24 April 2024

QUARTERLY ACTIVITY REPORT FOR THE PERIOD ENDING 31 MARCH 2024

Litchfield Minerals Limited ("**Litchfield"** or the "**Company"**) (**ASX:LMS**) a company with a strategic emphasis on critical minerals with an initial focus on uranium and copper exploration, is pleased to provide an overview of its activities for the Quarter ended 31 March 2024 ("**the Quarter**", "**Reporting Period**").

HIGHLIGHTS

- **Litchfield Minerals' shares commenced trading on the Australian Securities Exchange ("ASX"), on 15 March 2024 under the ticker code LMS, following an oversubscribed IPO capital raise for $5m.**
- **Gradient Array Induced Polarisation ("GAIP") survey at Mount Irene has uncovered chargeability highs in line with reef trend at the historic Mount Irene Mine:**
  - Indicated potential for extensions to the known mineralised reefs at Mount Irene, along trend to the NW.
  - Revealed multiple new & exciting chargeability targets to the NW at Mount Irene.
  - Indicated potential for extensions to the known mineralised reefs at Mount Irene, along trend to the north west.
- **Subsequent to the Quarter, Induced Polarisaton ("IP") surveys at Wolfram Hill Prospect have uncovered areas of high chargeability across known copper and tungsten-bearing reefs and have also identified new zones of interest.**
  - Revealed two large new & exciting chargeability targets, one to the north, and the other to the south.
  - Indicated potential for extensions of a known mineralised reef at depth and along strike to the north and south.
  - Identified promising drill targets at Wolfram Hill.
- **Silver King drilling preparation well underway targeting copper, silver & lead following successful IP survey and rock chip samples:**
  - Sumps and pads marked up preparing for arrival and delivery of drilling equipment.
  - Drilling & earth movers' contractors organised and now on site.
  - Necessary permissions to drill, including Mining Management plans and the NTGS and Land Access agreements with station owners.
  - Greater clarity with IP surveys with drilling and exploration identifying target zones.

OPERATING ACTIVITIES

Litchfield Minerals was thrilled to make its debut on the ASX on the 15th of March 2024 under the ticker code LMS, following an oversubscribed IPO capital raise for $5m.

Unexpected challenges arose due to a significant weather event that brought over 500 mm of rain over several weeks, delaying the commencement of drilling operations originally planned to occur earlier.

However, during periods of lighter rainfall, the Company effectively utilised its robust contingency plans and strong partnerships to bring forward geophysical work, maximising productivity during brief windows of improved weather.

During the very short initial Quarter of Company activities, Litchfield completed the following program of works:

- IP Campaign at Wolfram Hill
- Interpretation of Wolfram Hill
- IP Campaign at Mount Irene
- Rock Chip sampling campaign at Wolfram Hill & Silver King
- Appointment of drilling contractors and engineers



Figure 1 – Litchfield Minerals Project location map

MOUNT DOREEN PROJECT

The Mount Doreen Project is located 350 km north west of Alice Springs and accessible by the newly sealed Tanami Road. The tenement package consists of 5 highly mineralised zones (Figure 2). Mineralisation across all areas varies in geological style. Most is Polymetallic consisting mainly of copper, lead, zinc, silver, gold , rare earths and tungsten.

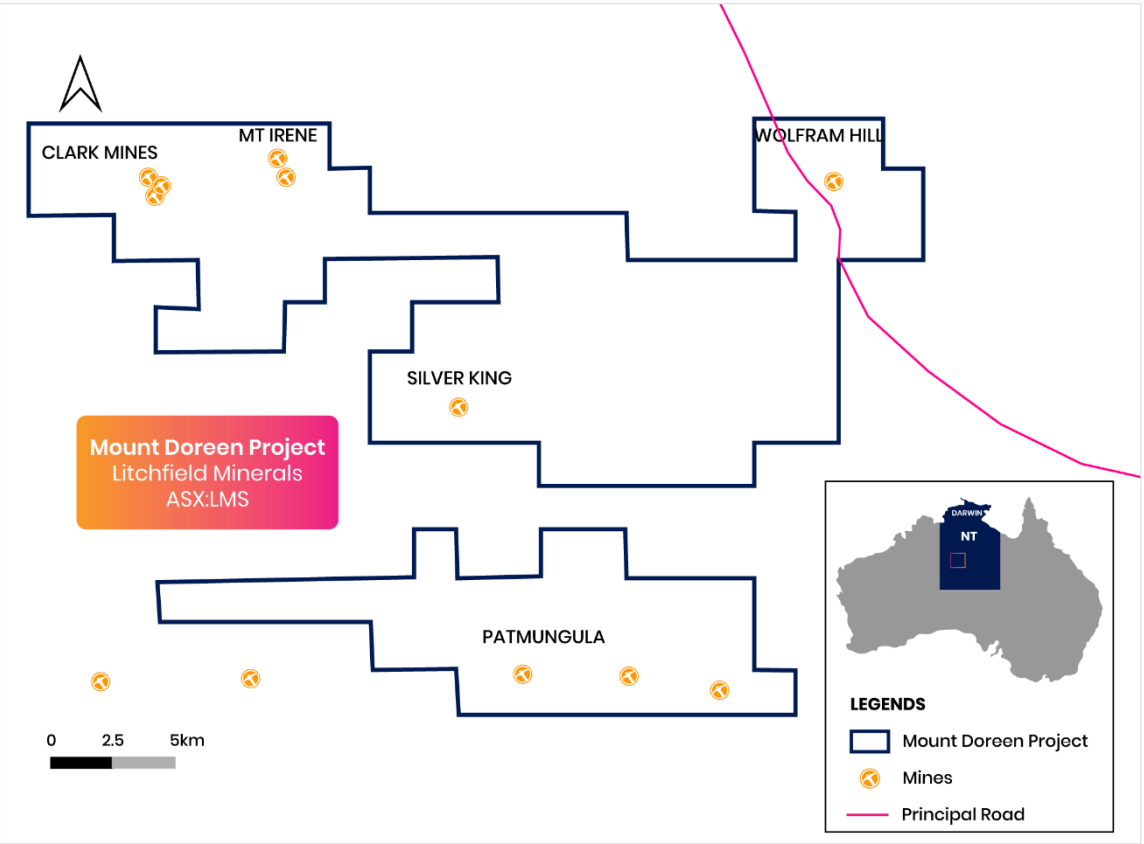


Figure 2 - Litchfield Minerals Mount Doreen Project

MOUNT IRENE PROSPECT

A GAIP survey around the prospect was conducted in March 2024 (Figure 3). The Company is delighted with the outcomes of this initial GAIP survey, which was highlighted continuity of known, highly mineralised reef structures at surface.

Despite the weather, the dedicated team at Planetary Geophysics successfully conducted the 800m wide by 1,450m long survey, intended to complement and extend the 2023 GAIP survey efforts. Although the survey wasn't completed to the planned extent due to rain impacts, it revealed promising extensions to chargeability anomalies, potentially connected to the mineralised, copper rich veins previously mined at Mount Irene.[1]

1 - Refer ASX Announcement – *Chargeable trends identified at Mount Irene* – 11/04/2024

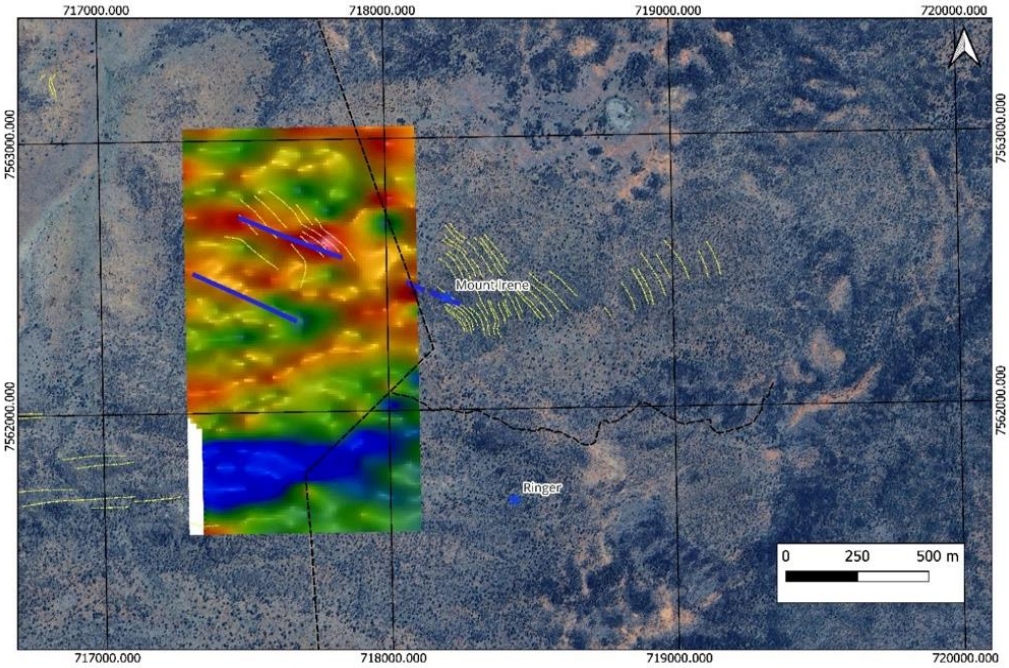


Figure 3 - Gradient Array Induced Polarisation chargeability image highlighting areas and extensions of known mineralisation demonstrating that the results extend along strike from the known mine workings.

The 2024 GAIP survey highlights a chargeability trend of 110 degrees magnetic, which could represent extensions to known mineralisation. The findings from this survey indicate the possibility of mineralisation occurring between the Mount Irene mine and the historic Clark Mines 5 km to the west.

Figure 4 below shows the 2024 GAIP survey and the known mineralisation, highlighted with the orange circle, which trends almost perfectly with the new chargeability anomalies defined by our March survey. These anomalies are the red structures highlighted below between the white parallel lines.

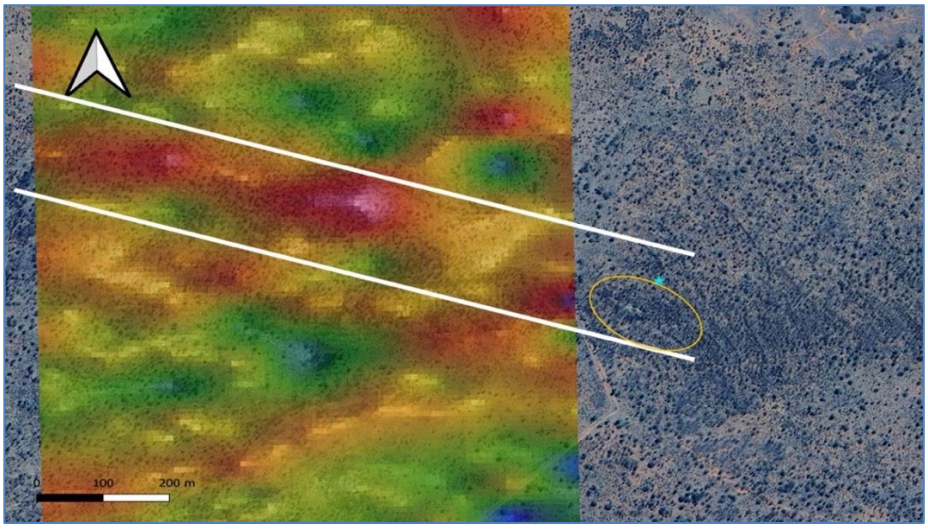


Figure 4 – Mt Irene prospect with chargeability image from the 2024 Gradient Array Induced Polarisation survey.

The white parallel lines show the similarity in the trend of mineralisation at Mt Irene and the trend of the chargeability anomaly.

SILVER KING PROSPECT

In late March, Litchfield announced that preparation for the maiden drilling program at the Silver King prospect,[2] which sits in the Mount Doreen tenement in the Northern Territory, was underway.

The Silver King drilling program will be targeting the Copper, gold-silver-lead-zinc mineral occurrences which are hosted within the Lander Rock Formation. In November 2023, the Company sent four rock grab / chip samples to ALS Laboratory from Silver King's historic working for review. The assays returned results of up to 22.5% copper, 551 g/t silver, and 28.9% lead.

In May 2023, the Company completed an IP Survey which delineated a discrete, strong chargeable zone near the historic workings, suggesting a possible vertical, pipe-like structure that could extend to depths of up to 100 m.

The rock assays, coupled with historic drilling results and the positive results from the IP Survey, have provided the basis for determining 2 drill targets, which will be tested by four Reverse Circulation (RC) / Core (diamond) holes and two contingent holes as part of the upcoming, maiden RC and Diamond drilling campaign.

WOLFRAM HILL PROSPECT

In March 2024, Litchfield flew an expansive 800 m x 1,500 m IP survey at Wolfram Hill, with the results from the survey announced to the market following the reporting period.[3] This GAIP survey successfully identified chargeability anomalies both in locations of historical mining activities and in new zones where no historical workings are present.

Among the highlights of this survey are the discoveries of two significant high chargeability areas, as depicted in Figures 6 and 7. The first is situated in the northeast, near the airstrip, hidden under a layer of colluvium (marked by a black oblong shape), and the second is found in the southwest, within an exposed outcrop area (indicated by a yellow oblong shape). These findings significantly enhance the exploration prospects at Wolfram Hill, and the team are eager to undertake drilling operations to evaluate these targets further.

The chargeability anomalies detected are not only extensive, exceeding 500 m in length and stretching beyond the surveyed area and previously known mineral deposits to the north and south, but also suggest the presence of substantial depths, as confirmed by the Pole Dipole Induced Polarisation ("PDIP") survey results. These insights reinforce our confidence in the exploration potential of Wolfram Hill.

Litchfield are currently awaiting approval from the Aboriginal Areas Protection Agency, which, once granted, will allow the team to begin drilling activities. We are optimistic about the potential discoveries and opportunities that await exploration at Wolfram Hill.

2 - Refer ASX announcement – *Silver King drilling preparations well underway* – 21/03/2024
3 - Refer ASX announcement – *IP survey unveils expansive new targets at Wolfram Hill* – 2/04/2024

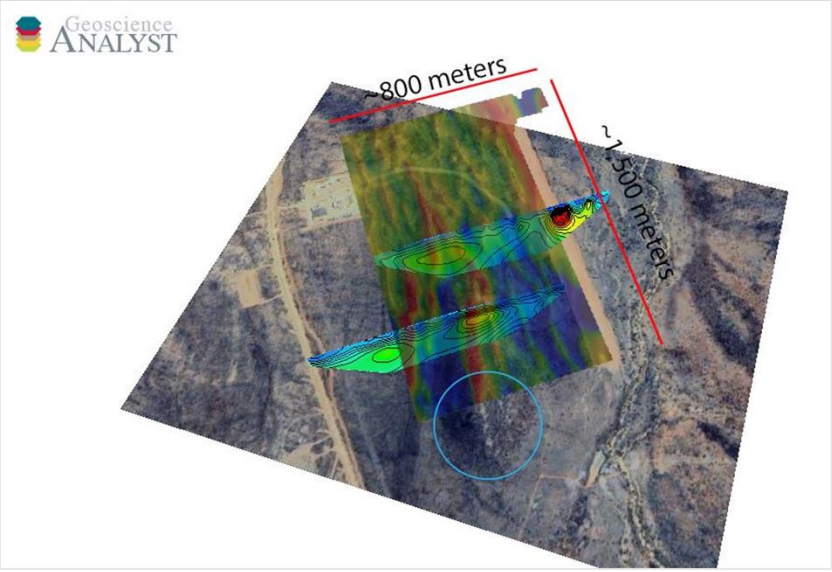


Figure 5 - Gradient Array & pole-dipole IP, demonstrating that the results map to the known, mineralised outcrops perfectly, highlighted with the Blue Circle. The IP survey area, which is 800 m wide by 1,500 m long, trends NW – SE is draped over the google map satellite image.

The PDIP survey results have revealed the likelihood that the already identified mineral deposits extend further into the depths, maintaining their connection with the surface mineral manifestations. In Figure 5, the PDIP chargeability anomalies are aligned with surface mineralized reefs, especially noting two central reefs demarcated by blue lines. The data suggests that these reefs plunge downward to a depth of at least 100 m. It's important to note that sulfides undergo oxidation above the water table, leading to the absence of chargeability anomalies at the surface.

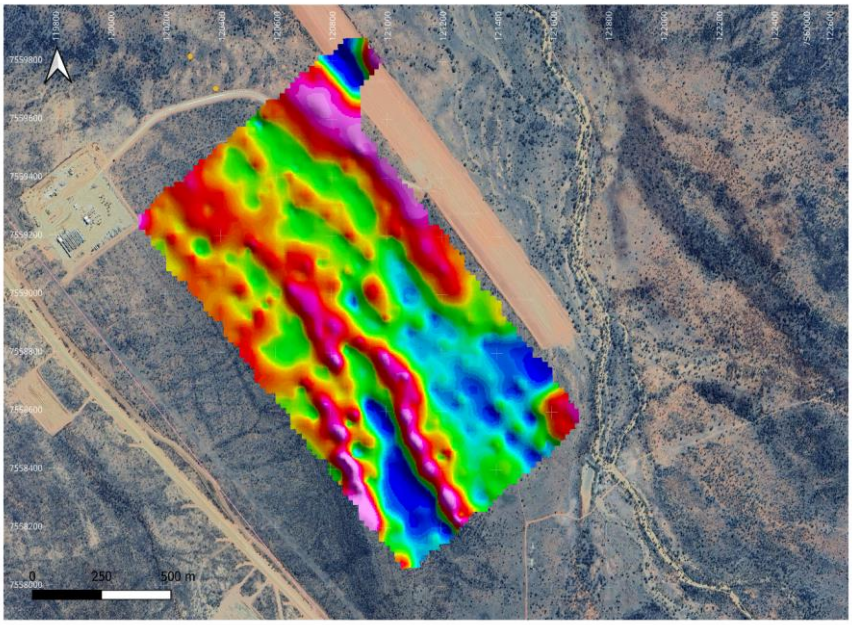


Figure 6 - Integration of PDIP survey lines as part of the gradient array survey.

A particularly high chargeability zone, outlined in red in Figure 7, suggests the presence of a significant geological feature. This feature appears to start near the surface beneath the colluvium and extends in both northern and southern directions. The anticipation is building for Planetary Geophysics' team to return and complete the surveys along the northern and southern extents.

With the data garnered from the Induced Polarisation campaign, Litchfield is now equipped with several drilling targets. The team are eagerly looking forward to drilling these targets in the imminent future, bolstered by the promising findings of the survey efforts.

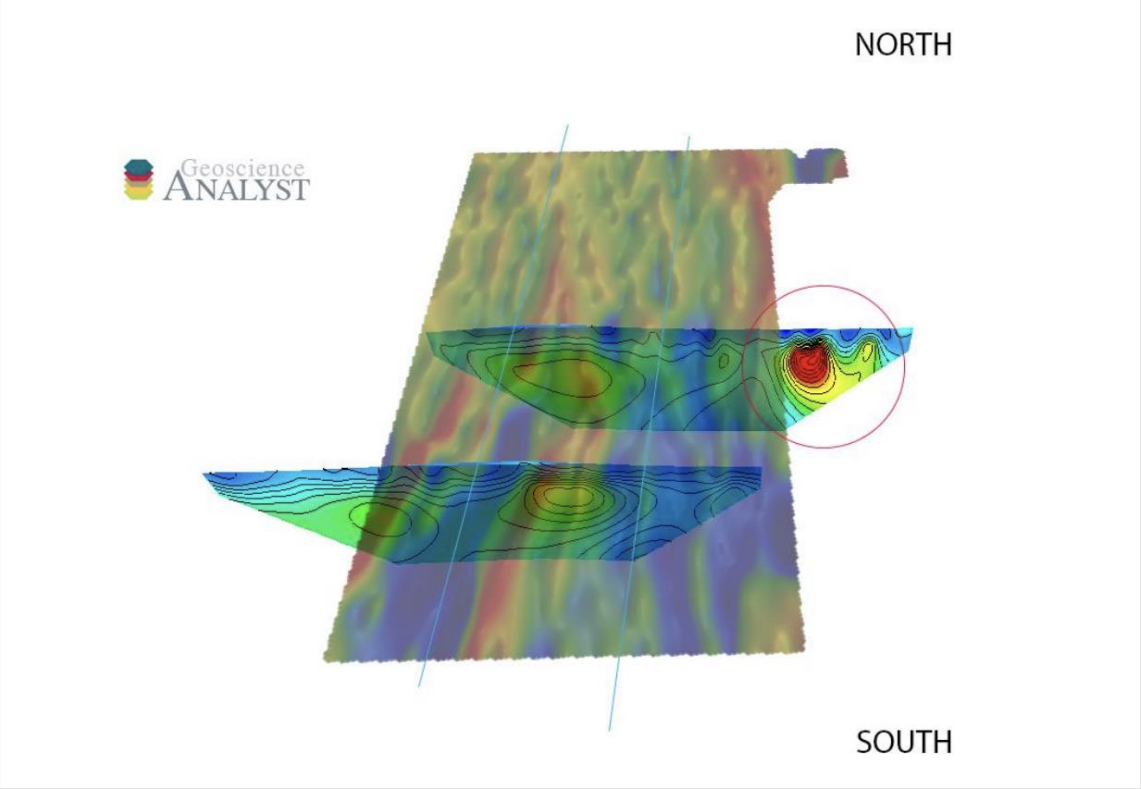


Figure 7 - Gradient Array, with Pole-Dipole lines, trending northeast – southwest, indicating depth to the exposed mineral reefs at surface. The two completed central PoleDipole lines each span roughly 1,000 m in length, while the planned southern line extends about 1,500m. The planned northern line is to reach a length of 1,200 m.

Bismuth, a relatively rare element in the earth's crust, boasts an average concentration of approximately 0.2 parts per million (ppm)—a scarcity comparable to gold and even rarer than silver. Litchfield recently explored the Wolfram Hill area, initially in search of gold evidence. However, findings suggest that this region holds promise for high-grade bismuth. During investigations in November 2023, rock chip samples were collected across the site.

The ALS analysis revealed compelling bismuth values, including: 8,250 ppm Bi (0.825% Bi) /7,890 ppm /4,200 ppm /3,210 ppm /2,960 ppm /2,210 ppm /1,620 ppm 1,165 ppm.

All 18 rock chip samples from Wolfram Hill exhibited elevated bismuth assays (see announcement New Potential Copper-Tungsten Targets Identified at Wolfram Hill Prospect – 2 April 2024). Notably, bismuth is classified as a 'Critical Mineral' by the Australian Government, Europe, and the USA.

Its significance lies not only in its rarity but also in its status as the heaviest non-toxic heavy metal. The prevalence of bismuth at Wolfram Hill is indeed exciting.

Furthermore, bismuth serves as an excellent indicator mineral for gold, especially in regions like the Tanami area of Central Australia, characterized by deep and intense weathering. Gold, susceptible to leaching, may be absent or occur at very low grades at the surface. Pathfinder elements like bismuth, which resist leaching more effectively, play a crucial role in targeting gold mineralization beneath the surface. In Wolfram Hill rock samples—such as CMLS002140—gold assays at 0.51 ppm align with the potential for gold presence alongside bismuth.

LUCY CREEK TENEMENT

During the Quarter, the Lucy Creek Tenement was granted.[4] Lucy Creek is located approximately 400 kms northeast of Alice Springs (refer Figure 1) and is an 'early-stage' exploration project that encompasses an area of 791.64 square kms.

Litchfield has commenced desktop studies on Lucy Creek, while the Company focuses its exploration activities on the Mount Doreen tenement.

NEXT STEPS FOR THIS QUARTER

The Litchfield has a substantial program of work planned across the company prospects including:

- Commencement of drilling at Silver King;
- Completion of IP program over Wolfram Hill;
- Commencement of drill at Wolfram Hill;
- Interpretation of IP results from Mount Irene;
- Aeromag campaign results; and
- Norther Territory Geophysical and Drilling Grants

CORPORATE

Cash Position

As at 31 March 2024, the Company held $4.42 million cash at bank.

Capital Structure

As at 31 March 2024, the Company has 35,403,845 shares on issue, of which 7,192,500 shares are escrowed till 13/03/2026 and 648,849 shares are escrowed till 29/11/2024.

The are also 8,200,000 unlisted options on issue, escrowed for 24 months from official quotation, are summarised below:

4 - Refer ASX Announcement – *Lucy Creek Exploration Licence Granted* – 18/04/2024

Type	Number	Exercise price	Expiry Date
Founder options	2,000,000	$0.30	25-Oct-26
Director options	750,000	$0.30	28-Feb-27
Director options	750,000	$0.35	28-Feb-27
Broker Options	4,700,000	$0.30	14-Sep-26
	8,200,000		

ASX Listing Rule 5.3 Disclosure

$0.115 million exploration spend during the quarter can be summarised as:

- $0.030 million deposit and mobilisation cost for geophysical work;
- $0.046 million tenement management costs; and
- $0.390 million costs in preparation for field activities.

$60,000 was paid during the quarter to Related Parties, as reported in clause 6 of the ASX Appendix 5B (Cash Flow Report). $8,000 of this comprised director fees and $52,000 was repayment of a related party unsecured interest free loan.

Pursuant to ASX Listing Rule 5.3.4 the Company provides a comparison of its actual spend against the estimated expenditure on "use of funds" items set out in the Company's Prospectus dated 24 January 2024.

Use of Funds	Funds Allocated	Actual to date
	$'000	$'000
Exploration Drilling	2,424	27
Geophysics, Mapping, Sample Analysis, Vehicles and Tenement Cost	689	90
Operational Labour - Exploration	324	14
Working Capital and Administration	1,563	454

TENEMENT INTERESTS

As at 31 March 2024, the Company had interest in the following tenements (as required by Listing Rule 5.3.3). During the Quarter, the Lucy Creek Exploration Licence was granted.

Country	Location	Project	Tenement	Status	Current Interest (%)
Australia	Northern Territory	Mount Doreen	EL31305	Granted	100%
Australia	Northern Territory	Lucy Creek	EL33568	Granted	100%

The announcement has been approved by the Board of Directors.

For further information please contact:

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www.litchfieldminerals.com.au

https://twitter.com/Litchfield_LMS

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

Competent Person Statement

The information in this announcement that relates to Exploration Results is based on information compiled or reviewed by Mr David Esser. The Company is not aware of any new information or data that materially affects the information included in these Company Announcements, all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. Mr. Esser is a Member of the Australian Institute of Geoscientists (MAIG) and is a consultant to Litchfield Minerals Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 the report of the matters based on his information in the form and context in which it appears.

Exploration Results & Exploration Target

Litchfield confirms that Exploration Results and Exploration Targets used in this document were estimated, reported and reviewed in accordance with the Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code) 2012 edition. Litchfield confirms that it is not aware of any new information or data that materially affects the Exploration Results or Exploration Target information included in the following announcements:

- Litchfield Minerals to List on the ASX – 15/03/2024
- Silver King drilling preparation underway – 21/03/2024

Forward-looking Statement

Certain statements made during or in connection with this statement contain or comprise certain forward-looking statements regarding the Company's Mineral Resources, exploration operations and other economic performance and financial conditions as well as general market outlook. Although the Company believes that these expectations reflected in such forward-looking statements are reasonable, such expectations are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performances or achievements to differ materially from those expressed, implied or projected in any forward-looking statements and no assurance can be given that such expectations will prove to have been correct.

Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, delays or changes in project development, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in commodity prices and exchange rates and business and operational risk management. Except for statutory liability which cannot be excluded, each of the Company, its offices, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in this statement and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this statement or any error or omission. The Company undertakes no obligation to update publicly or release any revision of these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules. Accordingly, you should not place undue reliance on any forward-looking statement.

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity	
Litchfield Minerals Limited	
ABN	**Quarter ended ("current quarter")**
33 612 660 429	March 2024

	Consolidated statement of cash flows	Current quarter $A'000	Year to date (9 months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation		
	(b) development		
	(c) production		
	(d) staff costs	(8)	(8)
	(e) administration and corporate costs	(143)	(255)
1.3	Dividends received (see note 3)		
1.4	Interest received		
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Government grants and tax incentives		
1.8	Other (provide details if material)		
1.9	**Net cash from / (used in) operating activities**	**(151)**	**(263)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) exploration & evaluation	(115)	(198)
	(e) investments		
	(f) other non-current assets		

Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
2.2	Proceeds from the disposal of:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) investments		
	(e) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
2.6	**Net cash from / (used in) investing activities**	**(115)**	**(198)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	5,000	5,312
3.2	Proceeds from issue of convertible debt securities	(429)	(429)
3.3	Proceeds from exercise of options		
3.4	Transaction costs related to issues of equity securities or convertible debt securities		
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings	(52)	(52)
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (provide details if material)		
3.10	**Net cash from / (used in) financing activities**	**4,518**	**4,831**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	165	47
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(151)	(263)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(115)	(196)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	4,518	4,831

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (9 months) $A'000**
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**4,417**	**4,417**

5.	**Reconciliation of cash and cash equivalents** at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	**Current quarter $A'000**	**Previous quarter $A'000**
5.1	Bank balances	4,417	165
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**4,417**	**165**

6.	**Payments to related parties of the entity and their associates**	**Current quarter $A'000**
6.1	Aggregate amount of payments to related parties and their associates included in item 1	60
6.2	Aggregate amount of payments to related parties and their associates included in item 2	

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	**Total financing facilities**		

7.5	**Unused financing facilities available at quarter end**	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(151)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(115)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(266)
8.4	Cash and cash equivalents at quarter end (item 4.6)	4,417
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	4,417
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	17

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: N/A

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answer:	

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Date: .....24 April 2024.....

Authorised by: .....By the Board.....
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.