2nd MAY 2024

Silver King Copper Prospect at Mt Doreen Enters Drilling Phase

Highlights:

- **Drilling commenced at the Silver King Prospect within the Mount Doreen tenement, Northern Territory.**
- **The maiden Induced Polarisation ("IP") survey conducted in May 2023 identified a strong chargeable zone near the historic copper workings, suggesting a possible sub-vertical, pipe-like structure that could extend to depths, which will be tested in this drilling program.**
- **Drill targets have been identified and a multi-purpose Reverse Circulation ("RC") / Diamond drill rig is on site at the Silver King Copper prospect (figure 1).**



Figure 1 – Drill rig on site at salt bush bore near Silver King.

Litchfield Minerals Limited ("**Litchfield"** or the "**Company"**) (**ASX:LMS**) a company with a strategic emphasis on critical minerals is pleased to announce that maiden drilling program at the Silver King prospect within the Mount Doreen tenement, Northern Territory is currently underway.

Matthew Pustahya, Managing Director commented:

"We are thrilled to announce that we are ready to initiate drilling at the Silver King site with a four-hole drilling campaign, planned, and two additional contingency holes".

The insights from the 2023 IP survey, coupled with historical magnetic data, affirm our confidence that the Silver King area is a great first Copper target for our maiden drilling campaign. We will be drilling a combination of Diamond from surface and then shallow RC collars and then HQ diamond 'tails' in this preliminary round.

We look forward to sharing updates on the drilling results with the market as soon as they are available."

Litchfield is a company with a strategic emphasis on critical minerals with an initial focus on copper exploration, is excited to commence preparations for the maiden drilling program at the Silver King copper prospect within the Mount Doreen tenement, Northern Territory.

The drilling will focus on the copper, gold-silver-lead-zinc deposits within the Lander Rock Formation. A strong chargeability anomaly was defined by gradient array and pole-dipole IP surveys, completed in 2023, which suggests a sub-vertical pipe-like structure, which Litchfield intends to assess with diamond drilling.[1]

These two targets will be tested with four planned RC/diamond holes, with two additional contingent holes if required.

Silver King copper Prospect

The Silver King prospect, located in tenement EL 310305 as shown in **Figure 2**, is characterised by intrusive related, copper-lead-silver mineralisation within a sequence of silicified schist and gneiss, which has been faulted, folded and intruded by pegmatite and aplite dykes.

The mineralisation is exposed at the surface as shown in **Figure 3**, and we are optimistic that fault-displaced repeats or extensions of this mineralisation are present nearby, as potentially highlighted by the IP survey conducted in May 2023.

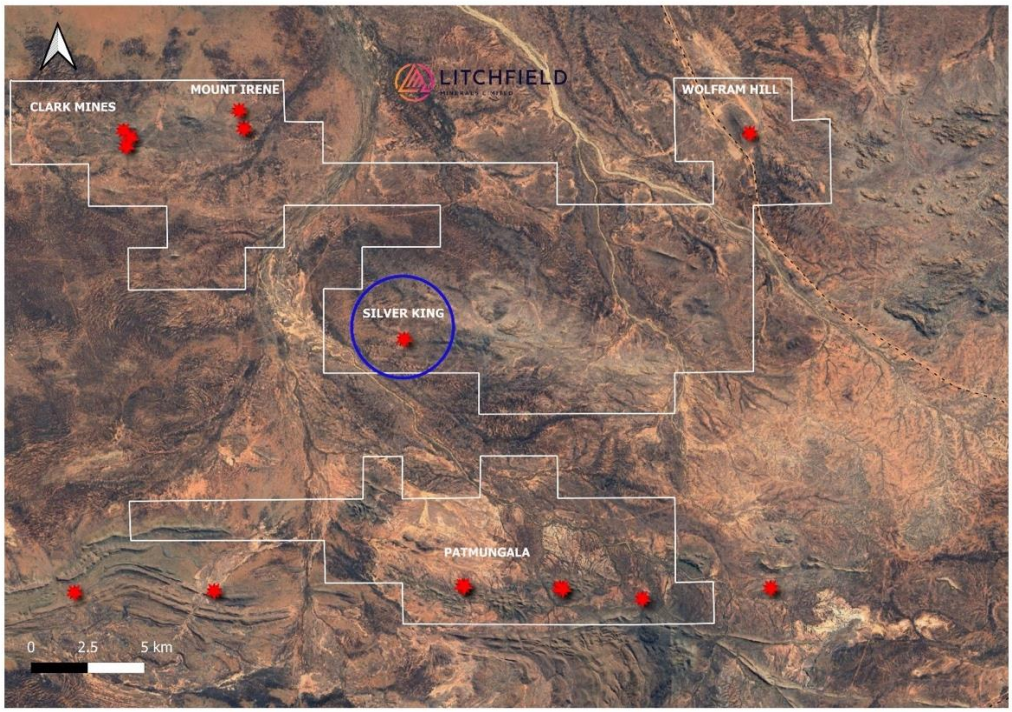


Figure 2 – Localised area of the Mount Doreen tenement showing the Silver King area.

1: Refer ASX Announcement – "Silver King Drilling preparation well underway" – 21 March 2024



Figure 3. Mineralised wall rock from Silver King, viewed to the northwest.

Historically, copper mining activities at Silver King, including shafts and larger pits, were primarily located along fractures, especially those crossing through siliceous rock layers. The most evident copper mineralisation is found a banded, siliceous gossan (oxidised orebody), centred on the historic workings. **Figure 4** is an example of the oxide copper minerals in the rock, observed beside a pit at Silver King.



Figure 4. Oxide Copper minerals exposed near a shallow pit at Silver King

Drill targets from Induced Polarisation Campaign from May 2023 at Silver King

As Announced to market on the 21st of March 2024 (*Silver King drilling preparation well underway targeting Copper, Silver & Lead following a successful IP Survey and rock chip samples*) The Company has defined four exploratory drill holes with two additional contingent holes based on, historical mapping, coupled with historic magnetic data and our own induced polarisation survey data.

The holes have been designed mainly to test the higher order chargeability anomaly (possibly pipe-like), better define the style and controls on mineralisation and confirm several historical high-grade Cu, Pb, Ag intercepts. The Company has also planned a deeper hole to test the larger, low order chargeability anomaly to the north. It should be noted that depending on the initial results of the drilling campaign, Litchfield may alter the number and design of subsequent drill holes to maximise the chances of intersecting the best target.

The IP Survey generated a 3D chargeability model that has identified a highly chargeable zone close to the historic Silver King mine site. This zone appears as a vertical, pipe-like structure potentially extending down to 100m and beyond.

Figure 5, below, presents a rendering from a below-ground perspective of the upcoming planned drilling holes. Most of the drilling in this campaign will focus on a smaller, shallow high chargeability anomaly located directly beneath the historical mine sites which should help to define a better exploration model.

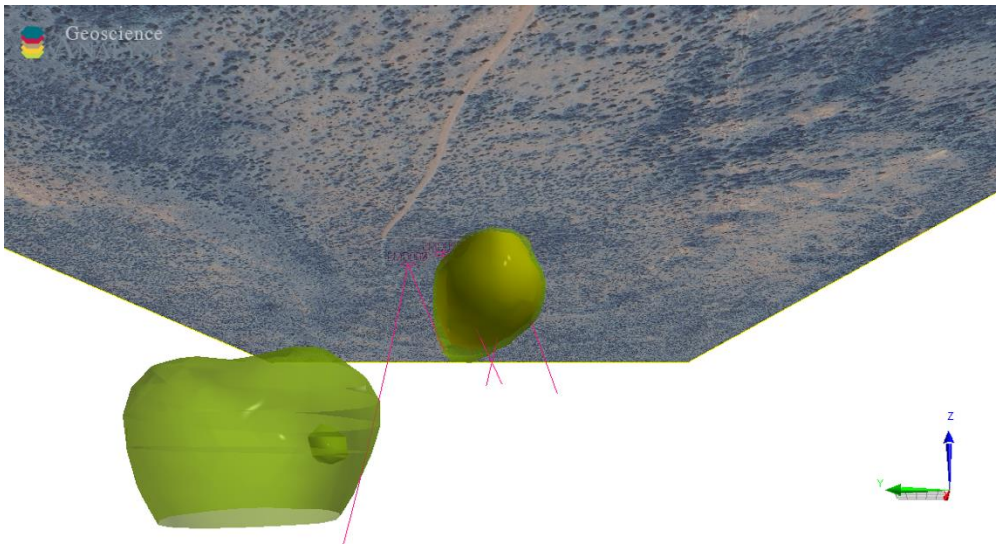


Figure 5. Planned Drill holes targeting shallow high chargeability anomaly. Viewed to the east from below.

The 3D IP model in **Figure 6** shows the first planned drill hole, LMD001, which was designed to be 220m deep at an azimuth of 280 degrees. This hole targets a region of significant chargeability located below known workings at Silver King, the hole is situated to the south east of the known Silver King shaft, with the intention to direct the hole beneath the known shaft and beyond. The goal of this drilling is to attempt to intersect the mineralisation described in historical RC drilling, and gather additional data on the orientation, type, and characteristics of the mineralisation.

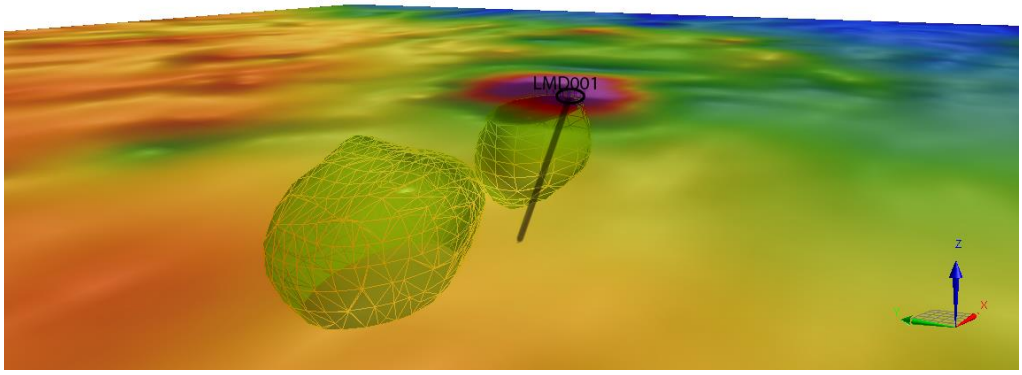


Figure 6. LMD001 - 220m – directed underneath the historic workings chasing the mineralisation to give us a better understanding of the system.

The 3D IP model and planned deeper drill hole is demonstrated in **Figure 7** which highlights a significant lower-order chargeability anomaly to the north of the historic workings. This target area is also interesting because of the contact of a higher order RTP magnetic anomaly (to the north) a magnetic low which appears to encircle the magnetic high over the Silver King mine workings. This larger target begins at approximately 150m depth, and, if shallower drilling into the surface anomaly proves successful, this deeper region will also be explored. The objective of drilling hole LMD009 is to determine if this anomaly is evidence of a feeder system to the Silver King surface body. This drill hole forms part of a 'Brownfield Drilling' grant application submitted to the NTGS on 29th April.

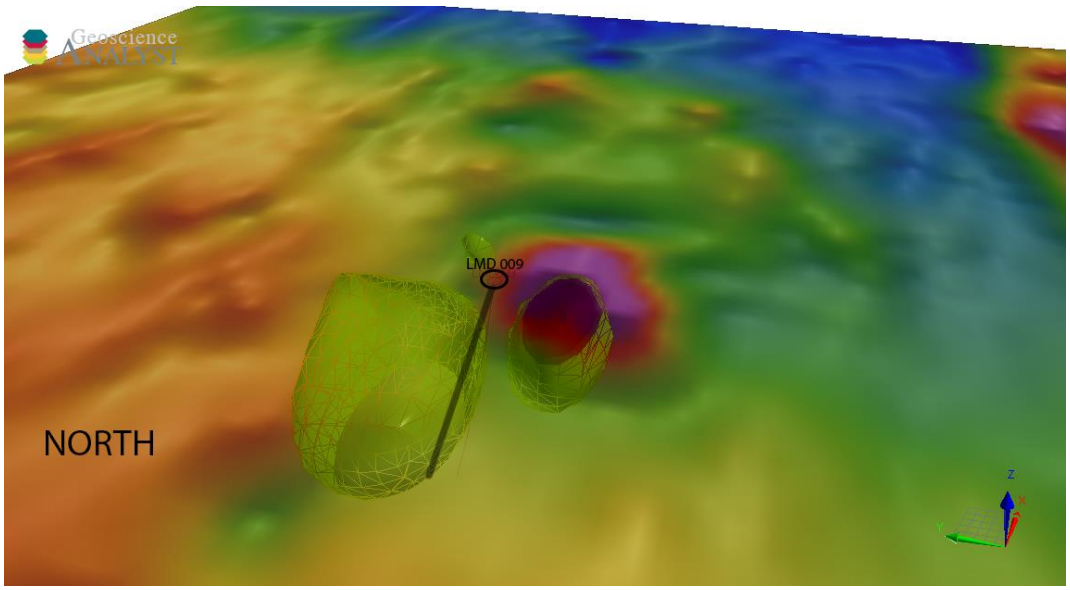


Figure 7. LMD009 – 500m, directed to test the lower order, much larger IP chargeability anomaly which also sits between the Magnetic highs to the North and the halo of the very high magnetic anomaly over Silver King.

DRILL COLLARS:

PLAN #	EASTING	NORTHING	RL	DIP	AZI	AZImag	DEPTH	HQ	RC	TOTAL
LMD001	725342	7552237	601.2	-64	285	280.5	220m	200m	0m	220m
LMD002	725353	7552275	602	-60	255	250	120m	120m	0m	120m
LMD003	725307	7552243	601.2	-60	50	45.5	150m	0m	150m	150m
LMD004	725300	7552325	600	-60	224.5	220	210m	192m	18m	210m
LMD007	725350	7552375	600	-60	224.5	220	150m	50m	150m	200m
LMD009*	725350	7552375	600	-80	20	15.5	500m	300m	150m	500m

Note – collars could be moved up to 10m from planned site to avoid rock outcrop or large trees.

*Holes contingent on geology / mineralisation intersected in previous holes

Hole justifications

LMD001 – Designed to replicate MDRC5 from the Bruce & Mules Campaign, which was the best mineralised intercept from that drilling campaign.

LMD002 – Designed to test the Cu, Pb, Ag mineralisation close to the main shaft.

LMD003 – Designed as scissor hole to LMD001 testing mineralisation.

LMD004 – Testing northern extension to mineralisation.

LMD007 – Testing mineralisation at depth.

LMD009 – Deeper hole testing deeper IP chargeability anomaly.

LMD010 – Designed to test the fault/ extension of mineralisation to the south.

All planned holes are subject to a change in design based on information from previous drill holes. We might require a change in depth, dip, or azimuth to provide the best opportunity to intersect mineralisation.

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

Jane Morgan
jm@janemorganmanagement.com.au

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Competent Person Statement

The information in this Presentation that relates to Exploration Results is based on, and fairly represents, information and supporting documentation compiled by Mr David Esser BSc (Hons) Geology, a Competent Person who is a Member of the Australian Institute of Geoscientists (MAIG). Mr Esser is employed by Litchfield Minerals Limited as a consulting Geologist. Mr Esser 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". Mr Esser consents to the inclusion in this Presentation of the matters that are based on and fairly represent information and supporting documentation prepared by him in the form and context in which it appears. Mr David Esser, BSc (Hons), MAIG.