ASX Announcement 2nd October 2025

Oonagalabi Formation Extensions Found & Mapped System Open NE–SW;

Highlights

- This week's Field mapping now confirms **continuous outcrop** of the mineralised Oonagalabi Formation from the Silverado to Bomb Diggity (>3km strike length).
- Newly identified mineralisation between Silverado and Oonagalabi is strongly mineralised with pXRF rock chips to **21.5% Cu, 2.47% Zn, 25 g/t Ag***, **Table 1**.
- Mapping of four new zones >500m strike confirms that mineralised Oonagalabi Formation is more widespread than previously thought and infers potential for depth extensions over significant parts of the system.
- Open Cu-Zn soil anomalism southwest of Silverado and north-dipping Oonagalabi Formation at Bomb Diggity indicate that the system is probably open to the northeast and southwest.
- The Company plans to complete additional Induced Polarisation (IP) surveys early next year to further define the full extent of subsurface Oonagalabi Formation within the system.

Managing Director's comment

Managing Director Matthew Pustahya said:

"While waiting for the drill rigs, Russ and I have put further time and work into the ground. The new VTEM data showing increased conductivity prompted follow-up checks in several areas. Mapping has now identified four new area's and importantly, now links outcrop from Silverado through to the Main Oonagalabi zone, which is about three kilometres end-to-end, with several new areas where the formation thickens and dips steeply to the southeast.

Importantly, the Induced Polarisation (IP) we conducted earlier this year didnt just frame the main corridor; it also picked up a second, parallel structure right where the new mapping says it should be. With VTEM indicating conductivity trends to the northeast and southwest, we have further clear, testable targets over a broader area that has not been rigorously examined to date. Put simply, it has become apparent that extensive areas of mineralised Oonagalabi Formation have not been drill-tested (**Figure 1**).

The drilling program kicking off this weekend (**Table 2**) will focus first on the northeast extension into the Bomb Diggity prospect and, after drilling, we'll have to follow up with further IP to more rigorously map the chargeability zones along strike and down-dip, which has the potential to significantly expand the current known expanse of the identified disseminated sulphides.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

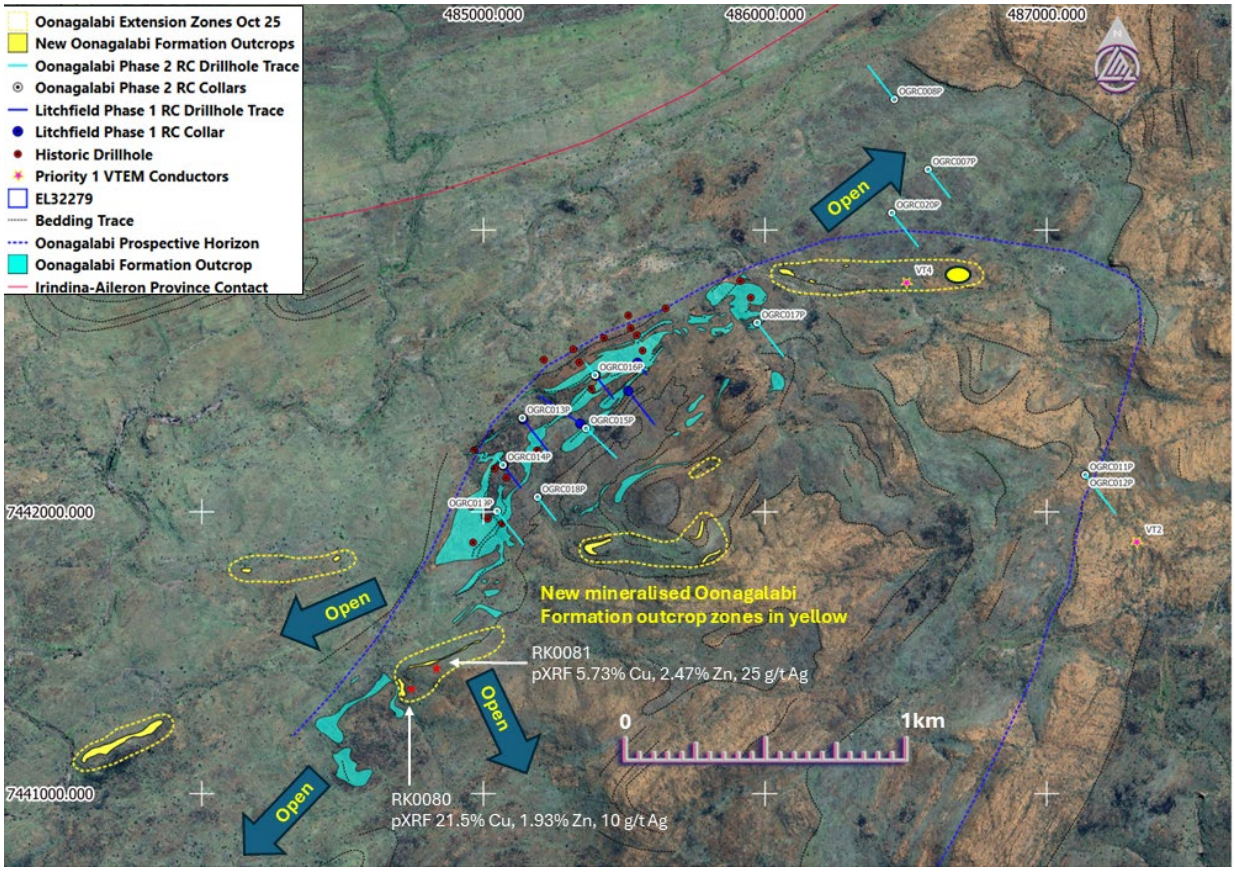

Figure 1. Oonagalabi Project satellite image showing the known and new mineralised Oonagalabi Formation outcrops, historic drilling and Litchfield Phase 1 and Phase 2 RC drillhole collar positions.

Sample #	Prospect	MGA_East	MGA_North	RL	Description
RK0080	Oonagalabi	484699	7441379	821	Strong calc-silicate alteration, minor marble, abundant malachite staining, gentle dip southeast into the hill, abundant 'Zn Bush' (Goodenia Ramelii)
RK0081	Oonagalabi	484809	7441461	841	Massive anthophyllite alteration with minor malachite staining, bands of dark green calc-silicate, abundant Goodenia Ramelii, 45/348

Table 1. New mineralised rock chip sample location and descriptions.

**Visual estimates of mineral abundance results should never be considered a proxy or substitute for laboratory analyses where concentrations of grades are the factors of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuation.*

Hole_ID	Prospect	Max_Depth	MGA_East	MGA_North	RL	Dip	Azi (Mag)	Targets
OGRC007P	Bomb Diggity	300	486579	7443215	821	-60	142	Coincident Mag-Grav-VTEM anomalies
OGRC008P	Bomb Diggity	300	486459	7443464	824	-60	322	Coincident Mag-Grav
OGRC009P	VT1	200	482457	7438852	792	-55	142	Strong VTEM Conductor
OGRC010P	VT1	150	482716	7438867	787	-80	174	Strong VTEM Conductor
OGRC011P	VT2	300	487137	7442131	869	-55	142	Strong VTEM Conductor
OGRC012P	VT2	300	487137	7442131	869	-70	142	Strong VTEM Conductor
OGRC013P	Oonagalabi	300	485138	7442333	809	-90	354	Au-Bi magnetic anomaly and +20mV/V IP anomaly
OGRC014P	Oonagalabi	200	485069	7442166	816	-80	322	Au-Bi magnetic anomaly and +20mV/V IP anomaly
OGRC015P	Oonagalabi	300	485364	7442296	812	-60	134	Blind' eastern parallel +20mV/V IP Chargeability and conductivity anomaly
OGRC016P	Oonagalabi	300	485396	7442485	843	-80	322	Au-Bi magnetic anomaly and +20mV/V IP anomaly
OGRC017P	Oonagalabi	300	485972	7442671	829	-60	142	Moderate VTEM Conductor, 'blind' eastern +20mV/V IP anomaly

Table 2. Oonagalabi Phase 2 RC drillhole collar and target information.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Technical overview

- **Geological mapping:** Reconnaissance mapping traverses have linked mineralised Oonagalabi Formation exposures from **Silverado to the main Oonagalabi outcrops**, confirming continuous outcrop and local thickening. Bedding/foliation and facing indicators support a SE-dipping geometry consistent with observations in the main zone. These observations indicate that the mineralised Oonagalabi Formation extends under cover to the southeast over an unknown depth extent.
- **Geophysics (IP):** Chargeability/resistivity responses constrain the lateral extent of sulphide-bearing horizons within the tested corridor and resolve a second, sub-parallel structure coincident with the newly mapped Oonagalabi horizon in the central corridor.
- **Targeting implications:** The combination of mapped continuity, thickening and steep dip, together with coincident IP anomalies, informs the prioritisation of multiple step-out and down-dip drill positions that have the potential to increase the known scale of mineralisation if successful. This zone will be tested with planned holes **15P, 18p and 19P** (**Table 1**). The Bomb Diggity extension will also be tested with planned holes **7P, 17P and 20P**.

Next steps

- **Post-drilling geophysics:** Infill and extension IP will be used to map along-strike and down-dip continuity over areas now confirmed as outcropping Oonagalabi Formation.
- **Reporting:** Results will be released as assays are received and validated with first assay reporting expected to be delivered in mid-late November.

Cautionary Statement

This announcement contains forward-looking statements that involve known and unknown risks, uncertainties, and other factors that may cause actual results, performance, or achievements to differ materially from those expressed or implied. Such statements include but are not limited to, interpretations of geophysical data, planned exploration activities, and potential mineralisation outcomes. Visual estimates of mineral abundance and pXRF results should never be considered a proxy or substitute for laboratory analyses where concentrations of grades are the factors of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuation. Forward-looking statements are based on Litchfield Minerals Limited's current expectations, beliefs, and assumptions, which are subject to change in light of new information, future events, and market conditions. While the Company believes that such expectations and assumptions are reasonable, they are inherently subject to business, geological, regulatory, and operational risks. Further work, including drilling, is required to determine the economic significance of any anomalies identified. Investors should not place undue reliance on forward-looking statements. Litchfield Minerals Limited disclaims any obligation to update or revise any forward-looking statements to reflect events or circumstances after the date of this announcement, except as required by law.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

About Litchfield Minerals

Litchfield Minerals is a critical mineral explorer, primarily searching for base metals and uranium out of the Northern Territory of Australia. Our mission is to be a pioneering copper exploration company committed to delivering cost-effective, innovative and sustainable exploration solutions. We aim to unlock the full potential of copper and other mineral resources while minimising environmental impact, ensuring the longevity and affordability of this essential metal for future generations. We are dedicated to involving cutting-edge technology, responsible practices and stakeholder collaboration drives us to continuously redefine the industry standards and deliver value to our investors, communities and the world.

The announcement has been approved by the Board of Directors.

For further information please contact:

Matthew Pustahya
Matthew@litchfieldminerals.com.au

Follow us on:

www.litchfieldminerals.com.au

https://twitter.com/Litchfield_LMS

https://www.linkedin.com/company/litchfield-minerals-limited/

Competent Person's Statement

The information in this announcement relates to Exploration Results and is based on, and fairly represents, information and supporting documentation compiled by Mr Russell Dow (MSc, BSc Hons Geology), a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy (AUSIMM) and is a full-time employee of Litchfield Minerals Limited. Mr Dow has sufficient sampling experience that is relevant to the style of mineralisation and types of deposits under consideration and to the activity 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" (JORC Code). Mr Dow consents to the inclusion in the Public Report of the matters based on their information in the form and context in which it appears. With regard to the Company's ASX Announcements referenced in the above Announcement, the Company is not aware of any new information or data that materially affects the information included in the Announcements.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

JORC Code, 2012 Edition – Table 1 report

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 (e.g. 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 (e.g. '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*	The instruments and parameters used for the VTEM survey are as follow: • The VTEM survey was flown by UTS Geophysics Pty. Ltd. • Heliborne electromagnetic data was acquired with VTEM™ Max transmitter frequency of 25Hz, loop diameter 35m and mean terrain clearance height of 35m. • Line spacing was 200m across the full survey area with the central 40% of the survey also flown at 100m. • Three-dimensional plate modelling of VTEM preliminary data was Kate Hine at Mitre Geophysics. • VTEM anomalies were modelled with industry standard Maxwell EM software – utilizing thin conductor plate scenarios for various, most relevant EM channel windows. VTEM final data was imported into Maxwell EM software using Geosoft/oasis database files. Resultant model scenarios for each of the five areas were exported to both

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Criteria	JORC Code explanation	Commentary
	there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	3D DFX and GIS plan view formats to aid follow-up ground EM optimization and consideration. • Rock chip samples were collected by selecting multiple small chips from each outcrop to produce a representative sample. pXRF Analysis / Sampling • Portable XRF (pXRF) readings were collected using an Olympus Vanta analyser in 3-beam, Geochem mode. Measurements were taken on a flat bench-top on pulverised rock. A relatively flat face of each pulverised sample was placed under the analyser nose cap to improve contact and repeatability. • pXRF results were used for rapid geochemical screening and vectoring; they are indicative/qualitative and not a substitute for laboratory assays. • Multiple readings were collected on each sample unless otherwise stated. • Data collected for 90 seconds for each sample (30 seconds per beam).
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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 new drilling is reported.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Criteria	JORC Code explanation	Commentary
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 new drilling is reported.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• No new drilling is reported. • Detailed field notes were collected for each rock chip sample.
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.*	• No new drilling is reported. • No rock chip sub-sampling was conducted.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Criteria	JORC Code explanation	Commentary
	• *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.*	
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Transmitter loop diameter: 35m • Peak dipole moment – 700,000 NIA • Transmitter Pulse Width – 7ms • VTEM Max Receiver – Z, X coils (Y optional) pXRF • **Primary analytical method:** Olympus Vanta Vanta VMR model 3 Beam GeoChem mode using manufacturer default beam settings. • **Sample positioning & measurement approach:** The analyser nose cap was held in firm contact with the rock-chip surface on a stable bench. Multiple readings were collected on each sample unless otherwise stated. • **Measurement environment (temperature):** All measurements were conducted indoors on a benchtop under ambient conditions. No temperature diagnostics were monitored. • **Calibration/standardisation:** The instrument operated on factory calibration with no user-applied matrix corrections.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Criteria	JORC Code explanation	Commentary
		• QAQC: Prior to use, manufacturer-supplied silica blanks were analysed to check for contamination/carry-over and to confirm instrument function. On an Olympus supplied standard, repeat spot analyses were taken to assess repeatability. The instrument window and sample contact area were checked/cleaned between readings as required. • Data treatment (raw vs corrected): Reported pXRF values are raw instrument outputs from Geochem mode; no post-hoc corrections were applied. • Moisture: Samples were analysed on the bench free of obvious surface moisture; no drying or other preparation was undertaken. • Laboratory assays: The pXRF results are preliminary in nature and will be confirmed by laboratory assays for any material exploration results reported under the JORC Code.
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.*	• Data detailed in this report has been reviewed and processed by Mitre Geophysics. • The pXRF readings are intended as screening data only. No independent verification of pXRF values has been undertaken. Laboratory analyses (when completed) will be used to verify and report significant results.
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.*	• The navigation system used was a UTS PC104 based navigation system utilizing a NovAtel WAAS (Wide Area Augmentation System) enabled GPS receiver, UTS navigate

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Criteria	JORC Code explanation	Commentary
	• *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	software, a full screen display with controls in front of the pilot to direct the flight and a NovAtel GPS antenna mounted on the helicopter tail. As many as 11 GPS and two WAAS satellites may be monitored at any one time. The positional accuracy or circular error probability (CEP) is 1.8m, with WAAS active, it is 1.0m. The co-ordinates of the block were set-up prior to the survey and the information was fed into the airborne navigation system. • Altitude control used the FreeFlight Systems TRA-3000 radar altimeter with altitude range (40 to 2500ft), altitude accuracy (40 to 100 ft. ±5 ft., 100 to 500 ft. ±5%, 500 to 2500 ft. ±7%) and sample rate of 10Hz. • Co-ordinates are in GDA94 datum, Zone 53. • A handheld GPS was used rock chip sample locations with an accuracy of ±3m.
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.*	• The full EL 32279 was flown at 200m line-spacing with a central 40% of the survey flown at 100m infill line-spacing.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Criteria	JORC Code explanation	Commentary
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.*	• Flight lines were orientated northwest - southeast to run perpendicular to most of the structures and geology of the area.
Sample security	• *The measures taken to ensure sample security.*	• All data was collected under strict security measure by UTS Geophysics Pty Ltd.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Data checks and processing reviews were undertaken daily and at the completion of the program by the contractor. • Review of the data was undertaken by an independent consultant Mitre Geophysics.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

JORC Code, 2012 Edition – Table 1 report

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.*	• Tenement includes Oonagalabi (EL32279) for a total of 145.3km^2 and 46 sub-blocks. • EL32279 is owned by Kalk Exploration Pty. Ltd., a 100% owned entity of Litchfield Minerals Limited. The tenement is located approximately 125km northeast of Alice Springs on pastoral leases. • The tenement is in good standing and there are no known impediments.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• A summary of previous EL32279 exploration and mining is presented below: • Oonagalabi was discovered in the 1930's. • In 1970, Russgar Minerals completed regional mag-rad survey, VLF_EM survey, ground magnetic survey, single line resistivity traverse and 14 drillholes. • In 1971, Geopeko completed limited IP. • 1979, Amoco completed photo-interpretation, rock chip sampling and drilling (8 holes). • 1981 D'Dor Mining NL completed limited dipole-dipole IP. • Between 1990 – 1996 on EL 6940 Clarence River Finance Group explored for garnet in the Florence and Maud Creeks, collecting 15 samples that averaged 4.4% garnet • Between 1997 – 2000 on EL 9420 Clarence River Finance Group completed garnet exploration north of Oonagalabi EL32279. In 2007, ML 22624 was applied for to cover the central Oonagalabi deposit and surrounding proximal alluvial systems (outside 2025 bulk sampling area). No work was completed and the ML was relinquished in 2019. • Silex 2009 completed pole-dipole IP 1 x diamond hole.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Oonagalabi-type mineralisation is considered to be either skarn-related, sediment-hosted or carbonate replacement with potential for high-grade remobilised breccia zones similar to the Jervois deposit. EL32279 falls within one of Geoscience Australia's IOCG high potential zones. • The project lies within the Harts Range that represents a package of multiply deformed and metamorphosed sedimentary and igneous intrusive rock.

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 new drilling reported.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *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.* • *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 aggregation methods were used.
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 (e.g. 'down hole length, true width not known').*	• No drilling results reported. .
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.*	• See figures within the main body of the announcement.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*

Criteria	JORC Code explanation	Commentary
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.*	• All available relevant information is presented.
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.*	• See the main body of this report for all pertinent observations and interpretations. • The occurrence of the so-called "Zinc Bush" plants, so termed by Litchfield Minerals, appears to act as geobotanical indicator in this area. Before VTEM ground-truthing, the 'zinc bush' had only been observed on mineralised outcropping Oonagalabi Formation.
Further work	• *The nature and scale of planned further work (e.g. 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.*	Future planned exploration includes: • Field validation of Priority 1 conductors • Earthworks for drillhole pads and tracks • RC drilling of priority conductors, gold targets and the Bomb Diggity magnetic anomaly.

**Disclaimer: XRF results are indicative only and are not a substitute for laboratory assays.*