ASX Announcement | 5th March 2025

Major Discovery, +1km-Long High-Chargeability Target at Oonagalabi

HIGHLIGHTS:

- **Major chargeability anomalies identified** – Two large, high-intensity sulphide-bearing targets extend over 1km in strike and +500m depth (+20mV/V).
- **Significant mineral system emerging** – large, high chargeability cores (+40mV/V, up to 60mV/V) point to a potentially higher-grade core to the system.
- **Untested, high-priority drill targets** – Historic drilling tested the peripheral alteration zones, leaving the strongest chargeability anomalies untested.
- **Chargeability following on from 3km long Soil Strike** - Strong chargeability response open to NE & SW correlating with a 3km soil geochemical anomaly strike (As announced 29th January 2025).
- **Drill-for-equity partnership secured** – Bullion Drilling to complete Phase 1 drilling under a 50% drill-for-equity arrangement at an equity premium of 0.12c, ensuring rapid advancement while preserving cash.
- **Potential Source intrusion identified** – New structural interpretation suggests a possible intrusive source 900m northeast of Oonagalabi, adding further exploration scale potential.
- **Environmental Mining Licence approved for public exhibition** – Litchfield's Environmental Mining Licence has met government criteria and entered a 15-day public exhibition period.

Litchfield Minerals Limited ("Litchfield" or the "Company") (ASX: LMS) is pleased to announce that its latest Induced Polarisation (IP) survey at the Oonagalabi Project (NT) has returned exceptional results, confirming the presence of a large, high-chargeability system that remains completely untested by historical drilling.

IP Survey Confirms Large Untested Sulphide System

The Pole-Dipole Induced Polarisation (PDIP) survey, completed by Planetary Geophysics Ltd., covered 13.1 line-km across the Oonagalabi prospect (**Figures 1 – 2**). The survey successfully defined:

- Two major, sub-parallel chargeability anomalies, **extending 1km** along strike and from surface **to over 500m depth**.
- A higher-grade core of **+40mV/V, extending over 500m** and **reaching peak values of 60mV/V**, correlating with stronger sulphide mineralisation potential.
- Chargeable zones that remain entirely untested by historical drilling, presenting a compelling opportunity for a major discovery.
- Chargeable zones still open to the Northeast and Southwest.

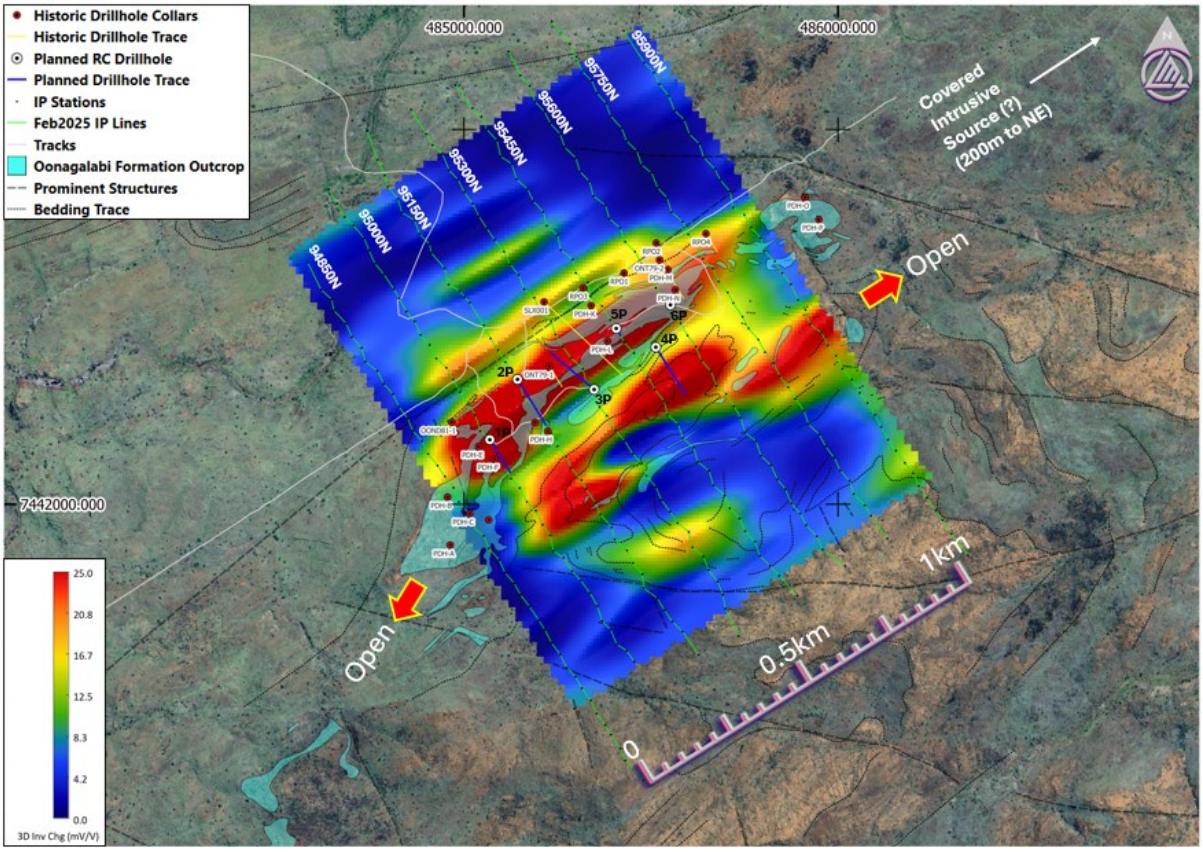

Figure 1. *Oonagalabi 2025 PDIP chargeability 150m depth slice showing the location of two parallel chargeable bodies. The western anomaly is coincident with outcropping Oonagalabi Formation while the eastern anomaly is not exposed, has no surface expression and represents a new discovery.*

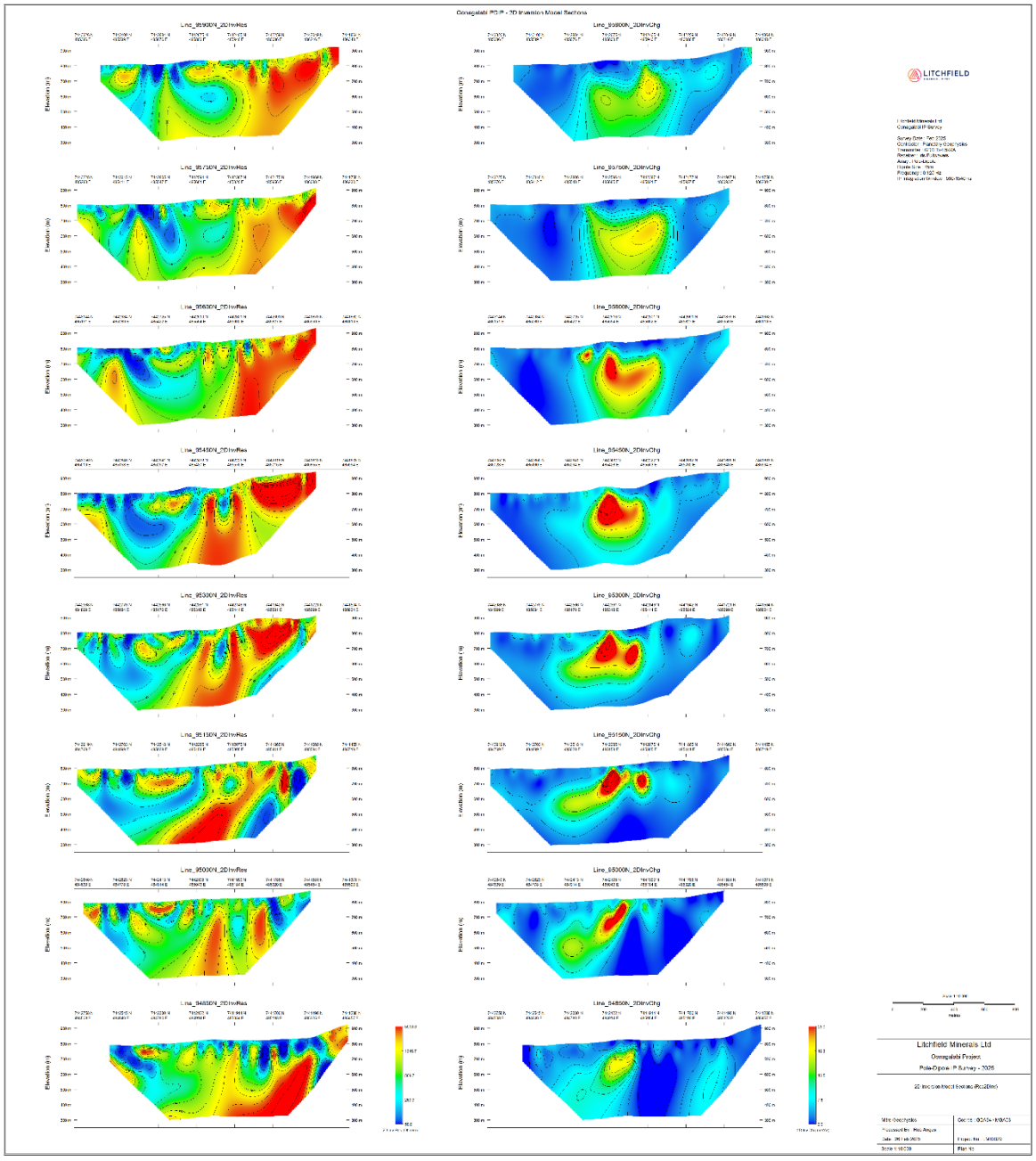

Figure 2. *Oonagalabi 2025 PDIP resistivity (left) and chargeability (right) 2D inverted stacked 150m spaced sections equalling 1.2kms in length and each line 1.6kms long and anomalies extending to 500m below surface.*

Managing Director & CEO, Matthew Pustahya, commented:

"The results from this latest IP survey have exceeded our expectations and have provided a significant breakthrough in our understanding of the Oonagalabi system. We now have clear evidence of a **large, continuous chargeable body** extending over 1km in strike length and more than 500m in depth which appears to be open to the northeast and southwest, with a high-chargeability core that remains completely untested by drilling.

Importantly, the few historical drill holes that did intersect the **+20mV/V chargeability shell** contain the best mineralisation recorded to date, reinforcing the strong correlation between chargeability and sulphide mineralisation. However, **no previous drilling has ever tested the highly chargeable +40mV/V to 60mV/V core**, which presents a compelling opportunity to define a higher-grade zone within the system.

Our geological model continues to evolve, and we now believe that Oonagalabi may be part of a **large skarn system**. This interpretation is further supported by the identification of a **potential intrusive source 900m to the northeast**, which appears structurally linked to the mineralised body. If this intrusion is confirmed as the primary driver of the system, it could significantly expand the exploration potential beyond the known mineralised footprint.

With these outstanding results in hand, we are pleased to have secured **a strategic drilling-for-equity agreement with Bullion Drilling Co**, one of Australia's premier RC drillers, at a 26% premium to our current share price. This agreement allows us to complete **up to 2,000m of drilling while preserving capital**, ensuring we can aggressively test these high-priority targets without unnecessary shareholder dilution.

We are now moving quickly to finalise our drill program, with approvals expected in the coming weeks and drilling set to commence in **late March / early April**. We believe Oonagalabi has the scale and geological characteristics to develop into a significant discovery, and this next drilling phase will be pivotal in unlocking its full potential."

Phase 1 Drilling Plan – High-Priority Targets to be Tested

Based on these excellent survey results, Litchfield has finalised plans for a targeted Phase 1 drilling program designed to directly test the strongest chargeability anomalies. The program includes:

- **6 RC holes**, with five holes targeting the high-chargeability western anomaly and one hole testing the eastern anomaly.
- **Drill spacing of 150m per hole**, specifically designed to test the higher-grade zones of the system identified by chargeability and to demonstrate scale.
- Focus on intersecting the **+40mV/V to 60mV/V** chargeability core, which remains completely untested.

Drilling is set to commence in late March / early April, pending a final Northern Territory government approval of the Environmental Mining Licence, which has met government criteria and has since entered a 15-day public exhibition period.

Strategic Drilling-for-Equity Agreement with Bullion Drilling

To fast-track exploration while minimising shareholder dilution, Litchfield has secured a drilling-for-equity partnership with Bullion Drilling, one of Australia's leading RC drillers. Under this agreement:

- Bullion Drilling will complete up to 2,000m of RC drilling for 50% equity
- Litchfield will pay 50% of drilling costs in fully paid shares, preserving cash for further exploration.
- Equity of up to $300,000 at 12c per share, **representing a 26% premium** to yesterday's closing price.

This agreement reflects strong industry confidence in Oonagalabi potential and allows Litchfield to rapidly advance the project with minimal financial outlay.

Geological model

- Oonagalabi is interpreted as a large skarn system formed through metasomatic alteration driven by hydrothermal fluids from a nearby intrusive body.
- A potential intrusion is located ~1km northeast, based on structural and Magnetic data obtained from December 2024 interpretations (as announced 13th Jan 25).
- Recent magnetic survey data highlights a prominent magnetic structure extending through Oonagalabi, appearing linked to the intrusion (Figure 3).
- Structural features further support this interpretation, reinforcing the relationship between the deposit and the intrusive system.
- Future drilling and geophysical surveys (Phase 2 or 3) will target the northeast sector to confirm the genetic relationship between the intrusion and skarn mineralisation, further delineating the system's scale and economic potential.

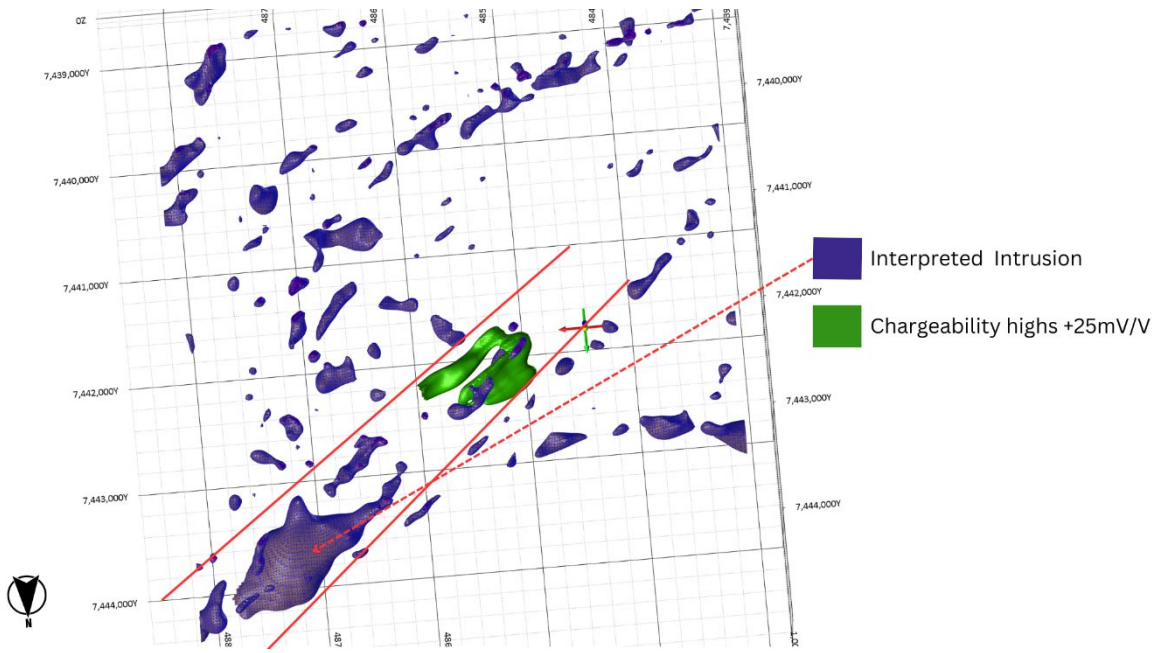

***Figure 3**. Oonagalabi 2024 magnetic survey highlights a potential link between the modelled intrusion and 2025 chargeability zones. High magnetic features (purple) extend from modelled intrusion through the Oonagalabi deposit (Green).*

Next Steps & Exploration Timeline

- Environmental Mining plan approval expected within two weeks, clearing the way for the drilling programme to start.
- Drilling to commence in late March / early April, targeting the strongest chargeability zones within the system, aiming to find a high-grade sulphide core.
- Ground gravity survey scheduled for early March, covering the full 3km strike length of the Oonagalabi system (800 stations, 100 x 50m grid).
- Additional geophysical work to northeast of Oonagalabi, targeting the interpreted source intrusion, which may be the driver of the mineralised system.

With a major untested chargeability anomaly, a clear geological model, and a funded drilling campaign, Litchfield Minerals is well-positioned to deliver early, significant exploration success at Oonagalabi in 2025.

Summary of Bullion Drilling Co HOA

The Company is pleased to announce that it has signed a binding heads of agreement (HOA) with Bullion Drilling Co Pty Ltd (Bullion Drilling) to provide ~2000m of RC drilling for phase one of the Company's Oonagalabi RC drilling program at a cost of up to $600,000.

50% of drilling costs (up to a maximum of $300,000) will be satisfied through the issue of Shares to Bullion Drilling at a deemed issue price of $0.12 a Share, resulting in a maximum of 2.5 million Shares being issued on completion of drilling, anticipated to be by April 2025. 30% of Shares will be voluntarily escrowed for 3 months from issue and 40% for 6 months from issue.

The Company has also agreed under the HOA to grant Bullion Drilling exclusivity, by way of a first right of refusal, to provide RC drilling services to the Company in the 18-month period

from the date of the HOA, subject to Bullion Drilling having capacity and negotiation of a formal drilling contract.

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.

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.

Exploration results discussed in this announcement do not guarantee the definition of a mineral resource or ore reserve under the JORC Code (2012 Edition). 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.

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 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:

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Competent Person's Statement

The information in this Presentation that relates to Exploration Results is based on, and fairly represents, information and supporting documentation compiled by Mr Russell Dow (MSc, BScHons 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 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 report of the matters based on his 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.

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*	The instruments and parameters used for the Pole-Dipole Induced Polarization survey are as follow: • Pole-dipole IP/Resistivity time series data was acquired with V-Full Waver IP/Resistivity Receivers in a distributed pole-dipole array read in both senses C>P & C<P and with the I-Full Waver Current Recorder recording full wave form transmission data. • All Receivers and the full wave form Current Recorder are manufactured by Iris Instruments of Orleans, France (www.iris-instruments.com). • Pole-dipole current in injection was via one (1x) GDD TX4 5000W/20A transmitter manufactured by GDD instrumentation of Quebec Canada (www.gddintrumentation.com).

Criteria	JORC Code explanation	Commentary
	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 there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	• Transmitters were powered by one (1x) Kubota 9000W Diesel Generator. **Pole-Dipole Data Acquisition** • Tx Electrode Type: Aluminium foil lined pit (Remote CA) & 10mm welded mesh (Forward CB) • Rx Electrode Type: CuSO4 Non-polarising porous pot • Tx wire Type: 2.5mm Cu conductor • Rx wire Type: 1.5mm Cu conductor • Rx Line spacing: 100m • Rx Dipole spacing: 50m. • Time Base: 2s ON/2s OFF • Windows: 20 • Timing Windows (ms): 20/20/20/20/40/40/40/40/80/80/80/80/ 120/120/120/120/180/180/180/180 • mDelay (ms): 70 **Instrument technical specifications** • Tx <u>Receivers:</u>

Criteria	JORC Code explanation	Commentary
		• Iris V-Fullwaver Receiver • Channels: 2 • Input voltage: Max. input voltage: 15 V, Protection: up to 1000V • Voltage measurement: Accuracy: 0.2 %, typical Resolution: 1 µV, Minimum value: 1 µV • **Input impedance:** 100 MΩ • **Signal waveform:** All IP measurements were made in the time-domain using a two second half-duty cycle (2s ON/2s OFF). An integration window of 0.5 to 1.1 seconds has been used for the final chargeability calculation. • GPS input for coordinates and synchronisation • Computation of apparent resistivity, average chargeability, and standard deviation • **Noise reduction:** Read duration manually selected in relation to apparent injection point current (mA) and power line rejection, SP linear drift correction. • Iris I-Fullwaver Current Recorder • Input current: +/- 25000mA (optional 6, 15 or 50A) • Resolution / Accuracy: 0.1mA / 0.1%

Criteria	JORC Code explanation	Commentary
		• GPS: GPS input for coordinates and time synchronisation. Time stamps record within an absolute accuracy of 250us. • Readings: Current value • Typically three (3x), 300 second (~75x cycle stacks) reads at each injection point. • GDD TX IV 5000 Transmitter • Output Power: 0 to 5000 W • Input voltage: Standard 240V 50hz • Output Voltage Range: 150V to 2400V • Output Current: 30mA to 20000mA • Transmission Cycle: ON+, OFF, ON-, OFF: • Timing: 1s, 2s, 4s, or 8s • Data processed by FW Viewer Prosys III TQIP WinDisp Res2D
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*	• No new drilling in this report

Criteria	JORC Code explanation	Commentary
	what method, etc).	
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 in this report
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 in this report

Criteria	JORC Code explanation	Commentary
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.*	• No new drilling in this report
Quality of assay data and	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• See survey configuration and system specifications above.

Criteria	JORC Code explanation	Commentary
laboratory tests	• *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.*	
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.*	• No new drilling in this report • Data detailed in this report has been reviewed and processed by Rob Angus at Mitre Geophysics.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other*	• Lines were gridded by Planetary Geophysics using a Garmin Map 65 series GPS.

Criteria	JORC Code explanation	Commentary
	locations used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Waypoints were recorded at every station using GDA94/UTM.
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.*	• PDIP was completed on 8, northwest-southeast oriented lines spaced 150m apart. • Line spacing is considered appropriate for the scale of the Oonagalabi system.
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.*	• Survey lines were oriented perpendicular to known structure and stratigraphic controls (Oonagalabi Formation) • No bias is expected.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• All data was collected under strict data security measures by Planetary 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 (Rob Angus, Mitre Geophysics).

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*	• 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. Oonagalabi is located 125km northeast of Alice Springs on pastoral lease.

Criteria	JORC Code explanation	Commentary
	with any known impediments to obtaining a licence to operate in the area.	• The tenements are in good standing and there are no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• A summary of previous 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. • Silex 2009 completed pole-dipole IP 1 x diamond hole.

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 rocks.
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*	• No new drilling in this report.

Criteria	JORC Code explanation	Commentary
	○ *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.*	
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 new drilling in this report.

Criteria	JORC Code explanation	Commentary
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 new drilling in this report. • The IP survey was completed perpendicular to the mineralized Oonagalabi Formation.
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 above.
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.*	• Individual IP readings have not been reported, plans within this report provide an adequate overview of the ground gravity data. • All data is of high quality and no data required removal to complete 2D and 3D inversions.

Criteria	JORC Code explanation	Commentary
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.
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: • Detailed ground gravity (100m x 50m) • Phase 1 reverse circulation drilling (~1,600m) • Lithostructural interpretation using the new drone magnetics and ground gravity data.