

3 May 2023

Lyons REE Drill Program Commenced

- RC drilling programme (>10,000m) at Lyons Project in the Gascoyne is underway
- Follow up on outstanding results from Lyons 12, 13 & 27
- Drilling of RC pre collars for two deep EIS Co-Funded Diamond Holes to test large Ferrocarnatite targets
- Drilling targeting Fenitisation containing enriched zones of REE and Niobium (Nb_2O_5) along the outer rim of the regionally significant sized targets of carbonatite complexes

Mr Brian Thomas, Lanthanein Technical Director commented *“The commencement of drilling on new outcropping ironstone trends is a very exciting time for Lanthanein. The drilling of these new discoveries is the result of the geological team’s growing understanding of the rare earth mineralisation controls within the Gifford Creek Carbonatite complex. The upcoming field programs have the potential to provide the breakthrough discovery that will transform the Company. We look forward to building on the discoveries made to date with the high grade outcropping ironstones at Lyons 12, 13 & 27 which are ~2km from Hastings Technology Metals (ASX:HAS) Frasers and Simons Find pits and updating the market with results as drilling progresses.”*

Lanthanein Resources Ltd (ASX: FNT) (**Lanthanein** or the **Company**) is pleased to announce that drilling (Figure 1) has commenced at the Lyons Rare Earths Project in Western Australia (**Lyons Project**). The proposed drill program will target high-grade rare earth mineralisation discovered at the outcropping ironstones and additional interpreted carbonatite intrusives and ironstones undercover at Lyons (Figure 2).



Figure 1: Topdrill RC Drill Rig on the Lyons LI03-01 Southern Prospect

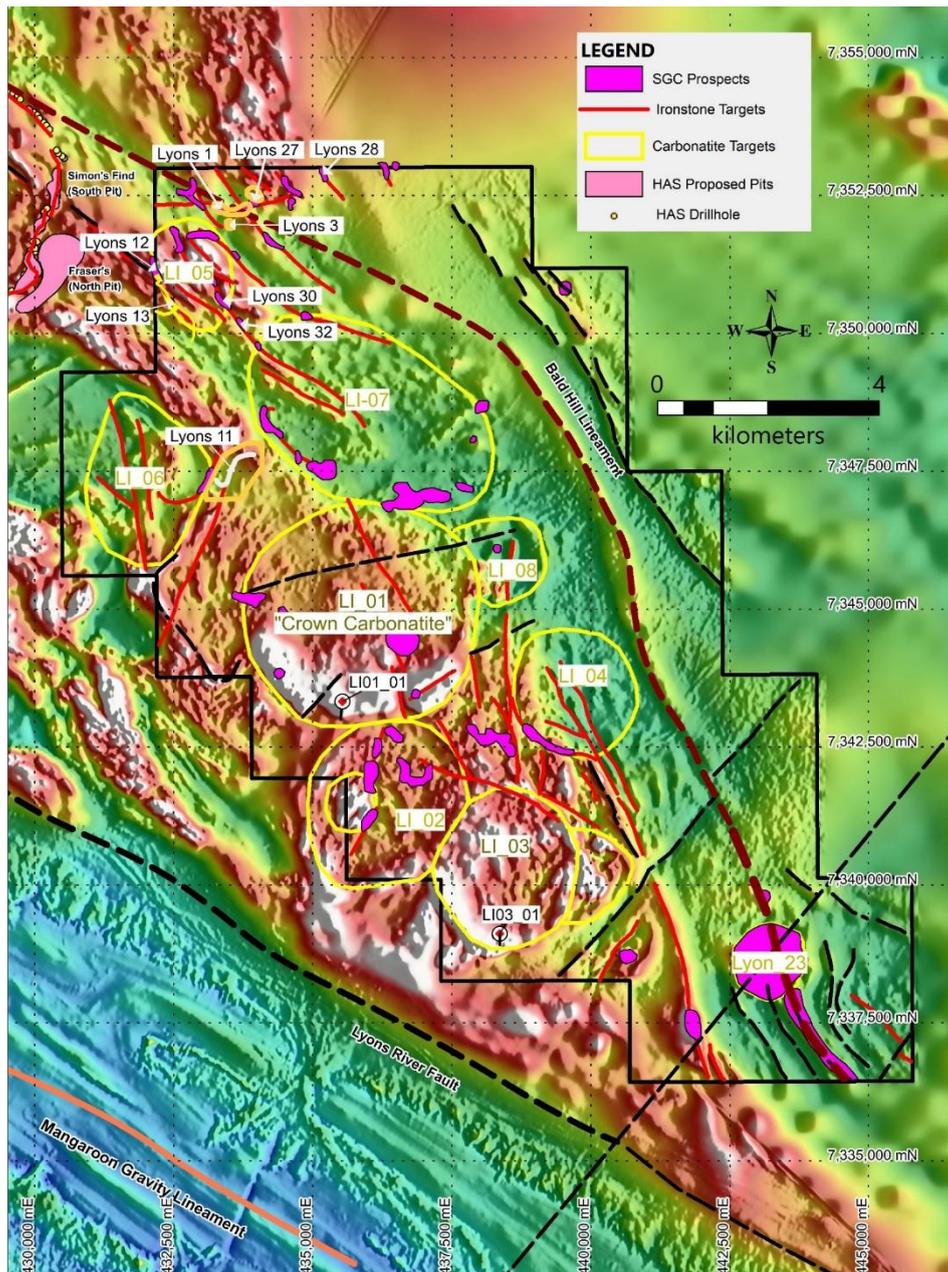


Figure 2: Interpreted intrusives with RTP filtered magnetics imagery, highlighting relationship with rare earth mineralisation at Hastings, and target areas on Lanthanein's Lyons Project.

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 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.