

ASX Announcement

25 November 2022

SOIL SAMPLING BEGINS AT DUNDAS PROJECT

Lightning Minerals (LIM or the Company) has commenced a soil sampling program at its 100% owned Dundas project in Western Australia. Following the Company's successful recent listing on the Australian Stock Exchange ("ASX")¹ it is implementing its discovery strategy with a focus on critical minerals and lithium across its Dundas Project.

HIGHLIGHTS

- **Soil sampling program has commenced at the Dundas Project**
- **Surface mapping and reconnaissance also being conducted to identify outcropping structures across tenements**
- **Geophysics interpretation underway**
- **Multiple geological targets form the basis of early-stage work program**
- **Combined soil sampling, surface mapping and geophysics interpretation designed to identify multiple drill targets and develop discovery strategy**

Lightning Minerals has commenced exploration activities at its 100% owned Dundas Project (Dundas). An extensive soil sampling program across the Company's tenements has begun targeting multiple minerals including a suite of critical minerals and lithium. A surface reconnaissance program of the project area is also being undertaken simultaneously to identify outcrops and further areas of potential mineralisation.

The Company has also begun interpretation of geophysical survey data with a view to develop drilling targets as part of its discovery strategy.

¹ASX Announcement 22 November 2022

Lightning Minerals Chief Executive Officer Alex Biggs said, “It is fantastic to be starting our exploration works at Dundas immediately post our successful listing on the ASX. The region is highly prospective for multiple commodities including a suite of critical minerals and lithium, demonstrated by recent exploration successes by multiple companies and proven by existing Resources in the region. We have a number of areas of interest that we will be focusing on during our initial campaign and combined with the geophysics interpretation that is being completed we aim to generate multiple high quality drill targets”.

DUNDAS PROJECT AREA

The Dundas Project area is located near Norseman in Western Australia and comprises eight tenements totaling 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 (Figure 1).

There are two project areas (Figure 2) at Dundas:

- a) South/Western tenements surrounding Liontown Resources’ Buldania/Anna lithium project, and
- b) North/Eastern tenements approximately 30km to the East of Alliance Mineral Assets’ Bald Hill lithium-tantalum mine.

Figure 1: Location of Dundas project tenements

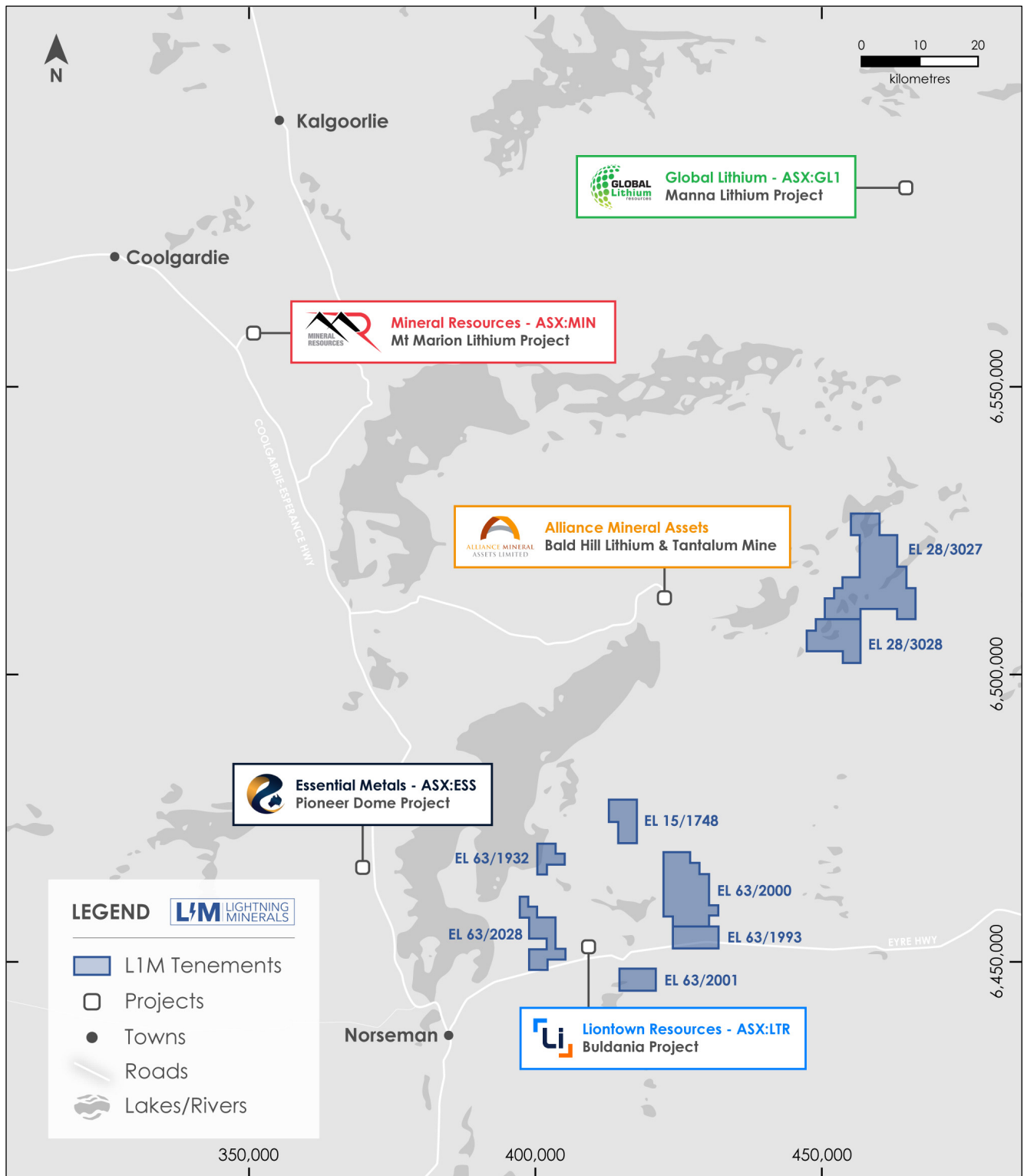
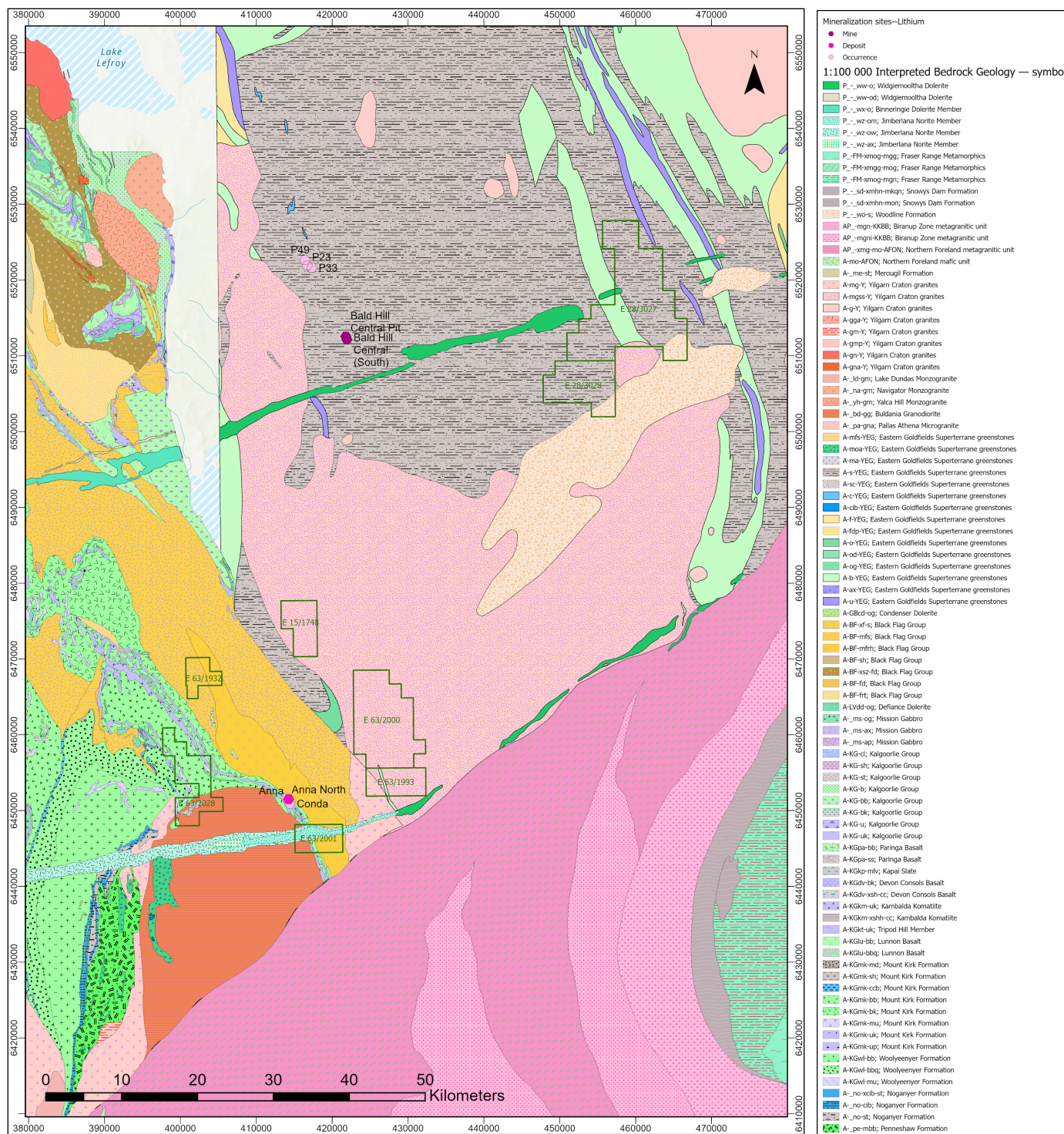


Figure 2: North/Eastern and South/Western Dundas tenements



SOIL SAMPLING WORK PROGRAM

A soil sampling campaign has begun at the Company's 100% owned Dundas project near Norseman, Western Australia.

Limited historical exploration over the project has focused predominantly on gold, nickel and PGEs. The further assessment of these datasets together with the integration of full-suite multi-element assay results from the soil sampling campaign into the Company's geological framework model will be the focus for the coming months.

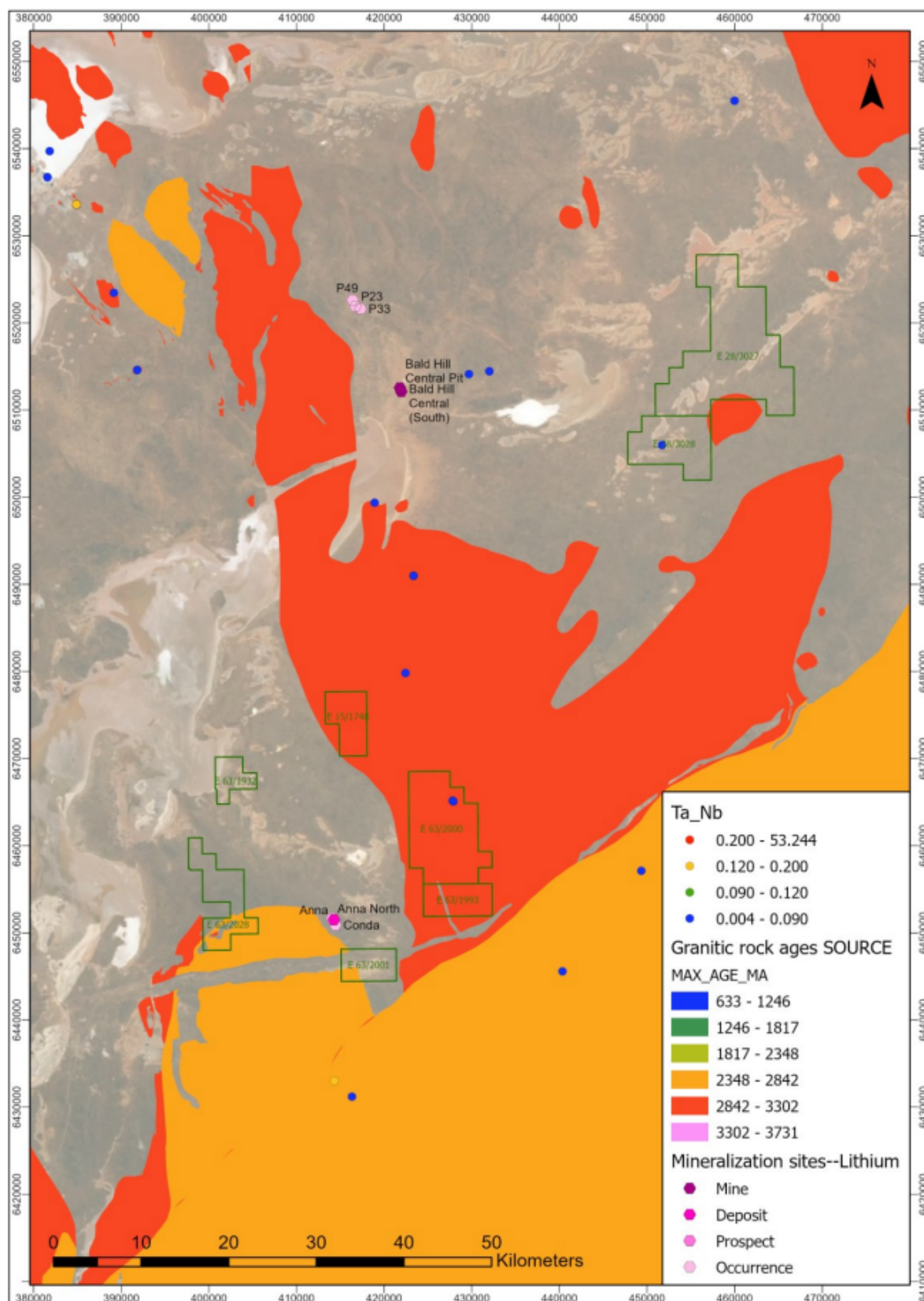
Sampling will initially be completed on a 400m x 400m grid spacing, with closer spaced sampling undertaken where geological prospectivity has been modelled.

GEOLOGICAL THESIS

The Dundas region is highly prospective for a range of critical minerals including lithium, nickel, PGEs, copper, rare earth elements and gold. A number of recent exploration successes have led to the Dundas region emerging as a new lithium province with an evolving exploration thesis.

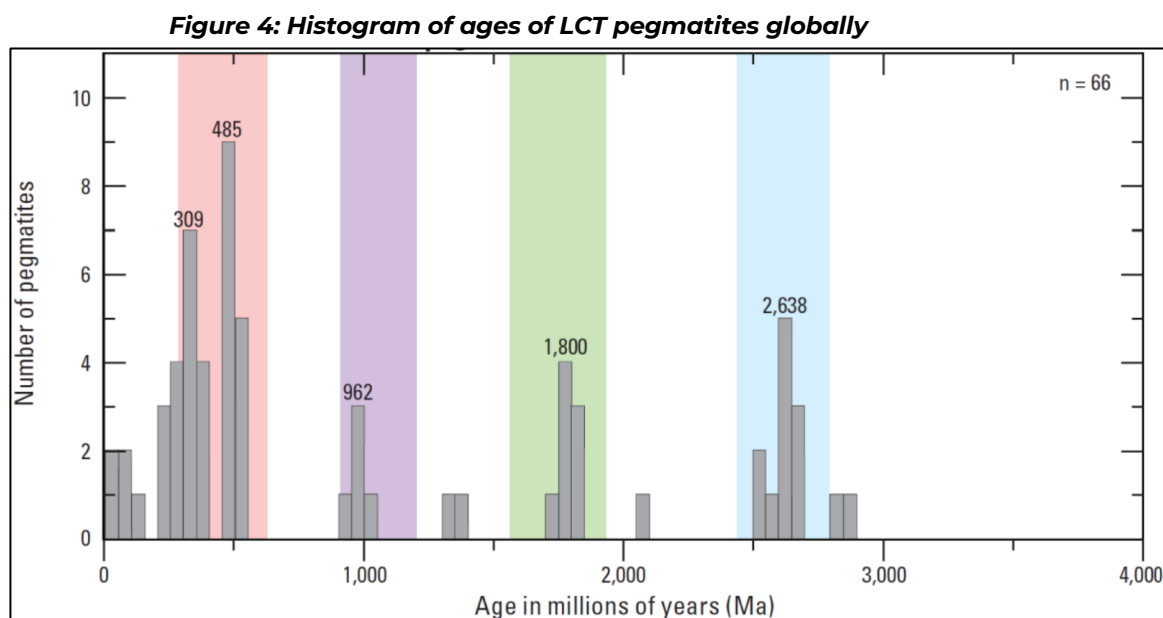
Figure 3 (compiled using data from the Geological Survey of Western Australia 2021, Critical Minerals, 2021: Accelerated Geoscience Program: Geological Survey of Western Australia, Geological Exploration Package) shows a granitoid source rocks with age ranges corresponding to global maxima for Lithium-Cesium-Tantalum (LCT) pegmatite development just north of the the Yilgarn Craton–Albany-Fraser Orogen boundary (Jerdacuttup Fault) which are associated with the Buldania Granodiorite.

Figure 3: Granitic source rocks in the Dundas project area coloured by age with granite hosted surface geochemistry coloured by Ta/Nb



Source: Geological Survey of Western Australia 2021, Critical Minerals, 2021: Accelerated Geoscience Program: Geological Survey of Western Australia, Geological Exploration Package

Elevated LCT indicator elements including Li, Ta, Be, Nb, Sn, Cs, Rb and ratios such as Li/Mg and Ta/Nb, as shown in Figure 3, from the Geological Survey of Western Australia ("GSWA") are used to identify highly fertile signatures of potential source granitoids (Figure 4)



Source: after Bradley et al. (2017)

Often anomalous values are coupled with being proximal to known pegmatites, which increases confidence in the significance of the anomalism. Where no pegmatite field observation points have been recorded, there is the potential that unrecognised pegmatites exist near fertile granite anomalism.

Soil sampling will be conducted across all tenements with an initial 400m x 400m spacing which may change depending on prospectivity, as shown in Figure 5. Priority sampling areas for Dundas South Western priority sampling areas are shown in Figure 6 and priority sampling for Dundas North/Eastern tenements are shown in Figure 7. Mapping will also be conducted concurrently to identify areas of additional interest including outcrops and areas of mineralisation.

GEOPHYSICS INTERPRETATION

Geophysics interpretation is currently underway utilising existing data across the tenement areas. The Company will integrate the results of geophysics interpretation with soil sampling results and surface mapping to allow further development of its discovery strategy.

Figure 5: Dundas tenements and 400m x 400m sampling interval

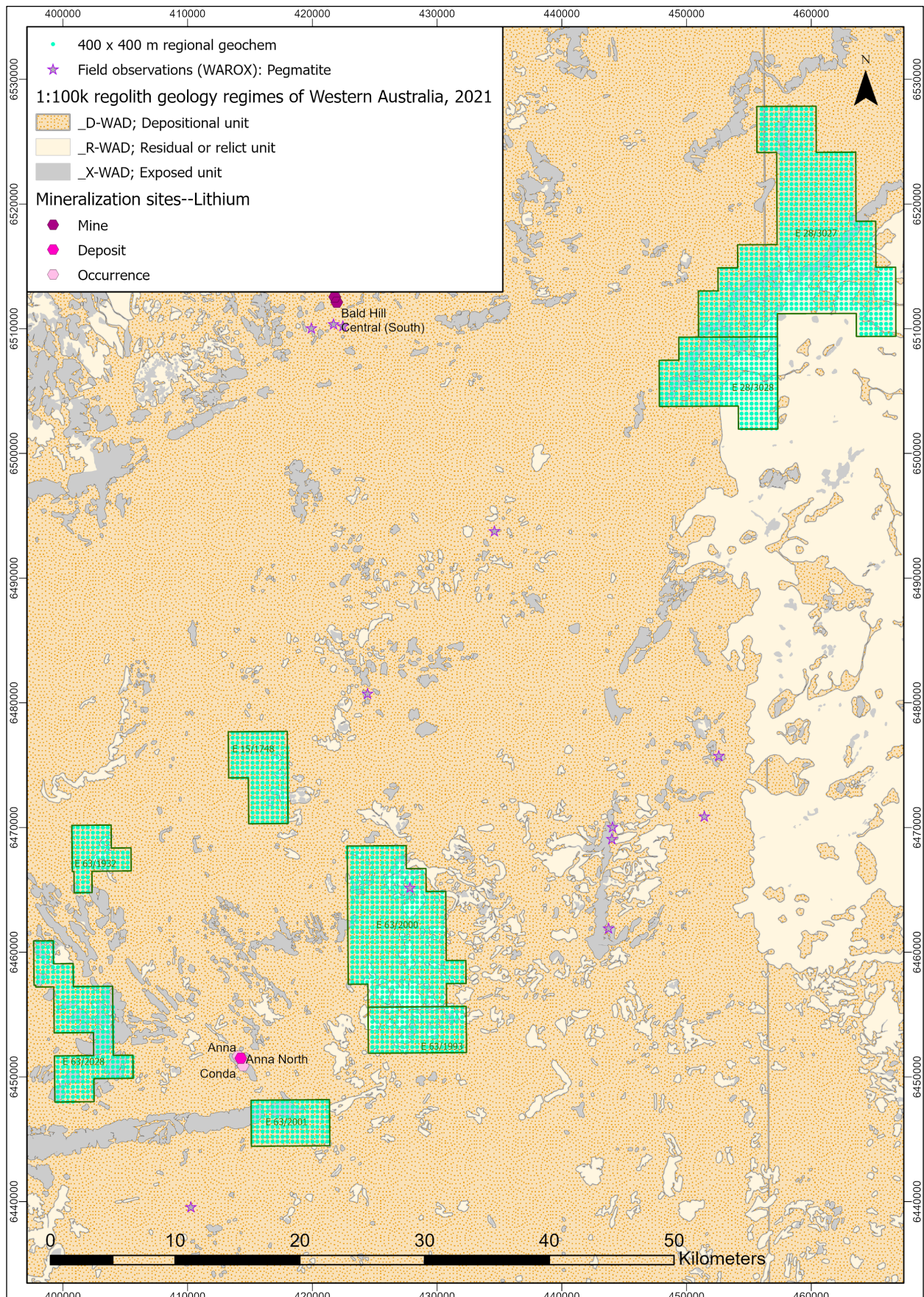


Figure 6: Dundas South/Western priority sampling areas

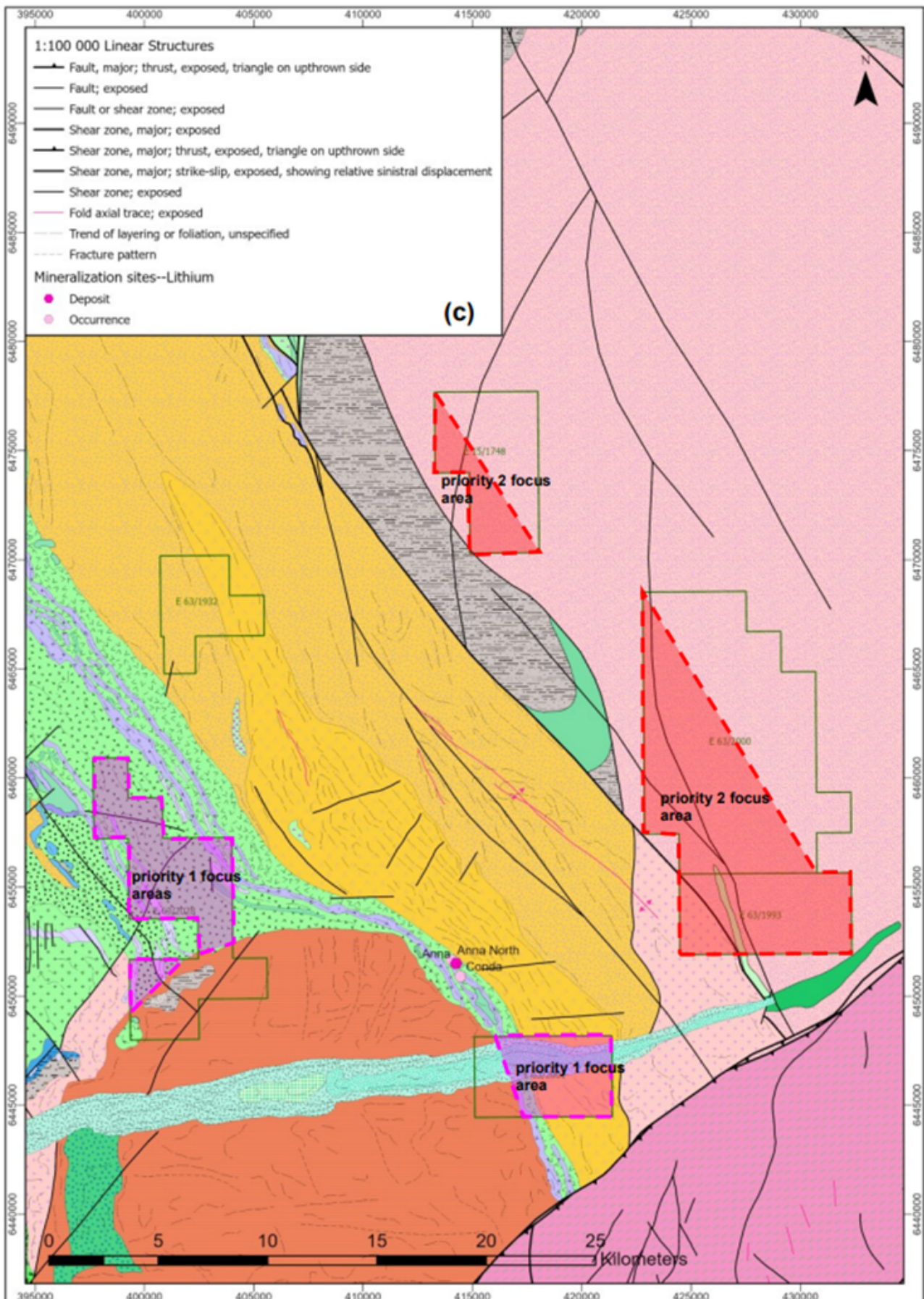
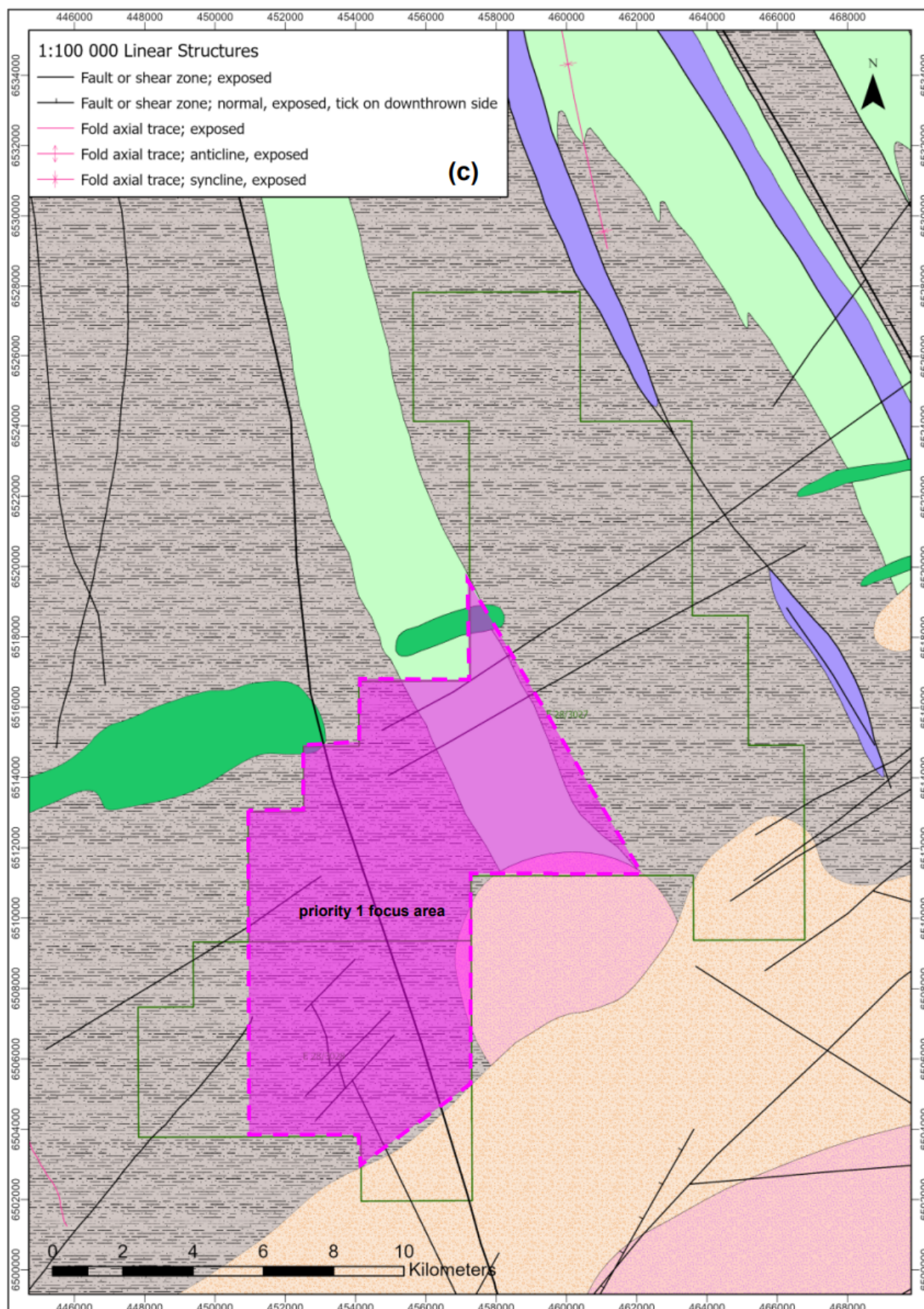


Figure 7: Dundas North/Eastern priority sampling areas



OTHER PROJECTS

The Company also has 100% interest in the Mt Jewell, Mt Bartle and Mailman Hill projects to the north of Kalgoorlie in Western Australia.

Figure 8: Lightning Minerals' project summary



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 has other projects in Western Australia, Mt Jewell, Mt Bartle and Mailman Hill 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.

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