



ASX Announcement | 11th April 2025

Oonagalabi drilling confirms Broad Sulphide Mineralisation

Key Highlights:

- **1,646m RC Drilling Program Completed:** A total of six RC drill holes for 1,646 metres were completed, with holes spaced approximately 150 metres apart. Each hole intersected visual sulphide mineralisation over downhole intervals ranging **from 20 metres to 150 metres**.
- **100% Success Rate Across Program:** The program achieved a 100% success rate, with mineralisation intersected in every hole. Based on these results and the geological model, the Company is confident that mineralisation extends throughout at least 1.5km of the full 3-kilometre corridor.
- **First-Ever Drilling on Eastern Side:** This program represents the first drilling of the eastern side of the Oonagalabi system, where abundant disseminated sulphide mineralisation was intersected, expanding the known mineralised envelope.
- **Polymetallic Sulphide System:** Sulphide assemblages observed include chalcopyrite (Cu), sphalerite (Zn), galena (Pb), pyrrhotite and pyrite, highlighting the polymetallic nature of the system and supporting historical data from the project.
- **Visual Mineralisation Estimates Appear Consistent with Historical Drilling:** Based on preliminary observations, sulphide intensity appears consistent with historical drilling, though some local variation is present. Samples dispatched for assaying to confirm grades.
- **Potential multiple mineralisation events:** Elevated cobalt and bismuth levels from in-field XRF data within a magnetically-responsive zone suggests multiple mineralisation events within the Oonagalabi system.
- **Geophysical Targeting Validated:** Drilling confirms that Induced Polarisation (IP) surveys had effectively delineated disseminated sulphide zones. Additional geophysical surveys (VTEM and ground gravity) are planned to target the potential semi-massive to massive sulphide zones.

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Litchfield Minerals Limited (“Litchfield” or the “Company”) (ASX:LMS), a company with a strategic emphasis on critical minerals, is pleased to announce we have completed the first phase of drilling at Oonagalabi (Figure 1).



Figure 1 – Bullion Drilling rig underway at Oonagalabi (OGRC005, April 2025).

Managing Director and CEO, Matthew Pustahya, commented:

“This is an excellent outcome for our first drilling program at Oonagalabi. Intersecting sulphide mineralisation in all six holes is a strong technical validation of our targeting methods and highlights the scale of the system.

The presence of chalcopyrite, sphalerite and galena, along with potential cobalt and bismuth geochemistry, confirms the polymetallic nature of the system and reinforces its potential significance. What’s particularly encouraging is that we’re seeing mineralisation where no drilling has ever been undertaken before – on both the eastern and western side’s – suggesting we may have only just scratched the surface of what may be a much larger mineralised footprint.

The system appears to have been driven by a substantial volume of hydrothermal fluid. So, the next phase of work will focus on uncovering the potential high-grade feeder structures that could be the key to unlocking value at Oonagalabi. We look forward to receiving the assay results and building on this strong foundation with Phase Two of our exploration program.”

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1,646m RC Drilling Program Completed

Litchfield Minerals completed six reverse circulation (RC) drill holes for a total of 1,646 metres at the Oonagalabi Project, located on the Mount Riddock station in the Northern Territory. Drill holes were spaced approximately 150 metres apart and were strategically positioned to test geophysical anomalies and extensions of known mineralisation (Figure 2 and Table 1). Every hole intersected visual sulphide mineralisation, ranging in downhole length from approximately 20 metres to 150 metres. Such intersects are an indicator of the scale of the system.

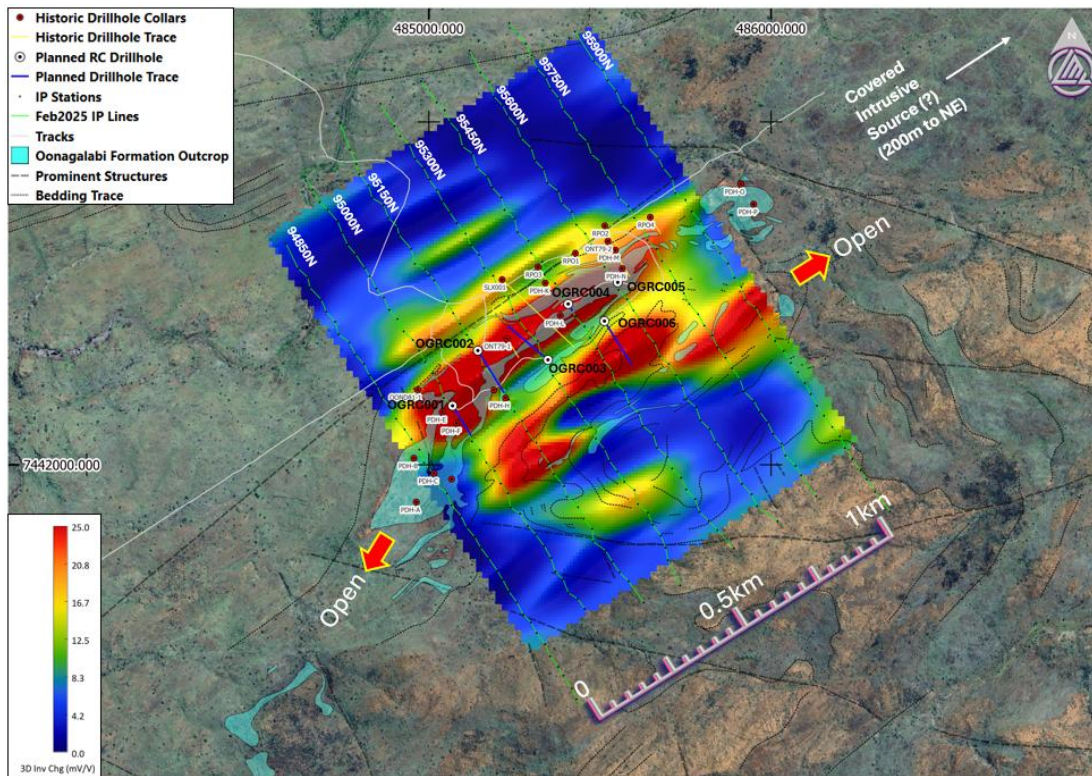


Figure 2 – 2025 Pole-Dipole IP 150m depth slice overlain by distribution of outcropping Oonagalabi Formation with the location of the six completed RC drillholes.

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Hole_ID	Easting	Northing	RL	Dip	AZI_TN	AZI_MAG	Depth
OGRC001	485071	7442164	816	-60	148	142	200
OGRC002	485141	7442328	803	-55	148	142	246
OGRC003	485343	7442313	812	-55	310	304	300
OGRC004	485547	7442529	843	-70	148	142	300
OGRC005	485398	7442483	848	-80	148	142	300
OGRC006	485514	7442429	850	-60	148	142	300

Table 1. Completed Phase 1 RC drillholes (GDA94 Zone 53).

100% Success Rate Across Program

The program achieved a 100% success rate, with all six holes intersecting mineralisation. This consistent outcome across a wide area provides a strong level of confidence that the mineralisation is laterally extensive and supports the Company’s interpretation of a large-scale mineralised system. Based on these results and the known geology, it is possible that mineralisation may continue throughout the entire 3kilometre corridor.

First-Ever Drilling on Eastern Side

This program also marked the first-ever drilling on the eastern side of the Oonagalabi system where a significant chargeability anomaly was defined in the February IP survey. The Company’s drilling revealed zones of disseminated sulphide mineralisation similar to that intersected in the western IP chargeability anomaly. This is a major step forward in expanding the known footprint and establishing the full lateral extent of the mineralisation.

Polymetallic Sulphide System

Logging of drill chips revealed a range of sulphide species including chalcopyrite (Cu), sphalerite (Zn), galena (Pb) pyrrhotite and pyrite, indicating a polymetallic sulphide system consistent with historical reports from the Oonagalabi area. A zone of intense magnetite-Co-Bi mineralisation intersected in OGRC002 is interpreted to have overprinted anthophyllite-chalcopyrite-pyrrhotite mineralisation and potentially indicates a distinctly different mineralisation event. This zone is coincident with the main magnetic anomaly at Oonagalabi

that cuts the northwestern flank of the system and may be indicative of a broader zone of this newly identified style of mineralisation¹.

Visual Mineralisation Estimates Appear Consistent with Historical Drilling

While laboratory assays are still pending, visual sulphide abundance appears broadly in line with previous drilling results in the area (Appendix 1). The observations, made during geological logging and supported by portable XRF analysis, suggests that the observed abundance may be similar to those grades reported in historical programs (average 13.1m @ 0.44% Cu, 0.96% in historic mineralised drilling intercepts²). Laboratory multi-element analyses, expected within 6 weeks, are required to confirm these observations.

Looking for the feeder

The widespread nature of the sulphide mineralisation, extending over several kilometres, implies that a significant volume of mineralising fluids has passed through the system. This level of fluid movement is typically associated with one or more feeder structures, which frequently serve as conduits for metal-bearing fluids. These feeders, if confirmed, could host higher-grade zones and hence represent high-priority drill targets in upcoming programs.

Geophysical Targeting Validated; More to Come

The drilling program has confirmed that Induced Polarisation (IP) is a highly effective disseminated sulphide targeting tool for Oonagalabi. The broader zones of chargeability and associated disseminated mineralisation intersected during Phase One drilling are likely related to fold repetitions of the mineralised Oonagalabi Formation.

To build on this success, Litchfield plans to expand its geophysical coverage using airborne EM (VTEM) and Ground Gravity to search for possible feeder structures and remobilized sulphide zones. These forms of structurally-controlled mineralisation, if found to be present, typically

¹ Litchfield ASX Announcement 13th January 2025. Major Mineral System Potential Confirmed at Oonagalabi

² Litchfield ASX Announcement 10th October 2024. Litchfield Secures Strategic Copper – Gold Portfolio NT Update (Appendix 1)

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host higher sulphide concentrations and can produce density and conductive anomalies. Hence are often detectable with gravity and electromagnetic geophysical techniques and will be the focus for Phase Two drilling.

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 refer to visual estimates of mineralisation, and these are not quantitative and are not grade results and 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 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.

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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.

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Appendix 1. Mineralized intercept visual sulphide estimates and geological comments. Chalcopyrite (CPY%), Sphalerite (SPH%), Galena (GAL%), Malachite (MAL%), Pyrite (PY%), Pyrrhotite (PO%), Magnetite (MAG%) and Garnet (GAR%)

HOLE_ID	From	To	CPY %	SPH %	Gal %	Mal %	Py%	Po%	MAG %	GAR %	Comments
OGRC001	35	37	1	1			1		1	2	Massive hb-px +/- garnet +/- mag alt with 3% diss to blebby sulphides
OGRC001	37	38	1	3					0.5		Light-coloured, equant hb?-px- alt with minor mag, 4% sulphides
OGRC001	38	39	0.5	3			0.5		3		Mass calc-sil alt with diss and blebby sulphides, sphal is red
OGRC001	39	40	1.5	3					1		Mass calc-sil alt with diss and blebby sulphides
OGRC001	40	41	0.5	3							Mass calc-sil alt with diss sulphides, anthophyllite dominant
OGRC001	41	42	0.5	1					2		Unsure what this is but definitely 20% qtz vein/silicification and dark calc-sil. Cpy is intergrown with mag and cpy is blebby
OGRC001	42	44	0.1	0.1			0.3				qtz-bt-feld +/- garn gneiss w/ trace diss pyr
OGRC001	44	46	0.1	0.1							Massive dark green/black pyroxene alt +/- biotite(?) with trace sulphides
OGRC001	46	48	0.5	0.1			0.5				Massive dark green/black pyroxene alt +/- biotite(?) with 1% diss fg sulphides
OGRC001	48	50	0.5	1							Massive marble with 30% diss olivine, minor diss mag, 1.5% sulphide
OGRC001	50	54	0.5	3							Massive cream, equant anthophyllite(?) and diss hb(?) with 3% diss sph, trace cpy
OGRC001	54	58	0.1	0.1							Massive mg black px +/- mag alt with trace-minor diss cpy-sph
OGRC001	58	61	0.1	0.1							Massive light grey to pinkish grey/cream anthophyllite with minor-trace diss sulphides
OGRC001	61	62	1	1							Massive light grey-pinking anthophyllite with 2% sulphides
OGRC001	62	63	2	1							Massive light grey-pinking anthophyllite with 3% sulphides
OGRC001	63	64	3	1							Massive light grey-pinking anthophyllite with 4% sulphides
OGRC001	64	66	1.5	0.5							Massive light grey-pinking anthophyllite with 2% sulphides
OGRC002	50	51	1	0.1							Qtz-bt gneiss with possibly weak pervasive green hornblende alteration, trace cpy-sph
OGRC002	51	52	3	0.5							Massive anthophyllite alteration with 7% qtz veins and 3% diss cpy / 0.5% diss sph
OGRC002	52	53	1.5	0.5							Massive cream/white qtz vein in massive anthophyllite alteration and 1.5% diss cpy / 0.5% diss sph
OGRC002	53	54	0.5	0.1							Massive talc alteration with disseminated / massive zones of anthophyllite alteration, 30% qtz vein, minor diss cpy
OGRC002	54	57	0.1	0.1					15		Massive anthophyllite alteration overprinted / replaced by massive and disseminated magnetite, trace disseminated cpy
OGRC002	57	59	0.1	0.1							Massive anth-qtz alteration with trace disseminated cpy
OGRC002	59	62	0.5	0.1							Massive dark green pyroxene +/- hornblende alteration, no mag
OGRC002	62	64	0.5	0.1					1		Massive anth alt w/ mass dark green px bands, minor diss mag
OGRC002	64	65	0.1	0.1			0.1		3		Massive anthophyllite with 5% phlogopite, 3% diss mag, trace pyrite
OGRC002	65	66	0.1	0.1					2		Massive dark green pyroxene with bands of massive anthophyllite, minor disseminated magnetite
OGRC002	66	67	0.1	0.1					5		Massive dark green pyroxene with bands of massive anth, 5% diss mag
OGRC002	67	70	0.1	0.1					10		Massive anthophyllite with 10% disseminated magnetite, trace cpy
OGRC002	70	72	0.5	0.1					5		Massive anth alt with 3% diss mag, trace cpy
OGRC002	72	73	1	0.1					3		Massive anth alt with 3% diss mag, 1% diss cpy. Where present cpy forms up to 10% of the rock, blebby
OGRC003	44	45	0.5	1					1		Massive, coarse-grained anthophyllite with disseminated calcite, green olivine, black stubby pyroxene, clear-brown mineral and octahedral (pyramid) black mineral (mag?). Rock looks like qtz-feld intrusive but has weak fizz
OGRC003	45	46	0.5	1					1		As above with 5% massive calc-silicate zones (px-hb-mag)
OGRC003	46	48	0.5	1				0.1	0.1		Massive anthophyllite(?)-qtz(?) with diss olivine and px, some zones of up to 20% ol-px, only minor sulphides.
OGRC003	48	54	0.3	1				0.1			As above with zones of weak fizz, originally marble but now completely replaced by anth-px-ol-sul
OGRC003	54	55	0.5	1				0.3			Massive anth with up to 30% diss px with 0.8% cpy-po blebs, trace diss sph, up to 10% zones of green olivine-carb
OGRC003	55	56		0.1							Massive clear qtz vn with 30% px-hb-ol calc-sil, trace sulphides
OGRC003	56	57	0.5	1.5				0.3			Massive clear qtz vein w/ massive chunks of clear/pale brown hb(?) and semi massive px with diss sulphides
OGRC003	57	58	1	2				0.5			Massive dark green-green calc-sil (px-hb-ol) with diss blebs of cpy-po
OGRC003	94	95		1							Unaltered qtz-bt gneiss
OGRC003	95	96	0.5	1				0.1			Massive px-hb calc-silicate with semi-massive olivine zones
OGRC003	96	97	0.5	1				0.1			Olivine-dominant calc-silicate
OGRC003	97	98	1	1				0.5			Dark green-black px-hb(?) dominant calc-sil with 20% olivine, 2% blebby intergrown cpy-po-sph
OGRC003	98	99	0.5	0.5							Massive anth-qtz-talc alt with 0.5% disseminated cpy, no po
OGRC003	99	101	1	0.5				0.1			Massive anth alt with diss cpy +/- po and 20% zones of massive dark green calc-sil (px-hb)
OGRC003	101	102	0.5	0.5				0.1			As above but with 30% dark green calc-sil. Cpy is elongated and smeared between anth grains
OGRC003	102	103	2	0.5							Mass anth-qtz with trace cpy and 20% zones of dark-green calc-sil with blebby cpy (to 10% in these zones, 2% total in rock)
OGRC003	103	104	0.5	0.5							Mass anth-qtz with trace cpy and 5% zones of dark-green calc-sil with blebby cpy (to 10% in these zones, 1% total in rock)
OGRC003	104	105	3	1							Massive light to dark green calc-silicate (mostly lighter coloured hornblende?) with zones of massive anth-qtz. 3% cpy
OGRC003	105	106	4	1							Massive light coloured stubby horn(?) - px calc-sil with up to 5% diss/blebby cpy. Minor flakey biotite in bottom of seive. Can't see any sphal. Some zones of cpy are blebby to semi-massive on the chip size
OGRC003	106	108	1	2							Massive light coloured stubby horn(?) - px calc-sil with up to 1% diss/blebby cpy. Can't see any sphal. Some zones of cpy are blebby to semi-massive on the chip size
OGRC003	108	110	5	2							As above but with 7% sulphides. Sphal is black and intergrown with cpy, where finer grained is reddish
OGRC003	110	111	1	1.5							Mass dark green calc-sil (hb-px-ol?) with 5% qtz vein, 2.5% sulphide
OGRC003	111	112	0.3	0.1							qtz-bt gneiss with 20% calc-sil
OGRC003	112	113	1.5	0.5							Massive green-grey clear hb-anth-px alteration with 2% diss sulphides
OGRC003	113	114	4	0.5				0.5			Massive anthophyllite alteration with up to 7% cpy-sph-po mineralisation. Some chips have blebby sulphide to 10%
OGRC003	114	115	1	0.1				0.1			Massive clear stubby hb-diss px calc-sil alt with 1% cpy-po intergrowths with 20% QBGN interbanded
OGRC003	115	116		0.1							
OGRC003	116	118	0.5	0.5							Massive clear stubby hb-px calc-sil alt with minor sulphides, 10% qtz veins
OGRC003	118	119	3	0.1							
OGRC003	119	120		0.1					0.1		Qtz-bt gneiss with minor calc-silicate zones and trace cpy in 120-121m. Has trace to minor diss pretty pink garnet
OGRC003	120	121	0.1	0.1							Qtz-bt gneiss w/ 10% dark green calc-sil
OGRC003	121	123		0.1							
OGRC003	123	125	0.5	1							Dark green calc-sil w/ up to 0.5% cpy
OGRC003	125	130		0.1					3		Qtz-bt gneiss with 10% mag-rich calc-sil
OGRC003	130	132	0.1	0.5					8		Massive dark green px-hb-mag-flakey musc calc-sil with 0.5% translucent red-brown sphal
OGRC003	132	136		1					5		As above but no mineralisation. Possibly high mag mafic granulite
OGRC003	136	138	0.1	1					3		Px-hb-mag calc-sil with trace cpy

OGRC005	184	186	0.1	0.1							Massive marble with minor-mod diss dark grey px and olivine with trace sphal
OGRC005	186	189	0.1	2							As above w/ minor diss sulphides, dark grey px-ol diss
OGRC005	189	190	0.1	0.1							
OGRC005	190	191	0.1	0.5	0.1						Mod calc-sil altered gneiss(?) with trace diss cpy and trace galena veinlet
OGRC005	191	194	0.1	0.1							
OGRC005	194	196.5	0.5	0.1							Massive phlog-anth alt w/ trace to minor diss cpy
OGRC005	196.5	199	0.5	0.1							Massive anth-qtz-phlog alt
OGRC006	5	10		0.1		0.5					Moderately weathered massive anthophyllite(?) w/ 0.5% diss mal
OGRC006	10	11	0.5	1.5							Biotite schist?
OGRC006	11	12		0.5		0.5					0.5% malachite
OGRC006	12	14	0.1	1.5							Qtz-bt gneiss with 1% qtz vein
OGRC006	14	16	0.1	1							Bands of light green calc-sil and anth-px alteration, 30% qtz vein
OGRC006	16	19	0.1	1							Px-anth-greasy talc(?) calc-sil alteration
OGRC006	19	20		7		2					Weathered calc-silicate with 2% diss mal
OGRC006	20	21		2		1.5					Qtz-anth and px-phlog banded calc-sil, trace to 2% mal
OGRC006	21	26	0.1	1					1		Qtz-bt +/- garnet gneiss
OGRC006	40	41	0.1	2.5					1		Qtz-bt +/- garnet gneiss
OGRC006	41	44	0.5	3			0.1				Massive px-anth calc-sil, weak oxidation
OGRC006	44	46	0.1	0.5							Massic calc-sil w/ 20% qtz vein
OGRC006	46	47	0.1	2							Massive phlog-px schist
OGRC006	47	52	0.1	1							Massive px-hb(?) calc-sil with 1% diss sphal
OGRC006	147	148	0.1	0.1							
OGRC006	148	150	0.1	0.1							
OGRC006	150	151	0.1	0.5							
OGRC006	151	154	0.1	0.1							Spotty ol-px altered marble with dark green calc-sil bands
OGRC006	154	155	0.5	2							Massive olivine with minor zones of massive phlogopite
OGRC006	155	159	0.5	2							Light green olivine - hb - px?? calc-sil with trace sulphides
OGRC006	159	160	1.5	1.5			0.5		5		High mag calc-sil alteration w/ 3% sulphides
OGRC006	160	162	1	1			0.1				qtz-cpy-sph vn
OGRC006	162	164	0.5	0.5			0.5				Massive dark green calc-sil alteration with blebby cpy-sph-po mineralisation
OGRC006	164	168	1	1							As above with more sulphides
OGRC006	168	176	0.5	1							Weak massive calc-sil alteration w/ trace to minor diss cpy-sph

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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	<ul style="list-style-type: none"> • <i>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.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>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 there is coarse gold</i> 	<ul style="list-style-type: none"> • Reverse Circulation (RC) was used to obtain a large green bag and a smaller calico 1m split sample for each metre of all six holes drilled. • A portable XRF instrument (Olympus Vanta) was used to assess Cu and Zn levels in green bags for each metre drilled. • All samples that exceeded either 0.1% Cu or 0.1% Zn were selected for individual 1m samples. • 4m composite samples were collected for all intervals that did not exceed 0.1% Cu or 0.1% Zn. • Spear sampling was used to collect 4m composite samples • QAQC standards (blank, reference and duplicate) were included routinely, alternating every 25 samples. • All samples have been submitted to Bureau Veritas for conventional multi-element and fire assay analysis

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Criteria	JORC Code explanation	Commentary
	<i>that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	
Drilling techniques	<ul style="list-style-type: none"> • <i>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).</i> 	<ul style="list-style-type: none"> • All holes were completed using the RC drilling technique by Bullion Drilling Company using a 5.5" face sampling bit. • All holes were surveyed during drilling using a GyroMaster north seeking gyro tool
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • RC sample recoveries were visually estimated for each metre with poor or wet samples recorded in drill and sample log sheets. The sample cyclone was routinely cleaned at the end of each 6m rod and when deemed necessary. • No relationship has been determined between sample recoveries and grade and there is insufficient data to determine if there is a sample bias.
Logging	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Geological logging of RC drill holes was done on a visual basis with logging including lithology, alteration, mineralisation, structure, weathering, oxidation etc.

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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • Sulphide percentages were visually estimated in the sieve before adding to the chip tray for more representative assessment. Where difficult to determine (e.g. coarse-grained, blebby, finely disseminated), a bias was placed on under-reporting sulphide percentages. All sulphide percentages were logged in 0.5% increments except where only trace sulphides were observed (0.1%). • Logging of RC drill samples is qualitative and based on the presentation of representative drill chips retained for all 1m sample intervals in the chip trays. • All drillholes were geologically logged in their entirety. • A portable XRF instrument (Olympus Vanta) was used to facilitate identification of mineralised intervals where visual mineralisation was difficult to identify.
<p>Sub-sampling techniques and sample preparation</p>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages</i> 	<ul style="list-style-type: none"> • 1m cone split samples were collected for all metres at the time of drilling from the drill rig mounted cone splitter. • The sample size is considered appropriate for the mineralisation style, application and analytical techniques used.

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Criteria	JORC Code explanation	Commentary
	<p><i>to maximise representivity of samples.</i></p> <ul style="list-style-type: none"> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> Not applicable as no assay results are reported.
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> 	<ul style="list-style-type: none"> Calibration disks and OREAS reference standards were used daily to ensure reliable portable XRF analysis.

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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Discuss any adjustment to assay data. 	
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill hole collars are surveyed with a handheld GPS with an accuracy of +/- 5m which is considered sufficient for drill hole location accuracy. Co-ordinates are in GDA94 datum, Zone 53. Downhole depths are in metres measured downhole from the collar location on surface. Topographic control has an accuracy of 2m based on detailed satellite imagery derived DTM or on laser altimeter data collected from aeromagnetic surveys.
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drillholes were spaced approximately 150m along strike to drill parallel to pole-dipole IP lines. It is too early to establish if drillhole spacing is sufficient to establish geological continuity. 4m composite samples were completed on intervals that did not exceed 0.1% Cu or 0.1% Zn.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> It is unknown whether the orientation of sampling achieves unbiased sampling as interpretation of quantitative measurements of mineralised zones/structures has not yet been completed. The drilling is oriented perpendicular to the lithological strike. Holes OGRC003 and OGRC005 are likely not drilled

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Criteria	JORC Code explanation	Commentary
	<i>if material.</i>	perpendicular to dip due to terrain limitations on drill hole locations. These holes potentially drilled at a lower angle than perpendicular to dip, however, is difficult to determine due to extensive folding of the host Oonagalabi Formation.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Each sample was put into a tied off calico bag and then several placed in large plastic “polyweave” bags which were zip tied closed. Samples were driven to the Bureau Veritas laboratory in Adelaide by Northline Transport.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	Continuous improvement internal reviews of sampling techniques and procedures are ongoing. No external audits have been performed.

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	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Tenement includes Oonagalabi (EL32279) for a total of 145.3km² and 46 sub-blocks.

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Criteria	JORC Code explanation	Commentary
tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. The tenements are in good standing and there are no known impediments.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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.

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Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • 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. <p>The project lies within the Harts Range that represents a package of multiply deformed and metamorphosed sedimentary and igneous intrusive rocks.</p>
Drill hole Information	<ul style="list-style-type: none"> • <i>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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>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</i> 	<ul style="list-style-type: none"> • See Table 1 within the main body of the announcement.

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Criteria	JORC Code explanation	Commentary
	<i>Person should clearly explain why this is the case.</i>	
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No assaying is reported in this report.
Relationship between mineralisation on widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> Where possible and known the drilling is oriented perpendicular to the lithological strike and dip of the target rock unit. It is unknown whether the orientation of sampling achieves unbiased sampling of possible structures as no measurable structures are recorded in drill chips. No quantitative measurements of mineralised zones/structures exist, and all drill intercepts are reported as down hole length in metres, true width unknown.
Diagrams	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of</i> 	<ul style="list-style-type: none"> See Figure 2 for the drillhole location plan.

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Criteria	JORC Code explanation	Commentary
	<i>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.</i>	
Balanced reporting	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • All available relevant information is presented.
Other substantive exploration data	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • See the main body of this report for all pertinent observations and interpretations.
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<p>Future planned exploration includes:</p> <ul style="list-style-type: none"> • Airborne EM (VTEM) • Ground Gravity • Phase 2 drilling