ADDRESS
Level 8, 99 St Georges Terrace
Perth WA 6000
PHONE
+61 (08) 9486 4036

ABN
96 095 684 389

WEBSITE
www.lanthanein.com

30 August 2022

Siteworks Commenced for Maiden Drill Program

- **Site works commenced for access and drill site preparations**
- **RC drilling scheduled to start early September**
- **Targeting the exceptional high-grade rare earth results from rock chips at outcropping ironstones over >2.5km strike, analogous to Hastings Technology Metals rare earth deposits and Dreadnought Resources Yin discovery adjacent to Lanthanein's Lyons Projects, 2.5km and 32km away respectively**

Mr Brian Thomas, Lanthanein Technical Director commented "Commencement of earthworks on site to prepare access tracks and drill sites means we are ever closer to starting our maiden drill program at the exciting Lyons rare earths project. The drill rig is scheduled to mobilise to site by weeks end with drilling to start in the first week of September."

"The geological team is buoyed by the recent success of Dreadnought's major discovery at Yin which demonstrates the significant potential that remains in the Gifford Creek Ferrocarbonatite Complex. The Gascoyne is in an enviable position globally with an existing significant endowment of rare earth minerals, but due to the underexplored nature there remains considerably more potential for rare earth discoveries such as Dreadnought's Yin and our own Lyons REE bearing ironstone discoveries."

"The Lanthanein management are also encouraged by the recent funding agreement between Hastings Technology Metals (ASX:HAS) and Wyloo Metals which has enabled Hastings to purchase a 22% strategic shareholding in Neo Performance Materials (TSX:NEO), a global leader in the downstream processing of rare earth elements and the production of advanced materials, including permanent magnets."

"I look forward to the drill program getting underway shortly and updating the market as drilling progresses."

Lanthanein Resources Ltd (ASX: FNT) (**Lanthanein** or the **Company**) is pleased to announce that site works have commenced ahead of the maiden drill program at the Lyons Rare Earths Project in Western Australia (**Lyons Project**). Earthworks will take approximately one week to complete with access tracks and drill site preparations to allow for drilling to commence shortly thereafter. The proposed drill program will target high-grade rare earth mineralisation discovered at the outcropping ironstones and additional interpretated carbonatite intrusives and ironstones undercover (Figures 1 and 2).

The drill program will investigate high priority targets located within the Gifford Creek Carbonatite Complex, host to Hastings Technology Metals'(ASX:HAS) world-class Yangibana Mineral Resource[1] of 27.42Mt @ 0.97% TREO with 0.33% Nd_2O_3+Pr_6O_{11}, and Dreadnought Resources multiple discoveries[2].

For personal use only

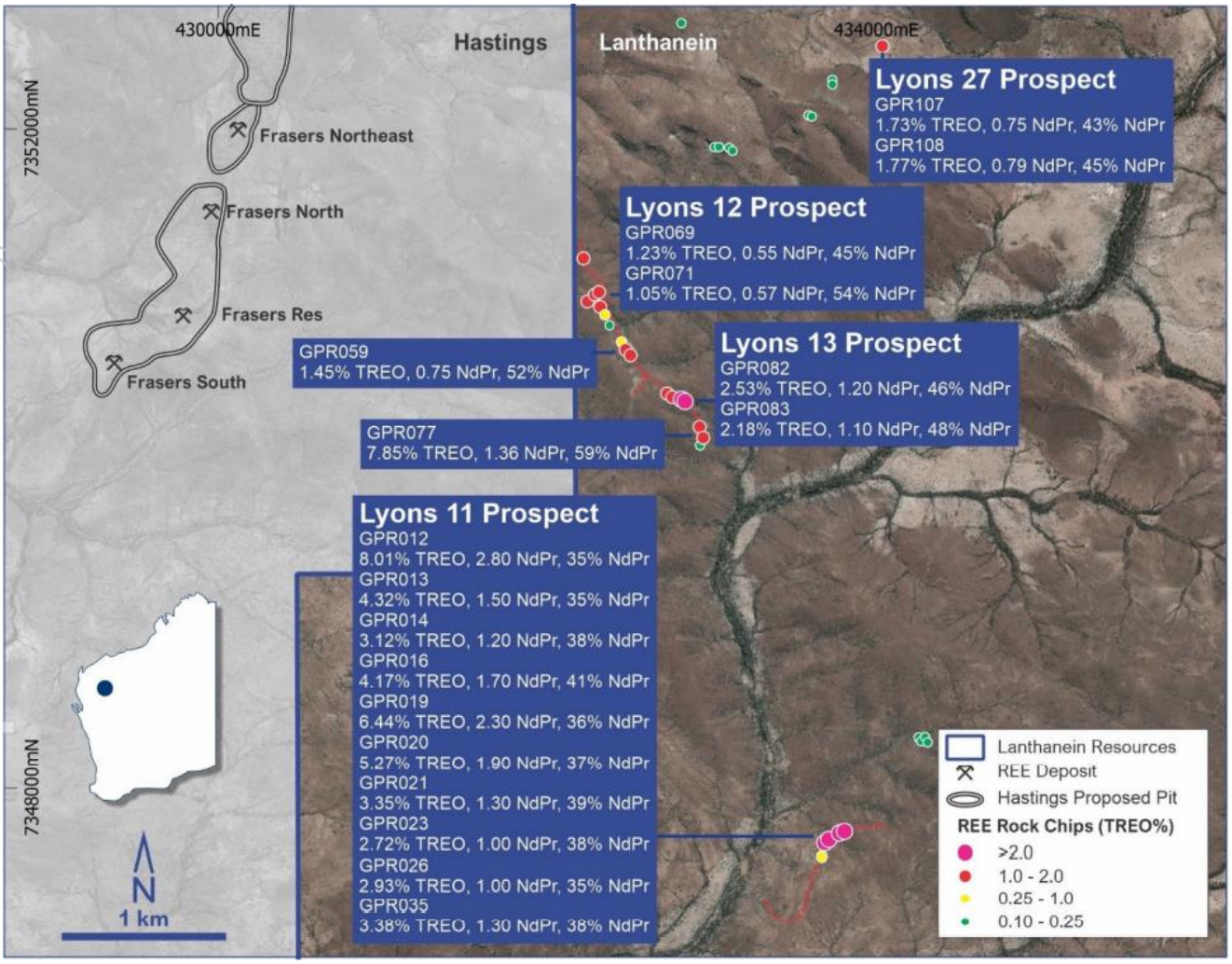

Figure 1. High grade REE bearing ironstones discovered to date will be the initial focus of the maiden drill program (refer ASX release 21 March 2022).

An additional Program of Works (PoW) application has been lodged with the Department of Mines, Industry Regulation and Safety (DMIRS) to allow for extensions to the initial drilling campaign. Drilling will be critical to understanding the resource potential of the mineralised ironstones, to determine width, grade, and continuity at depth and along strike of interpreted ironstone trends.

Further rock chip sampling, ground based geophysics and drilling programs are planned to investigate additional targets not yet followed up, including thorium and magnetic anomalies throughout the Lyons Project and the high priority structural target along the major Bald Hill lineament which transects both the Edmund and Lyons Project Areas (Figures 3 and 4). The Bald Hill lineament is the major control on rare earth mineralisation at Hastings Technology Metals Yangibana mine and represents a very high priority target for Lanthanein. Potential remains for further discoveries of ironstones and carbonatites (Figure 5) within the company's tenure where no historical REE exploration has occurred.

For personal use only

For personal use only

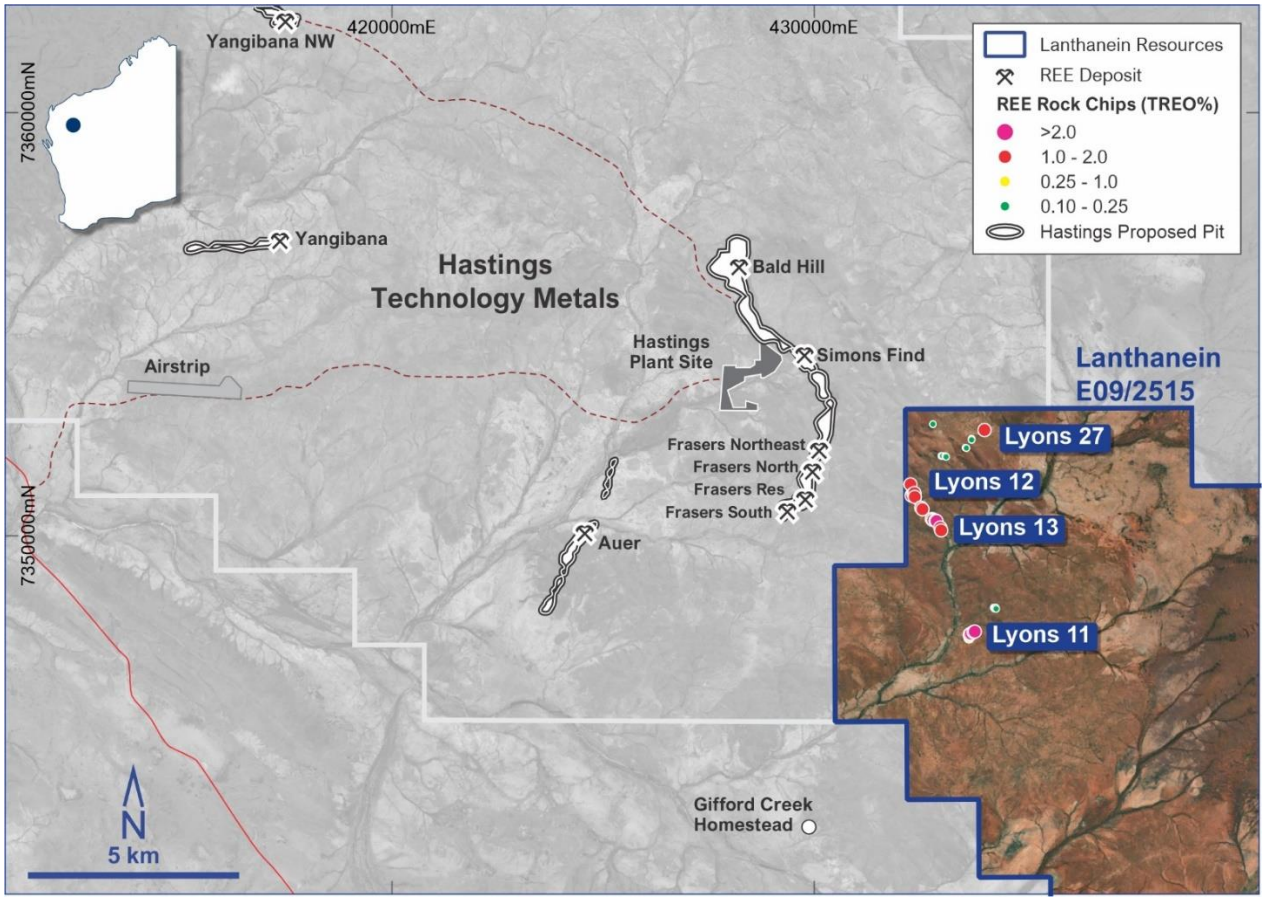

Figure 2. Lyons REE Project adjacent to Hastings Technology Metals (ASX.HAS) Yangibana REE mine.

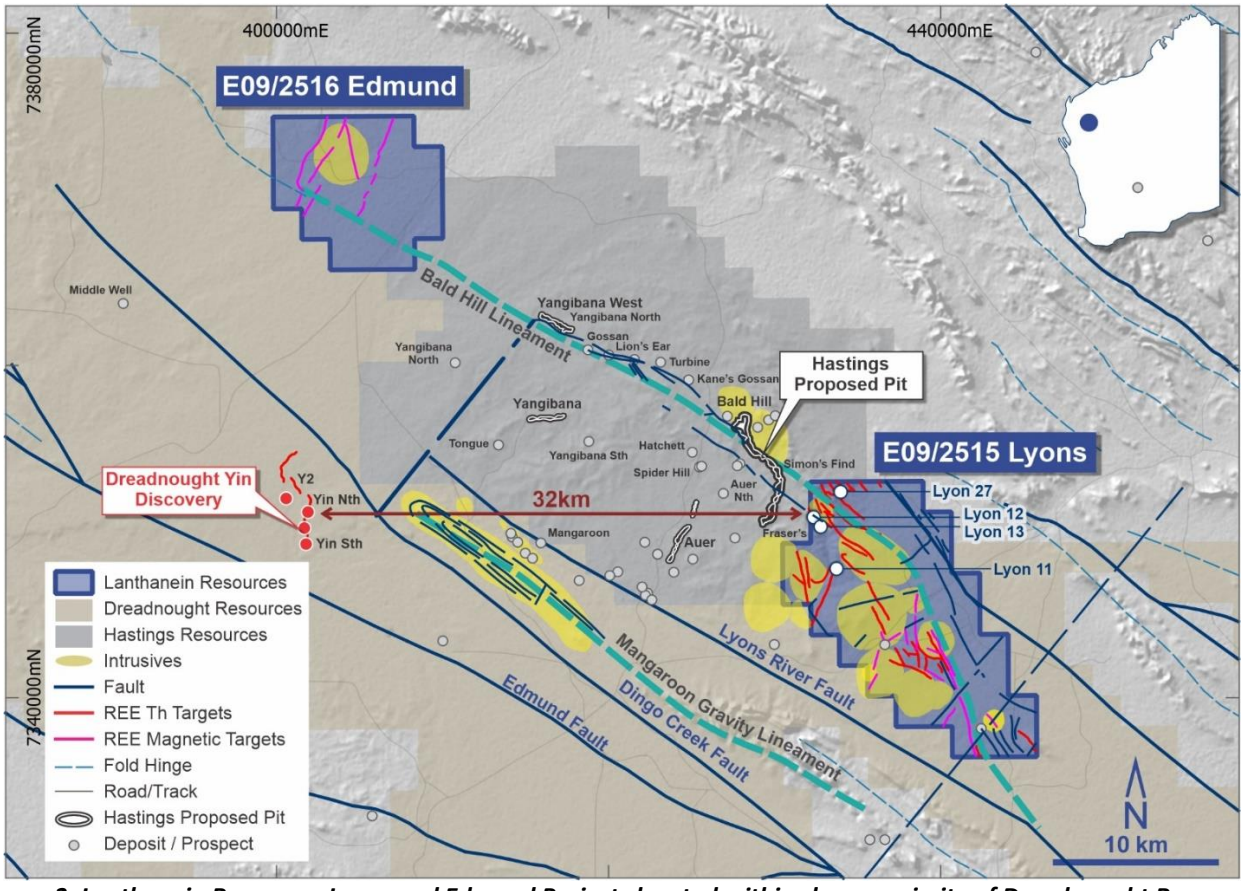

Figure 3. Lanthanein Resources Lyons and Edmund Projects located within close proximity of Dreadnought Resources Yin discovery and Hastings Technology Metals Yangibana REE mine.

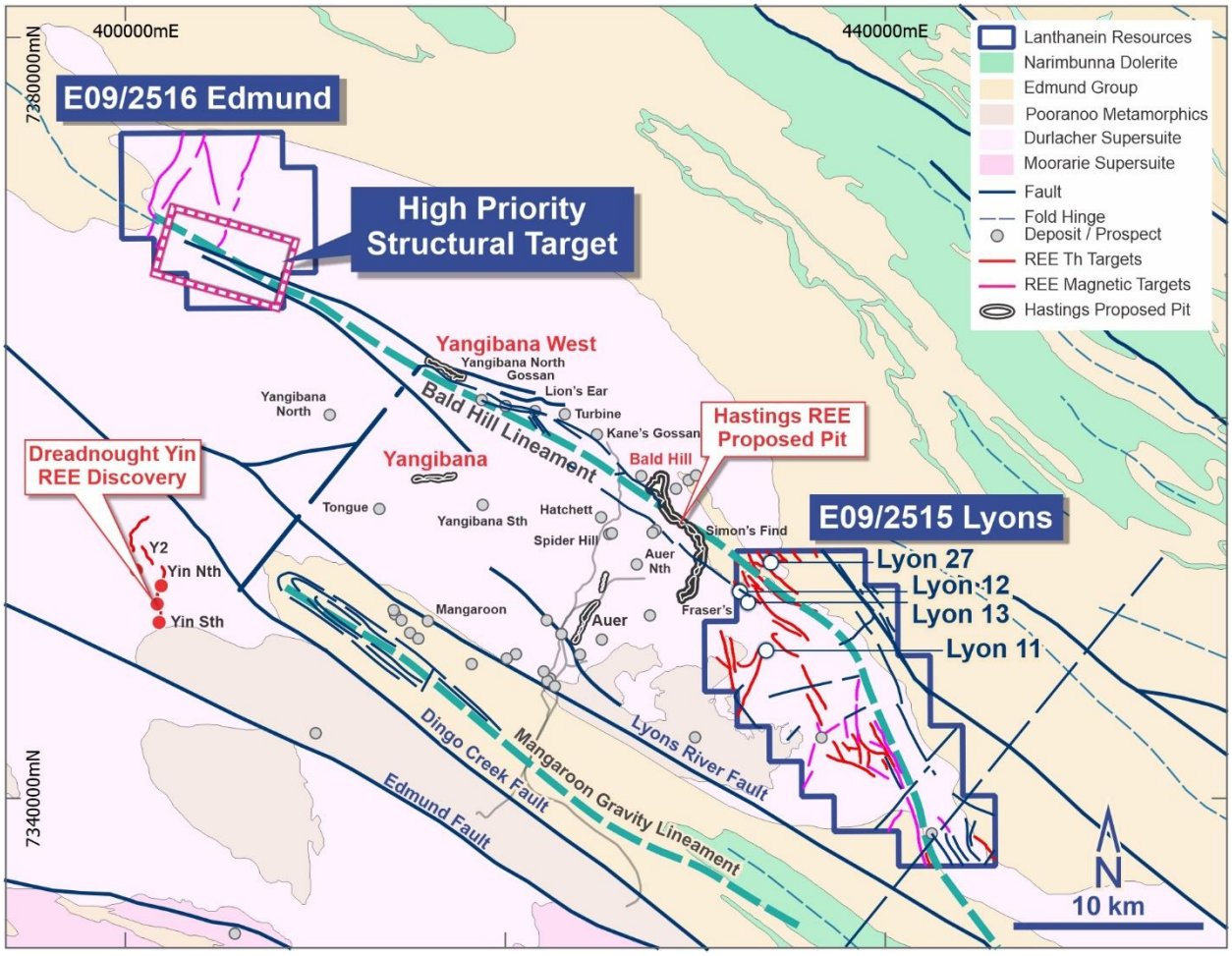

Figure 4. Location of Lyons and Edmund Projects in the Gascoyne, Western Australia, (geology overlay), highlighting the prospective Durlacher Suite of the Gifford Creek Carbonatite Complex, in pink underlying the project areas

For personal use only

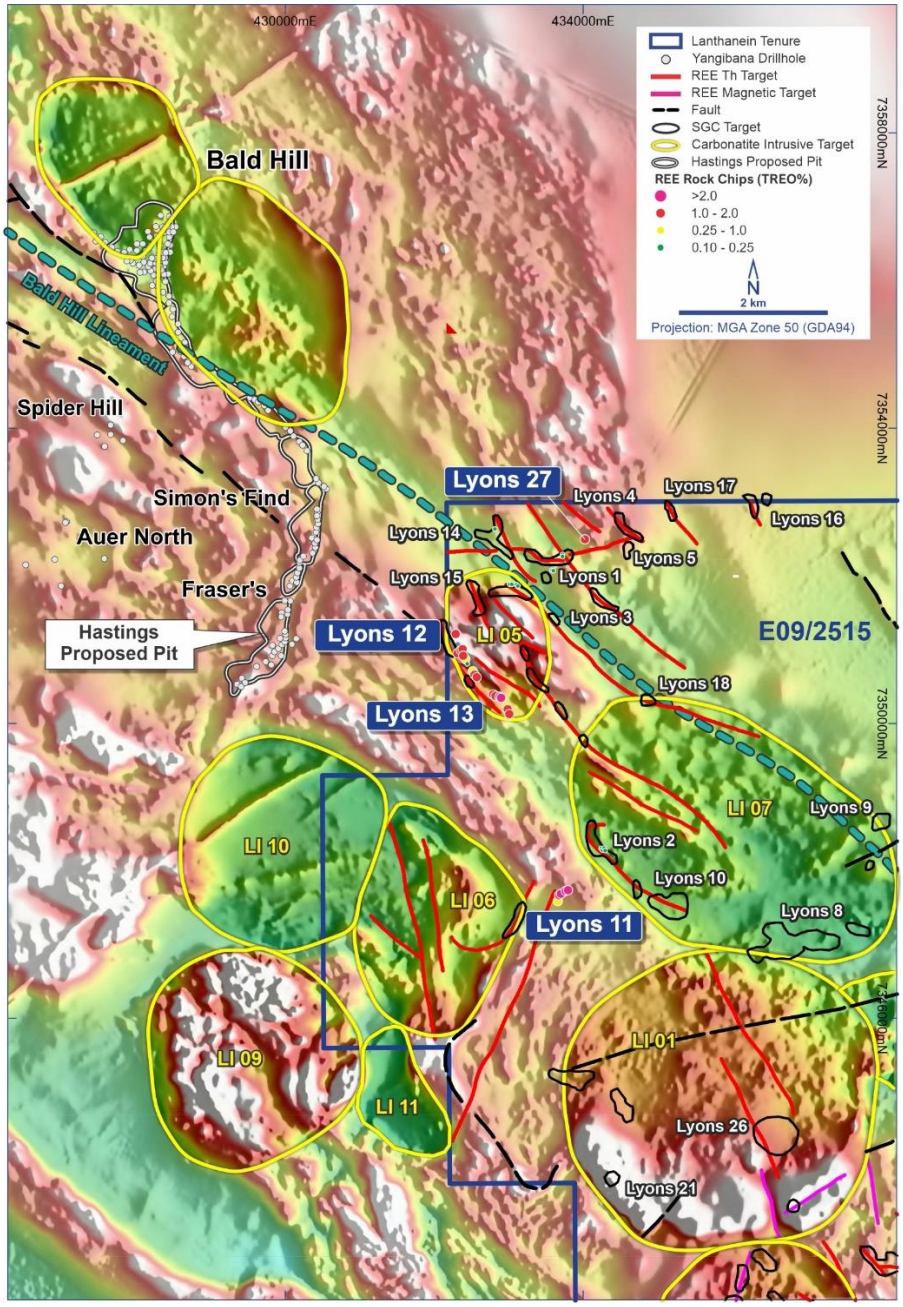

Figure 5. Interpreted intrusives with RTPVD1 filtered magnetics imagery, highlighting relationship with rare earth mineralisation at Hastings, and target areas on Lanthanein's Lyons Project

This announcement has been authorised for release by the Directors of the Company.

For additional information please visit our website at www.lanthanein.com

LANTHANEIN RESOURCES LTD

The information referred to in this announcement relates to the following sources:

[1] ASX.HAS: 5 May 2021 "Yangibana Project updated Measured and Indicated Resource tonnes up by 54%" b07ebf9d-03c.pdf (investi.com.au). The HAS Resource estimate comprises 4.9Mt @1.01% TREO in the Measured category, 16.24Mt @0.95% TREO Indicated and 6.27Mt @0.99% TREO Inferred.

[2] ASX.DRE: 28 July 2022 "Assays Confirm Yin as a High Grade Rare Earth Discovery" 5a699d6e-eab.pdf (investi.com.au)

For personal use only

The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the format and context in which the Competent Person's findings are presented have not been materially modified from the original reports.

Competent Person's Statement

The information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Thomas Langley who is a member of the Australian Institute of Geoscientists (MAIG) and a member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr. Thomas Langley is a consultant of Lanthanein Resources Limited, and is a shareholder, however Mr. Thomas Langley believes this shareholding does not create a conflict of interest, and Mr. Langley 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. Langley consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

Competent Person's Statement

The information in this report that relates to Geophysical Exploration Results is based on information compiled by Peter Swiridiuk - Member of the Aust. Inst. of Geoscientists. Peter Swiridiuk is a Technical Consultant and Non-Executive Director for Lanthanein Resources. Peter Swiridiuk has sufficient experience which is relevant to the type of mineralisation and type of deposit under consideration to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Resources. Peter Swiridiuk consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. Additionally, Mr Swiridiuk confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.

For personal use only