

ASX Announcement

14 December 2023

DRILLING CONTRACTOR APPOINTED FOR HIGH PRIORITY LITHIUM TARGETS AT DUNDAS

Lightning Minerals (LIM or the Company) is pleased to report appointment of Gyro Drilling Australia for its upcoming Aircore drill program on tenement E63/2000. Up to 7,500m is planned to commence in January 2024 targeting high priority lithium in soil anomalism up to 218ppm Li¹. A recent infill soil sampling program² has further delineated clustered samples greater than 100ppm Li and up to 177ppm Li over a 2.6km x 1.0km area representing a significant area of anomalism that warrants drill testing.

HIGHLIGHTS

- **Up to 7,500m of Aircore drilling to begin January 2024 testing for pegmatites and lithium mineralisation at identified soil anomalies which are located 8km to east of Liontown Resources' (ASX: LTR) Buldania project**
- **Drilling to focus on identified lithium, rubidium, caesium soil anomalies up to 218ppm Li and trending north-west to south-east over 2.6km x 1.0km within tenement E63/2000**
- **Gyro Drilling Australia continues as preferred drill contractor after the completion of a drill tender process and contractor evaluation**

Lightning Minerals Managing Director Alex Biggs said, "Tenement E63/2000 has always been an area of interest for us at Lightning Minerals. The initial geochemical results received in March began to identify a clear north-west to south-east trend, which is of interest given the regional geological context. We felt that further follow up was required and the infill geochemical work has helped more clearly identify that area of interest with assays up to 177ppm Li. With original assays up to 218ppm Li, the clustering and clear drill targets that have been identified we're excited to start 2024 with a promising drill campaign. Add to that the proximity of defined Resources only 8km to the west in a region that is becoming red hot in the lithium space we are in a fertile area for exploration. We welcome Gyro Drilling Australia back to the team as we look forward to working with them again. I would like to take the opportunity to thank our team for their tireless hard work this past year and our shareholders for their ongoing support. I would like to wish you and your families a safe and restful festive period and a prosperous and healthy 2024".

AIRCORE DRILL STRATEGY CONFIRMED FOR E63/2000

An Aircore drill program for up to 7,500m has been confirmed for tenement E63/2000 at the Company's Dundas South project. The program is designed to follow recent priority targets identified through the recent regional geochemical sampling campaign¹ which was then confirmed through infill soil geochemistry². Peak recorded assays of 218ppm Li and 177ppm Li were recorded respectively. These results are greater than background values which are typically 60-70ppm Li in the region.

Gyro Drilling Australia have successfully tendered for the drill program which is scheduled to begin January 2024. The program will provide geochemical information within the weathered profile from beneath the soil anomalism and also has the potential to intersect pegmatites should they be sub-cropping beneath the anomalism.

¹ASX Announcement 23 March 2023, ²ASX Announcement 30 November 2023

The geochemical targets present at E63/2000 are generally covered by a saprolite profile and transported soils with an anticipated depth between 10 to 40 meters. The target areas are relatively large requiring an east-west orientated nominal drill spacing of 75m which will ensure drill coverage within the strongest areas of anomalism. This approach increases the likelihood of intersecting further anomalism downhole, providing important information to continue vectoring toward the source of the anomalous lithium in soil assays.

Any pegmatite intersections discovered during Aircore drilling will be analysed and should lithium bearing minerals be identified follow up Reverse Circulation (RC) drilling will be undertaken to test deeper, fresh lithologies. Geological modelling and delineation of any mineralisation intervals will be undertaken at that stage.

A heritage clearance survey has been completed over the planned drill lines shown in Figure 2, mobilisation of contractors to site in January 2024.

Figure 1: Dundas South tenement E63/2000 and E63/1993 showing UFF+ lithium soil geochemistry results for reconnaissance and infill sampling programs with resultant target areas

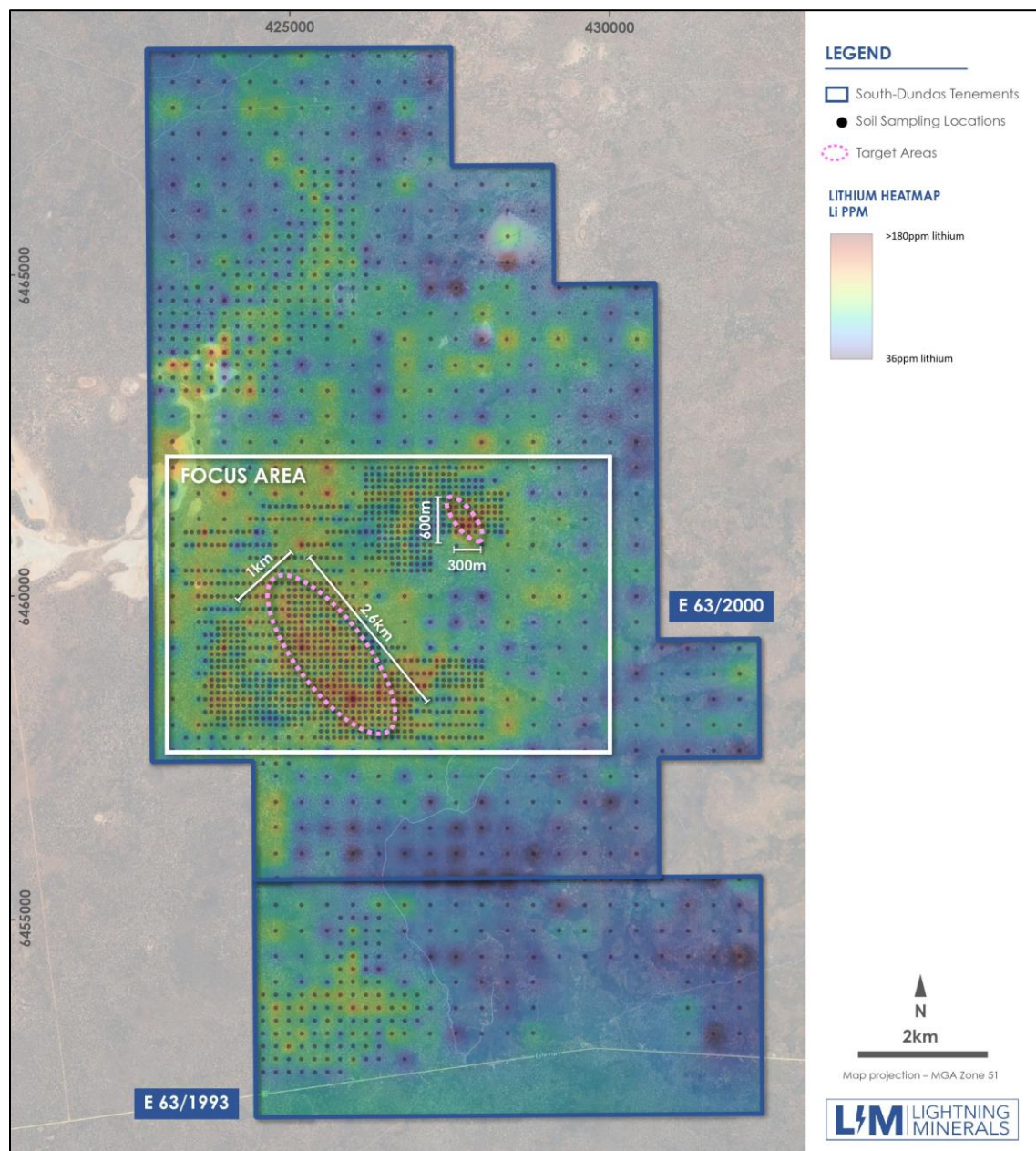
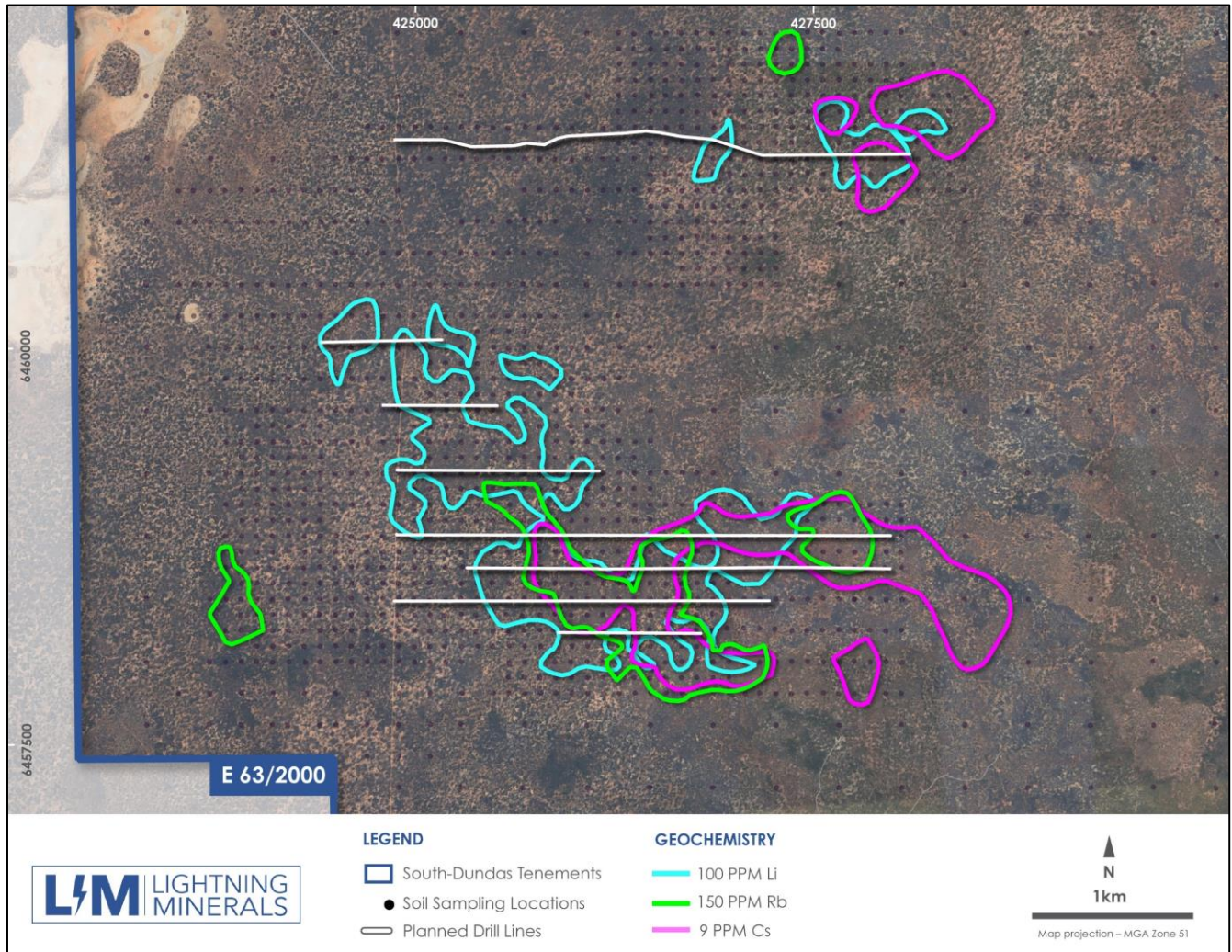


Figure 2 : Planned Aircore drilling areas within tenement E63/2000 at the Dundas South Project showing priority geochemical target areas (as reported on 30th November 2023)



DUNDAS PROJECT ONGOING WORK PROGRAMS

The success of the recent infill soil program highlights the value of higher resolution lithium focused soil sampling the region. When surface soil geochemistry is completed at an adequate resolution it can assist in accelerating the delineation of surface anomalism to high priority drill targets.

Further infill surface geochemistry programs are now being devised for E63/2028, and the Dundas North Project areas. Permitting and access obligations are currently being worked through to ensure all permitting obligations are met.

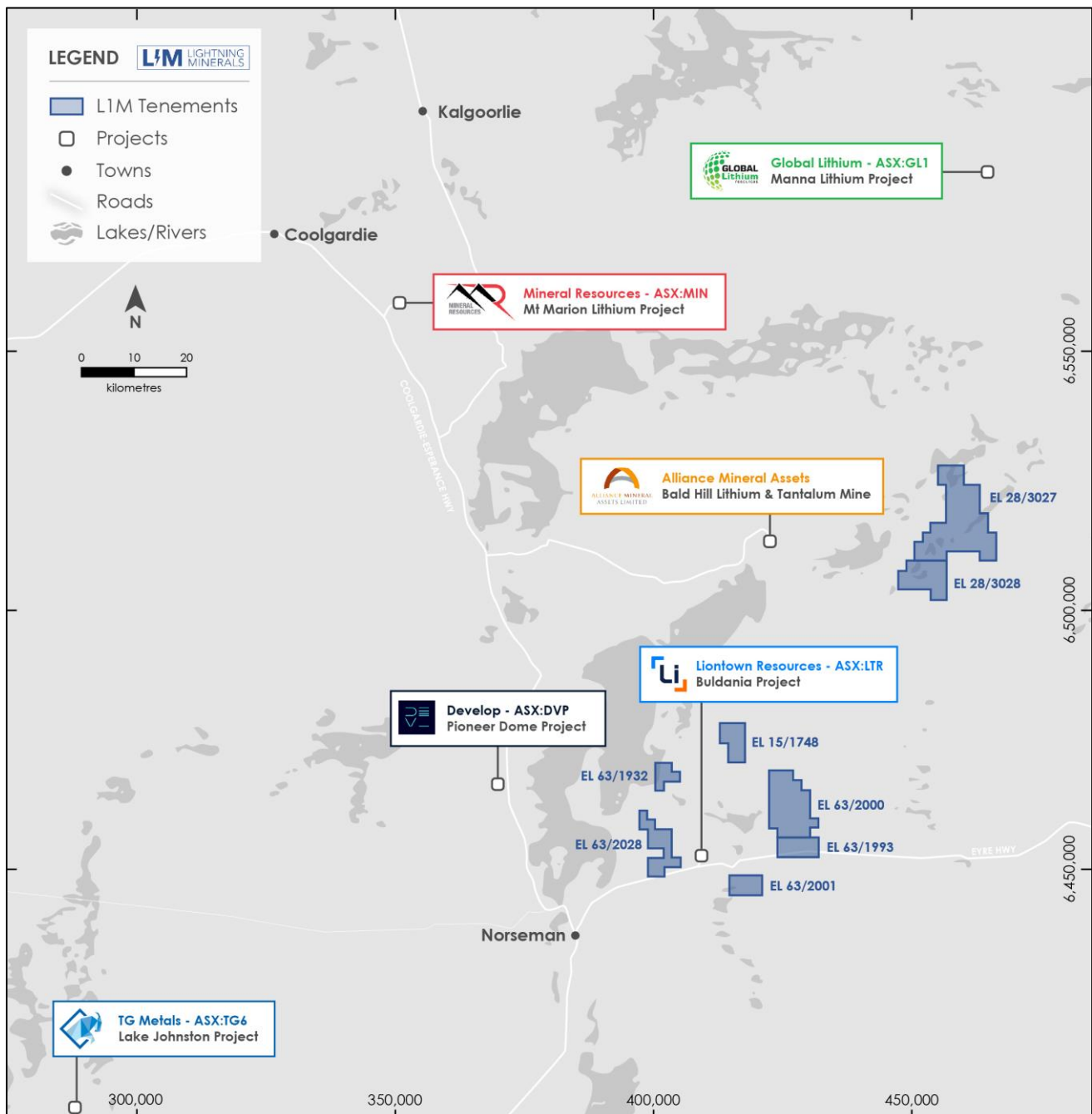
DUNDAS PROJECT (LIGHTNING MINERALS 100%)

The Dundas Project area is located near Norseman in Western Australia and comprises eight tenements totalling approximately 454km². Norseman has a strong history of mining dating back to 1892 and is located 190km south of Kalgoorlie. Historically, Norseman and the Dundas area has experienced mining in gold and nickel although over recent years the region has become an emerging lithium and critical minerals province with multiple discoveries and significant exploration activity.

There are two project areas at Dundas:

- South/western tenements surrounding Liontown Resources' Buldania/Anna lithium project, and,
- North/eastern tenements approximately 30km to the east of Alliance Mineral Assets' Bald Hill lithium-tantalum mine.

Figure 3: Location of Lightning Minerals' Dundas Projects



This announcement has been approved for release by the Board of Directors.
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ABOUT LIGHTNING MINERALS

Lightning Minerals is a mineral exploration company, listed on the Australian Stock Exchange (ASX:LIM) and focused on the exploration of critical minerals and lithium at its tenements across Western Australia. The Company's flagship Dundas project is located in the prolific Dundas region of Western Australia. The Company also owns the Dalmas and Hiver lithium projects in Quebec, Canada, another significant and evolving lithium region globally as well as other projects in Western Australia which include Mt Jewell, Mt Bartle and Mailman Hill which are prospective for base metals and critical minerals.

FORWARD LOOKING STATEMENTS

Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

REFERENCES TO PREVIOUS ANNOUNCEMENTS

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements, and that all material assumptions and technical parameters have not materially changed. The Company also confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.