LITCHFIELD MINERALS LIMITED

WWW.LITCHFIELDMINERALS.COM.AU

LMS.ASX

ASX Announcement | 8th October 2024

LITCHFIELD SECURES STRATEGIC COPPER-GOLD-BASE METALS PORTFOLIO IN NORTHERN TERRITORY

Highlights

- The portfolio includes the **Oonagalabi (Cu-Zn-Au)** deposit, **notable drill intercepts at Oonagalabi include 36.6m @ 1.0% Cu and 1.7% Zn** (PDH-L, from 1.5m depth), **gold** was also sampled over three 1.5m intervals **in this hole and averaged 1g/t**. Several other drill holes also intersected mineralisation near the surface.

- **Historical drilling at Oonagalabi missed the majority of the induced polarisation anomalies, which were identified in 2008**, providing Litchfield Minerals with several untested targets to explore.

- Drilling at the **Oonagalabi sediment-hosted Cu-Zn-Au** deposit (22 holes) **has defined a large mineralised system over 1.5km with mineralisation still open along strike** to the north and south along a northeast-trending fold hinge.

- Oonagalabi **shares many geological similarities to the Jervois Base Metal deposit**, located 150km to the northeast (23.8Mt @ 2.02% Cu, 0.25 g/t Au, 25.3 g/t Ag)[1].

- The package also includes the **Paradise Well (Cu-Au, REE)** prospect 120km east of Alice Springs and **Silver Valley (Ag-Cu-Pb)** prospect 300km northeast of Alice Springs.

- Paradise Well has historic rock chip values up to **8.9% Cu and 2.2 g/t Au** and hosts several monazite rich areas (REE potential).

- Silver Valley shows good potential for structurally controlled silver and base metals mineralisation with rock chips up to **554 g/t Ag, 20% Pb and 11.9% Cu**.

- Litchfield has secured this prime portfolio of copper-gold and base metals assets in the **NT for $200,000**.

[1] *Jervois Base Metal Project — KGL RESOURCES*

Litchfield Minerals Limited (**"Litchfield"** or the **"Company"**) **(ASX:LMS)**, a company with a strategic emphasis on critical minerals, is pleased to announce the acquisition of a copper, gold and base metals portfolio.

Managing Director and CEO, Matthew Pustahya, commented:

"We've made a strategic move to quickly secure this asset package at what we believe is a pivotal moment in the market cycle. The last time this portfolio changed hands it commanded a significantly higher price, despite minimal additional exploration work being conducted since then.

The opportunity at the Oonagalabi Project and the broader portfolio presents a fantastic prospect for Litchfield Minerals to significantly expand our footprint in the Northern Territory's base and precious metals sector. The acquisition of this asset package not only aligns with our strategic emphasis on copper, base metals and gold but also demonstrates our ability to secure high-value prospects for extraordinary value.

The Oonagalabi Project, which already hosts extensive copper-zinc mineralisation over a 1.5km strike length, offers untapped exploration potential, particularly with its similarities to the nearby Jervois Base Metal deposit. With known targets and untested induced-polarisation anomalies identified, we see this as an opportunity to uncover significant mineralisation, with the potential to position us for substantial discoveries and growth in the near future.

This acquisition demonstrates our unwavering commitment to creating long-term shareholder value. We've also taken on board the feedback from our shareholders, many of whom have encouraged us to expand our focus to include prospects with silver and gold potential. This acquisition does just that.

While we remain highly confident in the prospects at Mount Doreen, with our ground EM surveys and another drilling campaign set for the remainder of this year, this new addition strengthens our pipeline of high-quality projects. A successful exploration company thrives on having a robust project pipeline, and we weren't going to let this opportunity slip through our hands.

With our proven drive to explore and our technical capabilities, we are poised to deliver strong results within this portfolio. The rising demand for base and precious metals, driven by global inflation, infrastructure expansion, and the clean energy transition, positions us perfectly to capitalise on the future. We are confident this acquisition will be another key driver of growth and success for Litchfield Minerals."

Oonagalabi (EL32279)

The Oonagalabi Project, along with Paradise Well to the south, are located in central Australia, 120km east of Alice Springs, within a high potential zone for IOCG-type mineralisation as define within the Geoscience Australia Exploring For The Future Program (Figures 1 and 2).

The Oonagalabi prospect offers an exciting opportunity to expand **an already large mineralised system** by testing blind shallow targets and drill-testing at depth. Known mineralisation is stratabound within a complexly folded northeast-trending anticline. Base metals mineralisation is predominantly hosted in marble and calc-silicate units, which are commonly malachite stained and can be mapped along strike for 3km.

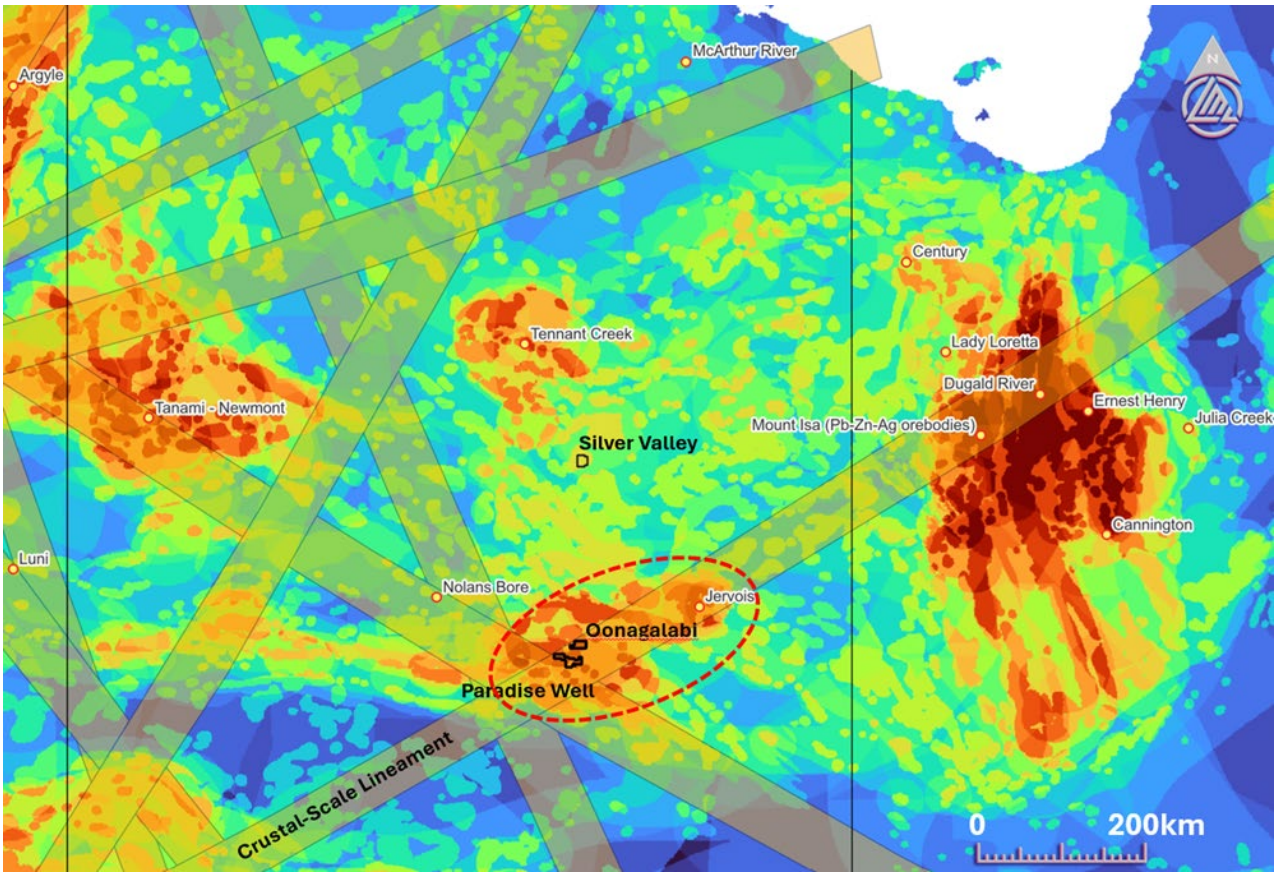

Figure 1. *Geoscience Australia's IOCG mineral potential map showing the Oonagalabi and Paradise Well projects falling within a regionally significant zone of high IOCG prospectivity. Also shown are crustal-scale gravity lineaments.*

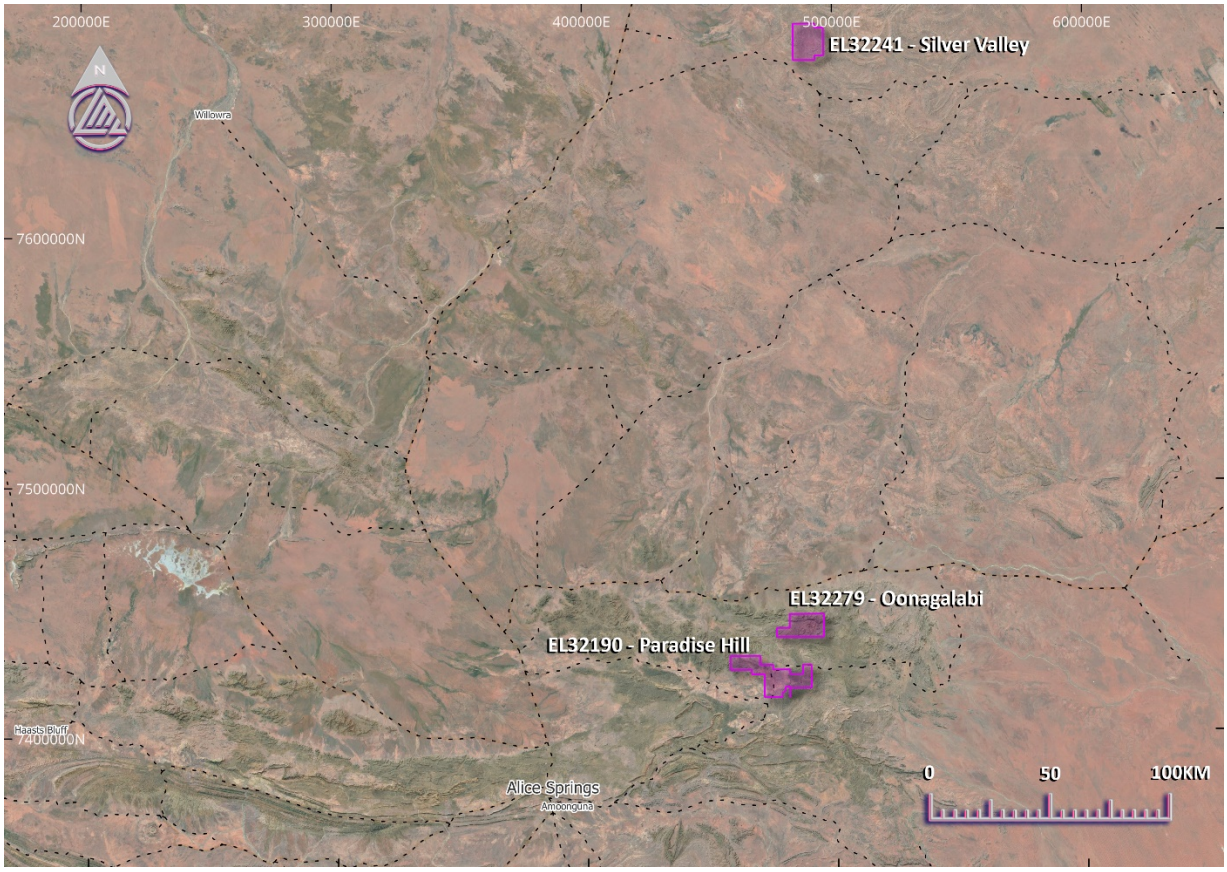

***Figure 2**. Location of the Oonagalabi, Paradise Hil & Silver Valley tenements.*

Known for its consistent copper and zinc sulphide mineralisation, Oonagalabi has already produced impressive historical results across a 1.5km area in 22 historic drill holes, of which 21 were drilled between 1970 and 1981 (Figures 3 and 4, Appendix 1).

- **36.6m @ 1.0% Cu and 1.7% Zn (PDH-L, from 1.5m)**
- **20m @ 1.71% Zn, 0.24% Cu (ONT79-2, from 200m)**
- **24m @ 1.5% Zn and 0.64% Cu (RPO-2, from 138m to EOH)**
- **12.2m @ 2.19% Zn (PDH-B, from 4.6m)**
- **5m @ 1.26% Cu, 1.22% Zn (ONT79-1, from 70m)**

Oonagalabi bears striking geological similarities to the Jervois Cu-Au-Ag deposit, which is 150km to the northeast (23.8Mt @ 2.02% Cu, 0.25 g/t Au, 25.3 g/t Ag[2]). At Jervois, high grade mineralisation was remobilised and deposited into structural breccia zones during a later deformation event. At Oonagalabi, potential for sulphide-rich, conductive zones was not

[2] *Jervois Base Metal Project — KGL RESOURCES*

assessed by previous exploration efforts and remains a high priority target to Litchfield Minerals.

Historic exploration has shown a strong correlation between surface soil geochemistry (Cu, Pb, Zn, Ag) and induced polarisation chargeability. **In 2008, Silex carried out a pole-dipole induced polarisation survey over a 2.5km by 2km area, revealing that historical drilling had not intersected these anomalies, leaving large zones of high chargeability undrilled**. The most prospective host rocks are concealed beneath the eastern limb of the northeast-trending anticline.

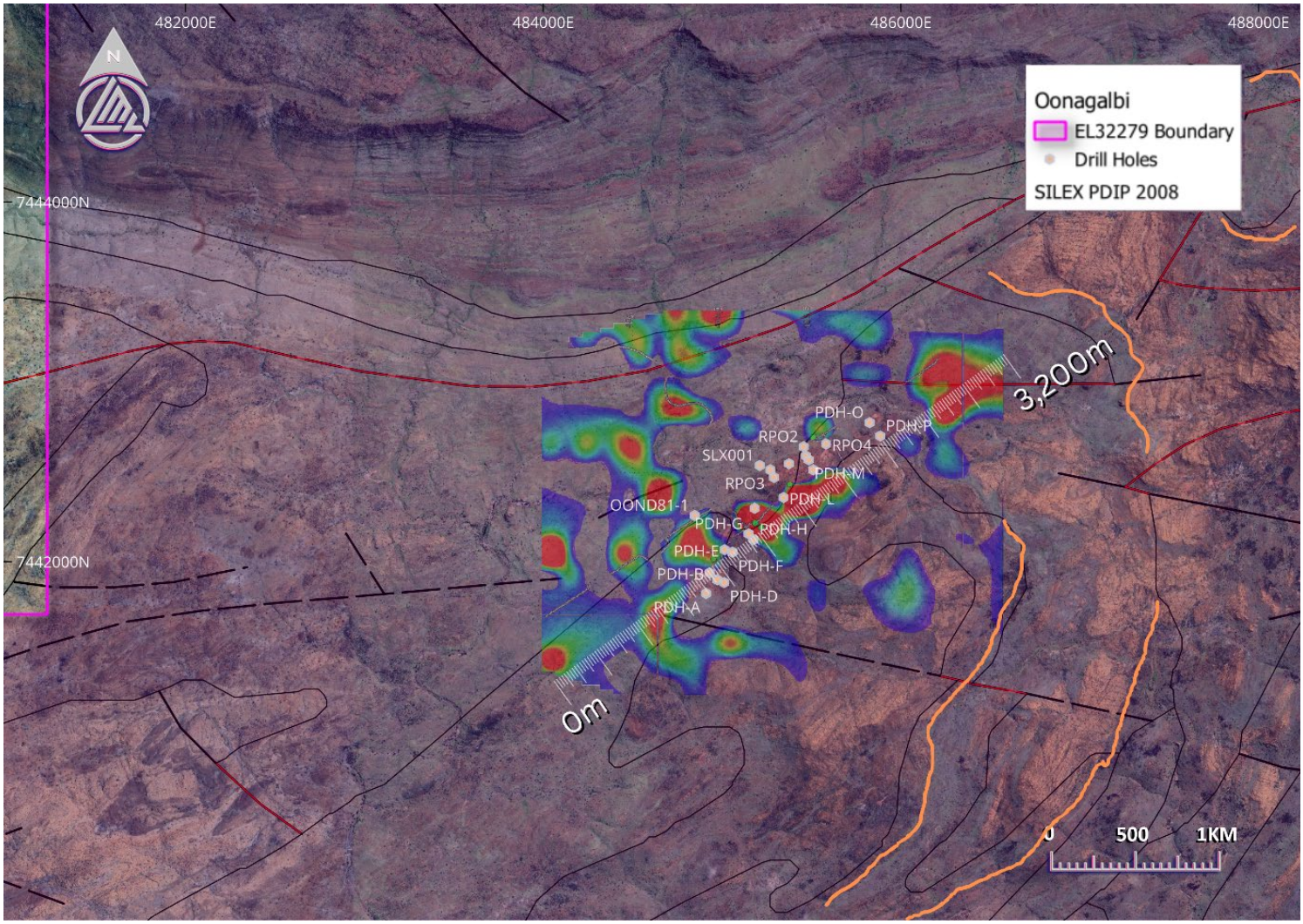

Figure 3. *Location of historic drill holes overlayed with the 2008 PDIP survey conducted with Silex. Orange zones are also highlighted as potential mineralised zones further IP should be conducted over.*

Litchfield intends to complete further IP to define the full extent of the sediment-hosted mineralisation and then fly a VTEM survey & ground EM to define any potential high-grade breccia zones ahead of a drilling campaign.

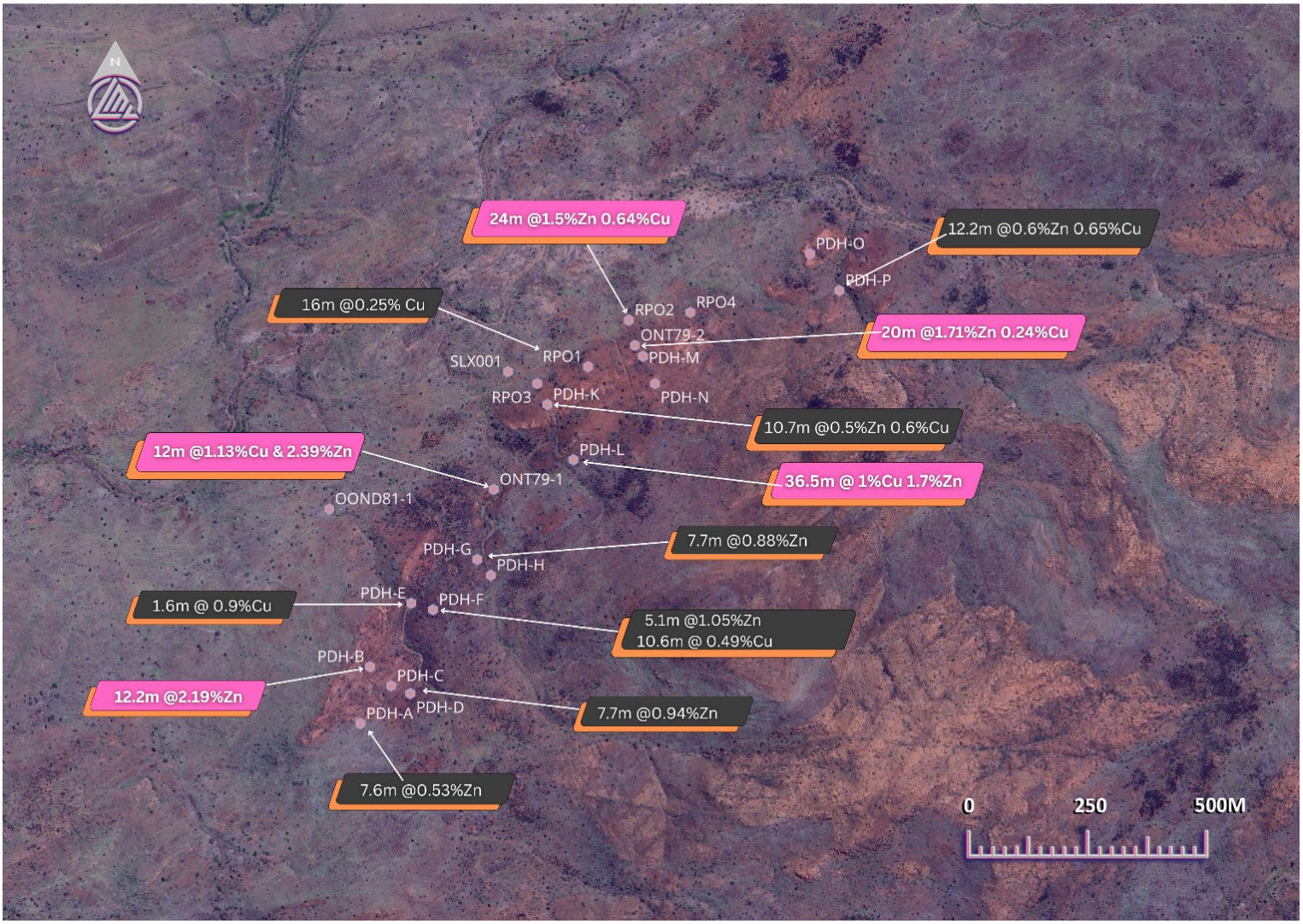

***Figure 4**. Oonagalabi historic drilling showing mineralisation over a 1.5km strike. Opportunities to expand mineralisation exist at depth (shallow historic drilling) and with testing blind IP chargeability anomalies on the eastern limb of the anticline.*

Paradise Well

The Paradise Well Copper-Gold prospect, (EL32190), is situated approximately 10km south of the Oonagalabi exploration licence, covering an area of ~250km².

Historical rock chip sampling has identified two high-potential prospects within the tenement: the Manny Prospect, which returned grades of up to **8.88% Cu**, and the New Paradise Well Prospect, with copper and gold grades up to **6.24% Cu and 2.15 g/t Au**. Several potentially significant monazite occurrences have been identified with concentrations ranging from **5-40% monazite**[3]**.** Monazite is a rare earth element-bearing mineral and significantly elevates the REE exploration potential of the Paradise Well Project.

[3] https://geoscience.nt.gov.au/gemis/ntgsjspui/handle/1/65143

These targets remain undrilled with no ground-based historical geophysics. Litchfield will initially complete a detailed airborne magnetic survey to define potential IOCG targets.

Silver Valley

The Silver Valley Copper-Gold-Silver-Lead prospect (EL32241) is an exciting asset located approximately 300km north of the Oonagalabi Project (Figure 5), within the highly prospective Davenport Province. This region, known for its Paleoproterozoic shallow marine sedimentary rocks and volcanic units, hosts four outcropping lead and silver-bearing quartz veins that have been historically mined through pits and shafts. The tenement includes the highly promising Chablo Prospect, with strong potential for lead, silver, copper and gold discoveries. Recent rock chip sampling has returned outstanding results, including assays of up **to 554 g/t Ag, 20% Pb, 11.9% Cu, and 2 g/t Au**. Mineralised veins remain undrilled and the broader system has not been tested with ground geophysical techniques. Potential remains to discover the larger causative mineralised system at depth within a dome structure below the outcropping Pb-Ag veins.

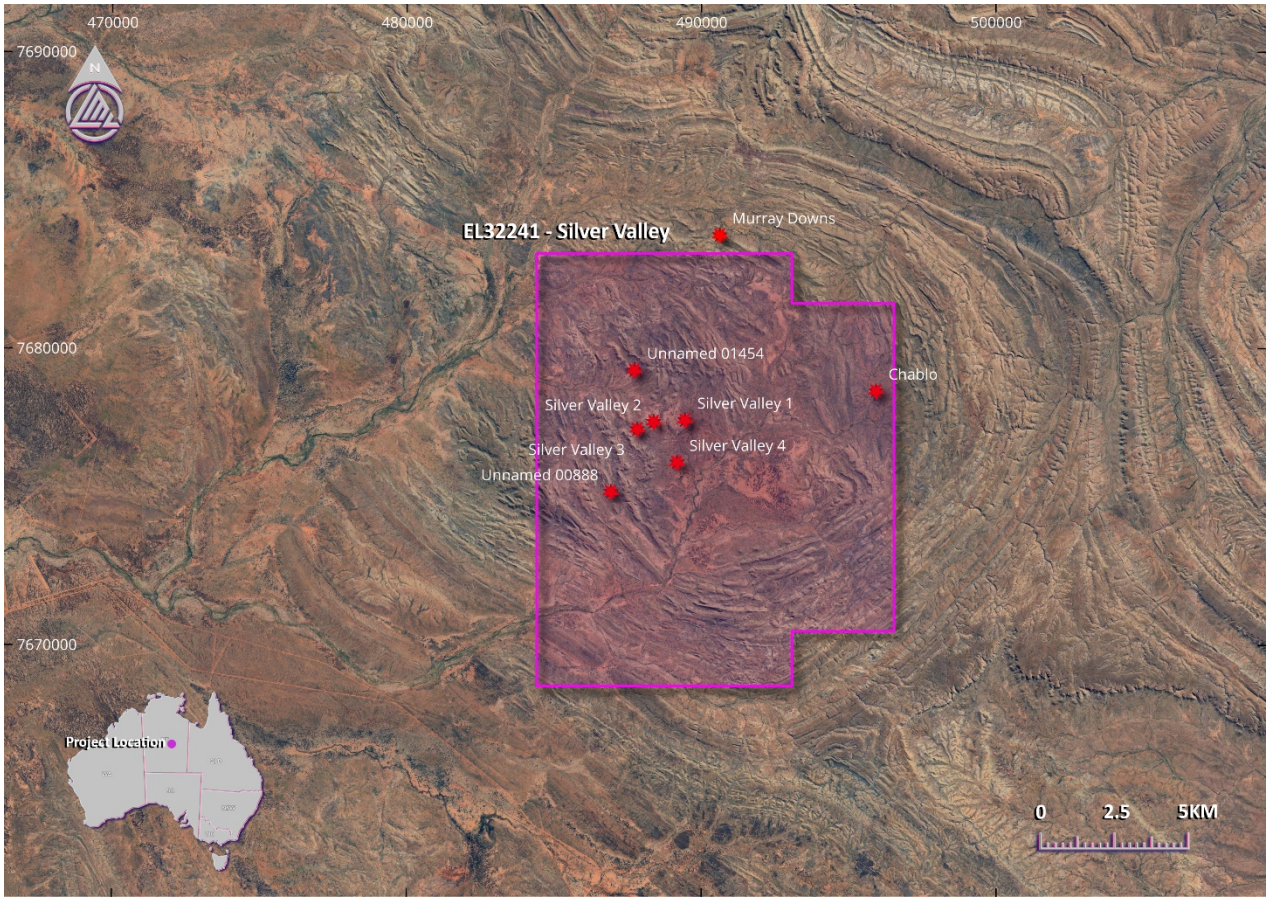

Figure 5. *EL32241 Silver Valley tenement with mineralised locations.*

Transaction details

The transaction allows for the acquisition of the portfolio from Comet Resources Limited, who are not a related party, nor are they a shareholder of the Company. The key terms are summarised below:

- The Company has entered into a binding terms sheet with Comet Resources Ltd (ACN 060 628 202) (the **Vendor**) to acquire all of the shares (**Sale Shares**) in Kalk Exploration Pty Ltd (ACN 634 749 429) (**Kalk**).
- Kalk is the holder of the following exploration licenses in the Northern Territory: Paradise Well EL32190, Oonagalabi EL32279 and Silver Valley EL32241.
- The Company has agreed to pay AUD $200,000 in cash for the Sale Shares.
- The Acquisition is conditional upon the Company obtaining all necessary regulatory approvals including from ASX if required. Completion is anticipated to occur in mid to late October 2024.
- The purchase of the Sale Shares is on the basis that Kalk is cash free and debt free with usual warranties and terms for an agreement of this nature.

Cautionary Statement

Conductive targets presented in this announcement are preliminary in nature and were identified using historical field data and information. In additon, traversing, modelling and drilling is required to better understand all the deposits.

Forward looking statement

This announcement may include forward-looking statements, which are subject to risks and uncertainties. Actual results could differ significantly due to factors beyond LMS's control, including market conditions and industry-specific risks. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. No warranty is given regarding the completeness of the information provided. Please avoid placing undue reliance on forward-looking statements, as they reflect views only as of the announcement date.

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 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

Appendix 1

Oonagalabi Historical Drillholes (Comet Resources ASX Announcement 19/03/2021)

DrillHole ID	Hole Name	Drilling Method	Total Depth (m)	Date Completed	Dip	Azimuth	Intervals
2192096	RPO3	Percussion	158.0	11/12/1978	-65	148	12m @ 0.19% Cu, 0.23% Zn from 118m
2327867	PDH-F	Percussion	40.3	12/06/1971	-90		5.1m @ 1.05% Zn from 10.7m: 10.6m @ 0.59% Zn & 0.49% Cu from 36.6m
2327871	PDH-G	Percussion	33.6	10/06/1971	-90		7.7m @ 0.88% Zn from 3m: 1.6m @ 1.47% Zn from 27.4m
2327855	PDH-C	Percussion	56.4	13/06/1971	-90		1.6m @ 0.54% Zn from 3m
2327859	PDH-D	Percussion	39.7	15/06/1971	-90		7.7m @ 0.94% Zn from 9.1m
2327847	PDH-A	Percussion	19.8	14/06/1971	-90		7.6m @ 0.53% Zn from 0m
2327851	PDH-B	Percussion	32.0	14/06/1971	-90		12.2m @ 2.19% Zn from 4.6m
2327875	PDH-H	Percussion	18.0	9/06/1971	-90		NSI
2327838	ONT79-2	Diamond Drill	241.0	9/10/1979	-60	148	20m 1.71% Zn, 0.24% Cu from 200m
2327843	OOND81-1	Percussion	180.2	20/08/1981	-90		NSI
2327879	PDH-K	Percussion	51.9	15/06/1971	-90		10.7m @ 0.56% Zn & 0.6% Cu from 18.3m
2192076	PDH-N	Percussion	54.0	17/06/1971	-90		NSI
2192080	PDH-O	Percussion	39.3	19/06/1971	-90		NSI
2327883	PDH-L	Percussion	90.0	16/06/1971	-90		36.5m @ 1.7% Zn & 1% Cu from 1.5m
2192100	RPO4	Percussion	134.0	13/12/1978	-65	148	NSI
2192084	PDH-P	Percussion	61.0	20/06/1971	-90		3m @ 0.53% Cu from 4.6m: 12.2m @ 0.6% Zn & 0.65% Cu from 12.2m
2327834	ONT79-1	Diamond Drill	128.0	22/09/1979	-60	148	5m @ 1.26% Cu & 1.22% Zn from 70m
2327887	PDH-M	Percussion	43.3	16/06/1971	-90		NSI
2327863	PDH-E	Percussion	47.3	10/06/1971	-90		1.6m @ .9% Cu from 9.1m
2192092	RPO2	Percussion	162.0	10/12/1978	-65	148	6m @ 0.89% Cu from 102m and 24m @ 0.63% Cu & 1.5% Zn from 138 to EOH including 14m @ 0.71% Cu
2192088	RPO1	Percussion	80.0	9/12/1978	-65	148	16m 0.25% Cu, 0.14% Zn from 16m
7963300	SLX001	Diamond Drill	500.7	12/08/2009	-55	133	2m @ 0.52% Cu, 1.39% Zn from 73m

Appendix 2

Paradise Well Rock Chips (Core Exploration Ltd. Annual Technical Report EL27369 'Mt Russell', 31/03/2014)

SampleID	Easting	Northing	Date	Observations	Prospect	Au_ppm	Ag_ppm	Cu_ppm
1220	482307	7419385	18/02/2014	malachite + mod grained garent ~2mm + qrtz+ carb unit along general trend ~300 degrees, along strike of separate mineralised trend away from 'main' trend	New Paradise Well	0.03	10.7	36594
1239	482266	7419415	3/04/2014	malachite staining + interstital to 2-5mm garnets in qrtz + mica band, striking ~130 (NW) 40-50cm wide surrounded by amphibolite	New Paradise Well	1.04	19.7	27830
1240	482262	7419417	3/04/2014	malachite + chrisicola high tenor Cu in 2-5mm garnet with malachite +- carb +- qrtz + feld	New Paradise Well	2.15	41	62356
1241	482258	7419417	3/04/2014	malachite moderate tenor in 2-8mm garnets + qrtz with malachite interstital +- feld + micas	New Paradise Well	0.28	5.1	18636
1242	482261	7419420	3/04/2014	malachite stained + interstital to 2-5mm garnet rich wthered unit adjacent to foliated amphibolite	New Paradise Well	0.15	9.4	38454
1243	482261	7419410	3/04/2014	malachite staining + interstital in 2-3mm grained garnet with qrtz + feld + mica	New Paradise Well	0.15	8.9	26182
1244	482262	7419479	3/04/2014	at contact between foliated amphibolite (to east) weakly magnteic and hematite altered garnet + qrtz granite/melt (to west) contact ~160, qrtz + garent + mica + malachite unit	New Paradise Well	0.06	6.1	17233
1285	485825	7418762	2/07/2014	high tenue malachite with v.c.g biotite + c.g qrtz feld, adjacent to magnetic amphibolite	Manny	0.21	4.4	64959
1286	485838	7418788	2/07/2014	high tenue malachite + azurite in veins + staining of f.g granite qrtz + feld + fe oxide, 1-3mm crystals	Manny	0.04	3.7	88468
1287	485850	7418790	2/07/2014	in situ blue azurite + malachite in moderately magnetic f.g 1-3mm magnetite + qrtz + feld + garnet gneiss?	Manny	0.02	1.8	21484
1288	485864	7418798	22/07/2014	moderate tp strong magnet response, dense, f.g 1-2mm magnetite + high lusture black biotite + qrtz + feld + malachite =- minor azurite rich veins ~2mm, adjacent to moderate grained magnetic amphibolite	Manny	0.06	6.7	53836
1289	485849	7418787	22/07/2014	malachite + azurite <2mm veins in f.g - m.g 1-3mm magnetite + qrtz + feld + bio f.g amphibolite?	Manny	0.05	3.9	60518
1290	485829	7418784	22/07/2014	malachite veining in f.g - m.g 1-2mm magnetite bearing unit with qrtz + feld + bio matic? F.g magnetic felsic? intermediate matic?	Manny	0.08	11.4	85841
1291	485739	7418755	22/07/2014	further west of Manny, magnetite 1-3mm bearing f.g amphibolite? Magnetic felsic? With malachite rich veins <2mm variably orientated	Manny	0.07	8.4	64213

Appendix 3

Silver Valley Rock Chips (AMI Resources Pty. Ltd. Final Report on Mineral Tenement EL27965, Jan 2016)

Sample_ID	Sample_code	Easting	Northing	Ag g/t	Cu %	Pb %	Au g/t
SIV1-01	rock	489406	7677498	0.0	0.0	0.0	0.0
SIV1-02	rock	489406	7677498	0.0	0.0	0.0	0.0
SIV1-03	rock	489371	7677431	0.0	0.0	0.0	0.0
SIV1-04	rock	489330	7677529	0.0	0.0	0.0	0.0
SIV1-05	rock	489367	7677576	0.0	0.0	0.0	0.0
SIV1-06	rock	489338	7677667	2.7	0.1	0.0	0.2
SIV1-07	rock	489347	7677634	30.2	0.1	0.0	0.4
SIV2-01	rock	488475	7677398	0.0	0.0	0.0	0.0
SIV2-02	rock	488482	7677480	63.2	0.1	1.8	0.0
SIV2-03	rock	488486	7677405	0.0	0.0	0.0	0.0
SIV2-04	rock	488404	7677506	9.8	0.0	0.0	0.0
SIV2-05	rock	488426	7677536	0.0	0.0	0.0	0.0
SIV2-06	rock	488411	7677538	2.2	0.0	0.0	0.0
SIV2-07	rock	488313	7677535	0.0	0.0	0.0	0.0
SIV2-08	rock	488291	7677526	0.0	0.0	0.0	0.0
SIV2-09	rock	488310	7677441	0.0	0.0	0.0	0.0
SIV2-10	rock	488308	7677284	0.0	0.0	0.0	0.0
SIV3-01	rock	487826	7677299	24.0	0.0	3.0	0.0
SIV3-02	rock	487809	7677283	2.1	0.0	0.2	0.0
SIV3-03	rock	487788	7677275	11.4	0.1	3.2	0.0
SIV3-04	rock	487808	7677345	4.5	0.0	0.4	0.0
SIV4-01	rock	489126	7676200	1.5	0.0	0.0	0.0
SIV4-02	rock	489123	7676124	8.7	0.0	0.1	0.0
DVPRK01	Rock	489297	7672855	0.0	0.0	0.0	0.0
DVPRK02	Rock	489236	7672640	0.0	0.0	0.0	0.0
DVPRK03	Rock	489287	7672842	0.0	0.0	0.0	0.1
DVPRK04	Rock	488971	7673167	0.0	0.0	0.0	0.0
DVPRK05	Rock	488970	7673169	0.0	0.0	0.0	0.0
DVPRK06	Rock	488953	7673196	0.0	0.0	0.0	0.0
DVPRK07	Rock	490688	7672783	0.0	0.0	0.0	0.0
DVPRK08	Rock	490689	7672763	0.0	0.0	0.0	0.0
SV1-01	rock	489330	7677663	2.1	0.0	0.0	0.1
SV1-02	rock	489487	7677614	4.6	0.4	0.0	0.1
SV1-03	rock	489422	7677570	1.8	0.4	0.0	0.7
SV1-04	rock	489406	7677498	0.0	0.0	0.0	0.0
SV1-05	rock	489371	7677431	0.0	0.0	0.0	0.0
SV1-06	rock	489367	7677576	0.0	0.0	0.0	0.0
SV2B-1	rock	488745	7677518	2.6	0.0	0.0	0.1
SV2B-2	rock	488644	7677508	1.1	0.0	0.0	0.0
SV2M-1	rock	488434	7677667	54.8	0.1	7.9	0.1
SV2M-2	rock	488421	7677725	554.0	11.2	20.0	0.1
SV2M-3	rock	488422	7677716	16.5	0.1	0.6	0.0
SV2M-4	rock	488429	7677721	18.1	0.3	0.7	0.0

Sample_ID	Sample_code	Easting	Northing	Ag g/t	Cu %	Pb %	Au g/t
SV2N-2	rock	488617	7677847	3.5	0.1	0.4	0.0
SV2N-3	rock	488546	7677938	14.5	0.1	3.5	0.7
SV2S-1	rock	488482	7677480	63.1	0.1	1.8	0.0
SV2S-2	rock	488404	7677506	9.8	0.0	0.0	0.0
SV2S-3	rock	488411	7677538	2.2	0.0	0.0	0.0
SV2S-4	rock	488313	7677535	0.5	0.0	0.0	0.0
SV2S-5	rock	488308	7677284	0.5	0.0	0.0	0.0
SV2S-6	rock	487811	7677371	1.1	0.0	0.0	0.0
SV3-01	rock	487869	7677190	2.8	0.0	0.1	0.0
SV3-02	rock	487824	7677280	0.9	0.0	0.1	0.0
SV3-03	rock	487826	7677299	24.0	0.0	3.0	0.0
SV3-04	rock	487808	7677345	4.5	0.0	0.4	0.0
SV3-05	rock	489129	7676172	12.0	0.0	0.0	0.2
SV4-01	rock	489126	7676200	1.5	0.0	0.0	0.0
SV4-02	rock	489123	7676124	8.7	0.0	0.1	0.0
DVPRK01	Rock	489297	7672855	0.0	0.0	0.0	0.0
DVPRK02	Rock	489236	7672640	0.0	0.0	0.0	0.0
DVPRK03	Rock	489287	7672842	0.0	0.0	0.0	0.1
DVPRK04	Rock	488971	7673167	0.0	0.0	0.0	0.0
DVPRK05	Rock	488970	7673169	0.0	0.0	0.0	0.0
DVPRK06	Rock	488953	7673196	0.0	0.0	0.0	0.0
DVPRK07	Rock	490688	7672783	0.0	0.0	0.0	0.0
DVPRK08	Rock	490689	7672763	0.0	0.0	0.0	0.0
DVPRK09	Rock	489396	7677639	15.2	0.0	0.0	0.4
DVPRK10	Rock	489455	7677631	0.0	0.0	0.0	0.0
DVPRK11	Rock	489377	7677668	4.8	0.0	0.0	0.1
DVPRK12	Rock	489378	7677666	3.9	0.0	0.0	0.1
DVPRK13	Rock	488644	7677507	100.0	0.1	1.0	0.4
DVPRK14	Rock	488644	7677507	4.4	0.0	0.7	0.0
DVPRK15	Rock	488405	7677530	5.0	0.0	0.2	0.0
DVPRK16	Rock	488406	7677514	2.3	0.0	0.0	0.0
DVPRK17	Rock	487732	7679285	1.0	0.0	0.0	0.0
DVPRK18	Rock	487731	7679285	0.0	0.0	0.0	0.0
S13-001	rock	489383	7677651	9.7	0.0	0.0	0.2
S13-002	rock	489350	7677683	2.1	0.0	0.0	0.1
S13-003	rock	488475	7677398	0.0	0.0	0.0	0.0
S13-004	rock	488486	7677405	0.0	0.0	0.0	0.0
S13-005	rock	488426	7677536	0.0	0.0	0.0	0.0
S13-006	rock	488431	7677674	56.1	0.8	3.6	0.2
S13-007	rock	488421	7677725	554.0	11.9	20.0	0.1
S13-008	rock	488422	7677716	16.5	0.1	0.6	0.0
S13-009	rock	488429	7677721	18.1	0.3	0.7	0.0
S13-010	rock	487811	7677371	1.1	0.0	0.0	0.0
S13-011	rock	487869	7677190	2.8	0.0	0.1	0.0
S13-012	rock	489129	7676172	12.0	0.0	0.0	0.2
S13-013	rock	487474	7679036	1.4	0.0	0.0	0.1

Sample_ID	Sample_code	Easting	Northing	Ag g/t	Cu %	Pb %	Au g/t
S13-014	rock	488546	7677938	14.9	0.1	3.5	0.7
S13-015	rock	489353	7677855	0.8	0.0	0.1	0.0
D877-H1	rock	489487	7677614	4.4	0.4	0.0	0.1
D877-H2	rock	489422	7677570	1.8	0.4	0.0	0.8
D877-H3	rock	489428	7677522	0.0	0.0	0.0	0.0
D877-H4-1	rock	489406	7677498	0.0	0.0	0.0	0.0
D877-H4-2	rock	489406	7677498	0.0	0.0	0.0	0.0
D877-H5	rock	489371	7677431	0.0	0.0	0.0	0.0
D877-H6	rock	489330	7677529	0.0	0.0	0.0	0.0
D877-H7	rock	489367	7677576	0.0	0.0	0.0	0.0
D877-H8	rock	489338	7677667	0.0	0.1	0.0	0.2
D877-H9	rock	489347	7677634	30.2	0.1	0.0	0.4
D887-H1	rock	488745	7677518	2.6	0.0	0.0	0.1
D888-H1	rock	488697	7677547	51.9	0.1	3.0	0.2
D889-H1	rock	488644	7677506	1.1	0.0	0.0	0.0
D890-H1	rock	488482	7677480	63.2	0.1	1.8	0.0
D891-H1	rock	488404	7677506	9.8	0.0	0.0	0.0
D891-H2	rock	488411	7677538	2.2	0.0	0.0	0.0
D893-H1	rock	488313	7677535	0.0	0.0	0.0	0.0
D894-H1	rock	488291	7677526	0.0	0.0	0.0	0.0
D895-H1	rock	488310	7677441	0.0	0.0	0.0	0.0
D896-H1	rock	488308	7677284	0.0	0.0	0.0	0.0
D897-H1	rock	488615	7677875	29.9	0.1	1.0	0.0
D899-H1	rock	488617	7677847	3.5	0.1	0.4	0.0
D900-H1	rock	488434	7677887	54.6	0.1	1.0	0.0
D901-H1	rock	488417	7677724	100.0	1.0	1.0	0.0
D902-H1	rock	488404	7677704	100.0	0.0	1.0	0.0
D903-H1	rock	487855	7677284	56.9	0.0	1.0	0.0
D904-H1	rock	487842	7677279	13.9	0.0	1.0	0.0
D905-H1	rock	487824	7677280	0.9	0.0	0.1	0.0
D907-H1	rock	487828	7677299	24.0	0.0	1.0	0.0
D908-H1	rock	487809	7677283	2.1	0.0	0.2	0.0
D909-H1	rock	487788	7677275	11.4	0.1	1.0	0.0
D910-H1	rock	487808	7677345	4.5	0.0	0.4	0.0
D912-H1	rock	489128	7676173	7.7	0.0	0.0	0.0
D913-H1	rock	489126	7676200	1.5	0.0	0.0	0.0
D914-H1	rock	489123	7676124	8.7	0.0	0.1	0.0
ROSS2-1	rock	488644	7678027	2.0	4.6	0.0	2.0
ROSS2-2	rock	488644	7678027	0.2	0.3	1.0	0.0
ROSS3	rock	487753	7679313	0.0	0.1	1.0	0.0

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 (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or*	**EL32279 Oonagalabi** • Drill cuttings and diamond core samples were obtained from Reverse Circulation (RC) drilling (18 holes) and diamond drilling (four holes: ONT79-1,ONT79-2, OOND81, SLX001). • RC drilling occurred in two phases: 14 holes drilled in 1971 for Russgar Mining NL (drillhole prefix "PDH", reference report CR1973-0067); 4 holes drilled from 1978-81 for Kinex Pty Ltd (drillhole prefixes "RPO", reference CR1980-0016). • The Russgar holes collected samples in 5-foot intervals; the Kinex holes collected samples in 2m intervals; HQ and NQ diamond core was sampled on 0.5m, 1m and 2m intervals.

Criteria	JORC Code explanation	Commentary
	mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	**ELA32190 Paradise Well** Core Exploration Ltd (ASX:CXO) undertook rock chip sampling, reconnaissance mapping and prospecting in 2014. Samples were taken of newly identified lithological units or when alteration, veining or mineralisation was observed. Results (including JORC 2012 Table 1) were released in CXO announcements dated 17-3-2014 and 11-8-2014. **ELA32241 Silver Valley** • AMI Resource collected 130 rock chip samples from 2011-2015 targeting historic workings and observed mineralisation (references 2011-2015 Annual Technical reports for EL27965).
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Reverse Circulation (RC) drilling (18 holes) and diamond drilling (four holes). • Diamond drilling was used to collect HQ then NQ diameter core. • For SLX001 diamond drilling, downhole Eastman camera surveys were undertaken on approximately 30m intervals.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure*	• For historical RC drillholes, no sample recovery information recorded and no historical information available to determine any sample bias.

Criteria	JORC Code explanation	Commentary
	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.*	• For ONT79-1, ONT79-2, OOND81 diamond holes no information is provided for core handling procedures or sample recovery. • For SLX001 diamond drilling, drill core was first metre-marked, then block-to block recovery and Rock Quality Designator (RQD) were calculated. • For SXL001 diamond drilling, a bottom-of-hole orientation line, with tick marks pointing down hole, was drawn onto the core from 30m to end-of-hole (EoH) DD recoveries were assessed by comparing run length/drilled length on core blocks to length of core in trays. Data was recorded in geological logs.
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.*	• For historical RC drillholes, details of sample size, splitting, preparation and quality control procedures are not available. • For diamond drilling, ONT79-1, ONT79-2, OOND81 had selected half core samples collected; SLX001 had selected one-metre samples and some half-metre (character) samples taken in the uppermost 300m with two-metre composite samples taken from 300m to EoH.

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.*	• 2m sub-samples were collected from percussion holes by a rotary splitter. • Splitter was cleaned regularly to reduce contamination between samples. • For historical RC drillholes, details of sample size, splitting, preparation and quality control procedures are not available. • For diamond drilling, ONT79-1, ONT79-2, OOND81 had selected half core samples collected; SLX001 had selected one-metre samples and some half-metre (character) samples taken in the uppermost 300m with two-metre composite samples taken from 300m to EoH.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards,*	**EL32279 Oonagalabi** • RC Drilling ("PDH" series) were analysed at Spectrum Analytical Laboratories via Atomic Absorption Spectrometry (AAS) with hydrochloric/nitric/perchloric acids for Cu, Pb, Zn, Ni and hydrochloric/nitric acids for Au and Ag. Check assaying by Geochemical and Mineralogical Laboratories, Amdel and Spectrum Analytical Laboratories.

Criteria	JORC Code explanation	Commentary
	blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• RC drilling ("RPO" series) and diamond holes ONT79-1, ONT79-2, were assayed by AAS technique for Cu, Pb, Zn, Ag) (laboratory not recorded). • OOND81 Diamond core was analysed using AAS at ALS Brisbane for Cu, Pb, Zn, Ag and Au. • SLX001 Diamond core was analysed at ALS-Chemex (Alice Springs) for Au via method AA22 and other elements via method ME-ICP41: aqua regia digest followed by Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES). • SLX001 Diamond drill core samples had analytical blanks and standards inserted into the sample stream at approximately a 1-in-20 frequency; ALSChemex introduced its own triple quartz flush at the start of each sample batch. **ELA32190 Paradise Well** • Rock Chip samples were sent to Genalysis for 4 Acid Digest Mass Spectrometry (4A/MS) and 4 Acid Digest Inductively Coupled Plasma Optical Emission Spectrometry (4A/OES). **ELA32241 Silver Valley**

Criteria	JORC Code explanation	Commentary
		• Rock chip samples analysis by ALS using Au-AA25 fire assay and ME-MS23 (ICP-MS).
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.*	• All drilling information is recorded from historical company reports (CR1973-0067, CR1980-0016, CR1981-0296 and ML22624_2009_Collaboration report), which are publicly available through the Northern Territory mine department. • No independent data verification procedures are recorded for historical drilling. • No twinned holes have been recorded Samples collected in feet have been converted (5 foot = 1.5m).
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drilling Collar locations are provided in the drilling table with original coordinates converted to GDA94 Z53. These have not been ground-truthed to confirm accuracy. • **Paradise Well & Silver Valley Rock Chips**: coordinate information was collected using handheld GPS utilising GDA94, Zone 53.
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*	• Drill hole spacing was designed to target potential mineralisation as indicated by previous drilling and geological interpretation.

Criteria	JORC Code explanation	Commentary
	estimation procedure(s) and classifications applied. • *Whether sample compositing has been applied.*	• Historical drilling was designed to test below outcropping secondary mineralisation. • The drilling is exploration drilling in nature and not designed for geological and grade continuity calculations. • Drill hole spacing is appropriate for early exploration. • Information available is not sufficient for the estimation of a Mineral Resource.
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.*	• 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 either perpendicular to the lithological strike and dip of the target rock.
Sample security	• *The measures taken to ensure sample security.*	• No security information is available regarding the historical drilling. • **Paradise Well & Silver Valley Rock Chips:** samples were labelled and bagged and sent straight to the geochemistry laboratory.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No known audits or reviews conducted.

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.*	• Tenements include Paradise Well (EL32190), Oonagalabi (EL32279) and Silver Valley (EL32241). for a total of approximately 558 square kilometres. • The tenements are in good standing and there are no known impediments. • All EL's are 100% owned by Kalk Exploration Pty Ltd.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	**Oonagalabi** • 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.

Criteria	JORC Code explanation	Commentary
		• 1979, Amoco completed photo-interpretation, rock chip sampling and drilling (8 holes). • 1981 D'Dor Mining NL completed dipole-dipole IP. • Silex 2009 completed pole-dipole IP 1 x diamond hole. **Silver Valley** • Pb-Ag veins discovered in the 1950's. • 1960's Government Surveys (5 rock chip samples). • Geopeko (mid-1970's) focused on 2 radiometric anomalies. • CRA (late-1970's) focused on uranium exploration. • BHP (1990's) focused on gold exploration using BLEG sampling. • Meekatharra Minerals (1988-1992) completed stream sediment sampling. • Arafura Resources (2004) focused on low-level Au-Ag stream anomalies. • NTGS (2009) completed rock chip sampling. • Spinifex Uranium (2008 – 2012) focused of uranium exploration based on airborne radiometric data. • Southern Dome (2009) collected 8 rock chip samples.

Criteria	JORC Code explanation	Commentary
		• At Silver Valley, AMI Resource took rock chip samples over multiple deployments during 2011-2015 targeting historic workings and observed mineralisation. **Paradise Well** • K.R. Yates 1950's, original RRE-rich rock chip samples. • Pontifex and Associates (1989) 3 high grade monazite rock chips and petrology. • Discovery of radiometric pods. • Regional stream sediment survey (54 samples). • Aerial photography. • Core Exploration Ltd (2014) Collected 506 soil samples, 69 rock chip samples.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Oonalagalbi-type mineralisation is considered sediment-hosted with potential for high-grade remobilised breccia zones similar to the Jervois deposit. The Paradise Well Project is located within a zone of high potential IOCG area and observed surface mineralisation is possibly replated to this mineralisation style. Both projects lie within the Harts Range that represents a package of multiply deformed and metamorphosed sedimentary and igneous intrusive rocks.

Criteria	JORC Code explanation	Commentary
		• Mineralisation at Silver Valley best falls within the intrusion-related base metals type of deposit. Mineralisation is located within the Davenport Province, a folded succession of Paleoproterozoic shallow marine sedimentary rocks and volcanic units. Locally folded around Murray Downs Dome.
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.*	• See drillhole data reported in Appendix 1.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material*	• Weighted averages have been used to produce drill intercepts reported. • No metal equivalence calculations are used in reporting.

Criteria	JORC Code explanation	Commentary
	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.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Only down hole lengths are reported. • The relationship between the mineralisation widths and intercepts lengths require further geological assessment to confirm their relationship. • Downhole lengths are not considered true widths given limited geological understanding. • Paradise Well & Silver Valley Rock Chips: As the geochemical results are from surface any potential depths of mineralisation or orientations can only be inferred from geological observations on the surface and hence are speculative in nature.
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*	• See Figure 3. • Drill hole locations have been determined with hand-held GPS drill hole collar location +/- 5m in X/Y/Z dimensions.

Criteria	JORC Code explanation	Commentary
	of drill hole collar locations and appropriate sectional views.	
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 data is provided in its entirety.
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.*	• No other substantive exploration data has been uncovered that is material for this release.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Future planned exploration includes: • Airborne and ground-based geophysical surveys. • Surface geochemical sampling (soil and rocks). • RC and DD drilling.