	0.82	2.75	0.34	0.69	BDL	BDL	BDL	BDL	533	92	17.2
S66	350372	6538487	144.25	185.07	31.53	116.64	21.10	2.78	9.45	0.94	3.90	0.46	0.69	BDL	0.91	BDL	6.86	525	148	28.2
S70	349878	6538937	215.80	702.78	40.72	128.30	17.86	2.89	8.30	0.94	3.79	0.34	0.69	BDL	BDL	BDL	6.73	1129	169	15.0
S188	350724	6538034	517.20	513.03	132.90	459.56	61.57	8.45	35.38	4.23	12.85	1.60	2.74	BDL	1.48	BDL	19.30	1770	592	33.5
S229	350739	6538025	155.98	245.97	27.79	72.90	9.16	1.74	5.19	0.82	4.71	0.69	2.06	0.34	2.28	0.34	18.03	548	101	18.4
S232	350773	6538007	702.51	554.02	97.02	225.12	16.23	3.13	6.45	0.94	4.59	0.46	1.03	BDL	1.02	BDL	9.52	1622	322	19.9
S235	350653	6538219	317.83	133.53	38.06	81.18	6.84	1.04	2.07	0.35	1.61	BDL	0.80	BDL	0.68	BDL	5.08	589	119	20.2
S263	349878	6538939	171.23	120.64	50.02	157.46	21.22	2.66	10.60	1.29	3.90	0.57	0.80	BDL	0.68	BDL	7.62	549	207	37.8

**TREO -Total Rare Element Oxide (La_2O_3+Ce_2O_3+Pr_6O_{11}+Nd_2O_3+Sm_2O_3+Eu_2O_3+Gd_2O_3+Tb_4O_7+Dy_2O_3+Ho_2O_3+Er_2O_3+Tm_2O_3+Yb_2O_3+Lu_2O_3+Y_2O_3)*
**CREO – Critical Rare Earth Oxide (Nd_2O_3+Pr_6O_{11})
*** BDL (below detection level), blank values not tested.

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.*	• Rockchip samples were collected by CuFe Geologists • Rock chips are random and inherently subject to bias and often not representative of the typical widths required for economic consideration. They are difficult to duplicate in any form of precision and or accuracy. • 267 from E15/1495 were collected into pre-numbered calico bags and assayed for lithium and rare earth element (REE) suite by SGS laboratory in Perth using sodium peroxide fusion technique with ICP-OES and ICP-MS finish. • Samples were collected from observed pegmatites across E15/1495. • SGS laboratory used internal standards, blanks, duplicates and repeats to ensure quality control.
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).*	• No drilling was undertaken by CuFe Ltd across tenure.
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.*	• No drilling was undertaken by CuFe Ltd across tenure.
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.*	• All rock chip samples were logged upon collection with brief geological description and photographed. • No drilling was undertaken. • Rock chip sample results do not support appropriate Mineral

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	Resource estimation, mining studies and metallurgical studies.
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.*	• Rock chip samples were collected in the field from outcrop using a geological pick hammer. • Samples were collected by qualified CuFe Geologists across observed pegmatite outcrops. • Rock chip samples ranged in weight between 1kg-<3kg and were collected for preparation and analysis by SGS in Perth and are considered appropriate size.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.*	• Rock chip samples were submitted to SGS in Perth and assayed for lithium and rare earth element suites (46 elements) by sodium peroxide fusion with ICP-OES and ICP-MS finish. • Samples were dried, crushed and pulverized to 85% passing <75um. • SGS included 11 internal standards, 3 duplicates, 6 blanks and 6 repeats. • Acceptable accuracy levels of the rock chip samples were achieved. • Sample S254 exceeded detection limit (>5,000) for Nb ppm and Ta ppm from ICP-MS and was re-assayed via XRF technique to achieve accurate results.

Criteria	JORC Code explanation	Commentary
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.*	• Rock chip samples and location of samples were recorded in the field by qualified geologists using a Garmin GPS. • Lithological description of each sample was recorded in logbook and later transferred to excel database. • Photo of each sample was recorded with sample description checked against photo. • Li_2O ppm was calculated from Li ppm by SGS lab using conversion factor 2.153. • Oxide conversion factors were used to report rare earth element (REE) equivalent oxides listed in table below. • The Total Rare Earth Oxides (TREO) was calculated by the sum of the 15 rare earth oxides. • The Critical Rare Earth Oxide (CREO) was calculated by the sum of $Nd_2O_3 + Pr_6O_{11}$ • Sample S254 exceeded detection limit (>5,000) for Nb ppm and Ta ppm from ICP-MS and was re-assayed via XRF technique to achieve accurate results.

La_2O_3	1.1728
Ce_2O_3	1.1713
Pr_6O_{11}	1.2082
Nd_2O_3	1.1664
Sm_2O_3	1.1596
Eu_2O_3	1.1579
Gd_2O_3	1.1526
Tb_4O_7	1.1762
Dy_2O_3	1.1477
Ho_2O_3	1.1455
Er_2O_3	1.1435
Tm_2O_3	1.1421
Yb_2O_3	1.1387
Lu_2O_3	1.1371
Y_2O_3	1.2699

Criteria	JORC Code explanation	Commentary
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.*	• All rock chip sample locations were recorded by handheld Garmin GPS with an accuracy of +/- 5m. • GDA94 datum and MGA zone 51 grid system was used.
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.*	• Data spacing and distribution were dependent on outcrops of pegmatite dykes/sills. • The works carried out are considered early-stage exploration, rock chip results are not suitable for Mineral Resource estimation. • No sample compositing.
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.*	• Rock chip sampling is considered early-stage reconnaissance work and not designed for unbiased sampling of possible structures. • No drilling was undertaken therefore orientation of structures are unknown.
Sample security	• *The measures taken to ensure sample security.*	• Samples were dispatched immediately to SGS in Perth via courier with chain of custody managed by CuFe personnel. • High level of security of the samples were carried out by CuFe personnel.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits carried out.

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.*	• A $300,000 milestone payment payable in the event production occurs in the future from the tenure, and a 1% gross sales royalty. The vendor retains rights to gemstones on the Tenement. • The presence of priority flora is recognised on E15/1495 recorded in the north east of the tenement.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historical exploration was undertaken by numerous parties mainly for gold with little focus on lithium and REE exploration. • Between 2005-2007 Ramelius Resources Ltd conducted numerous auger sampling across the mid-southern portion of E15/1495 targeting gold (WAMEX reports A072453 and A075421)
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The project area consists of numerous pegmatites intruding the siliciclastic of the Black Flag Group within E15/1495.

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.*
		• No drilling was undertaken across the tenure by CuFe.

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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No data aggregation methods were used. • No metal equivalents have been reported.
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').*	• No mineralisation widths have been reported.

Criteria	JORC Code explanation	Commentary
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.*	• Included within body of the text.
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.*	• The accompanying document is a balanced report with a suitable cautionary note
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.*	• Included within body of text.
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.*	• Further mapping, rock chip sampling, soil sampling/surface geochemistry, RAB and RC drilling.

CuFe ltd

About CuFe Ltd

CuFe Ltd (ASX: CUF) is a producer and explorer, focused on near-term, high grade premium product iron ore projects and exposure to key strategic metals; Copper and Lithium. The Company has diversified commodity interests in various projects and tenements prospective for copper, lithium, gold and iron ore, located in world-class mineral provinces of Australia. Our experienced team have demonstrated their ability to execute rapid, flexible, low capex, iron ore projects.

Registered Office

32 Harrogate Street
West Leederville WA

T: +61 8 6181 9793
E: admin@cufe.com.au

Share Registry

Link Market Services Ltd
Level 12, QV1 Building
250 St Georges Terrace, Perth WA 6000
www.linkmarketservices.com.au

For further information please contact:

Investor Relations

+61 8 6181 9793

ir@cufe.com.au

Follow us

@CuFeLtd

CuFeLtd

For further announcements please visit **asx.com.au** and **cufe.com.au**