



Review of REE & Critical Minerals Prospectivity of US Assets

Magnum Mining & Exploration Limited (ASX: **Magnum**, or the **Company**) provides an update on its ongoing project portfolio review. Following the recent capital raise, changes to the board¹ and further additions to the exploration team, the board has undertaken a strategy, cost and project wide review. Following a review of the US Assets the Company is pleased to report on this initial assessment.

HIGHLIGHTS

- Magnum's USA portfolio is undergoing a rigorous review in response to increased interest in import replacement by domestic supply – in March 2025, President Trump issued an Executive Order titled "**Immediate Measures to Increase American Mineral Production**"²
- **Parker Gold Project is recognised as being on the margins of the Walker Lane Trend**, a significant zone that includes multi-million ounce Au deposits & the USA's Mountain Pass REE mine
- Parker targets firm up with previously reported bonanza grade **gold to over 83 g/t gold** at surface driving a follow up programme, including **359 g/t silver, 8.37% copper, and 16.1% lead**³
- **Possible REE prospectivity at Parker** has been identified and will be field assessed
- Previous reconnaissance sampling at Buena Vista identified **Gallium and Lithium anomalism**, from stream sediment sampling^{4,5}
- Follow-up satellite multispectral data analysis **confirmed the Buena Vista area is prospective for REE mineralisation**
- Work programmes will be formulated once the review is completed and may consist of surface geochemical sampling and geophysical surveys to define drillable targets

PROJECT REVIEW DRIVES FOCUS ON CRITICAL MINERALS

The board at Magnum is driving a refocussing of the Company's strategy, supported by tailwinds in the critical mineral and gold sectors. Over a period of a substantial build up in the Company's US minerals portfolio, the Board has embarked on a strategy to maximise value by identifying high priority critical mineral and gold targets.

Non-Executive Chairman Michael Davy commented "*Western governments are re-prioritising gold as a safe-haven, as well as rare earths and critical minerals as strategic assets — our portfolio positions us at the intersection of financial security and critical supply chain independence. For these reasons the*

¹ ASX:MGU – "Magnum Board & Company Secretary Updates", 15 July, 2025

² EO 14241, March 20, 2025 - <https://www.whitehouse.gov/fact-sheets/2025/03/fact-sheet-president-donald-j-trump-takes-immediate-action-to-increase-american-mineral-production/>

³ ASX:MGU – "Magnum Acquires High Grade Us Copper-Gold Projects", 9 April, 2025

⁴ ASX"MGU – "Lithium Discovered at Buena Vista", 16 January, 2023

⁵ Taylor, et al, "Critical mineral inventory of select IOA-IOCG deposits, southwestern USA" U.S. Geol Survey, 2025

board has considered it a priority to review its portfolio of projects, to ensure that funding can be appropriately directed towards these strategic minerals.

This change in focus does not exclude the Company's Buena Vista Iron Project, which the Company considers aligns perfectly with global industrial transformation. Magnum is continuing discussions with numerous parties and strategics around unlocking value from this advanced asset."

PARKER GOLD, ARIZONA

The Parker Gold Project hosts an interpreted Iron Oxide Copper Gold (IOCG) style gold target. While it is generally accepted that this area is within the Colorado Extension River Corridor, some interpretations have the Walker Lane Trend extend this far south. Both zones are characterised by intensive structural disruption. This Corridor as mid-Tertiary crustal extension with crustal thinning along a system of low-angle normal faults and the Trend as a major fault corridor that may accommodate, along with the San Andreas Fault system, tectonic movement between the Pacific and North American plates. In either case, the intense faulting creates structural traps and conduits for hydrothermal fluids, which are key drivers of mineral deposition. The Trend has yielded over 40 million ounces (Moz) of gold and hosts significant gold operations including AngloGold Ashanti's Silicon/Merlin Project (16Moz), the Castle Mountain Gold Mine (4.2Moz)⁶, and the Mother Lode Deposit (1.7Moz). Dateline Resources' recently announced Colosseum gold deposit (1.1Moz)⁷ is located approximately 200km north-west along the Walker Lane Trend (Figure 1).

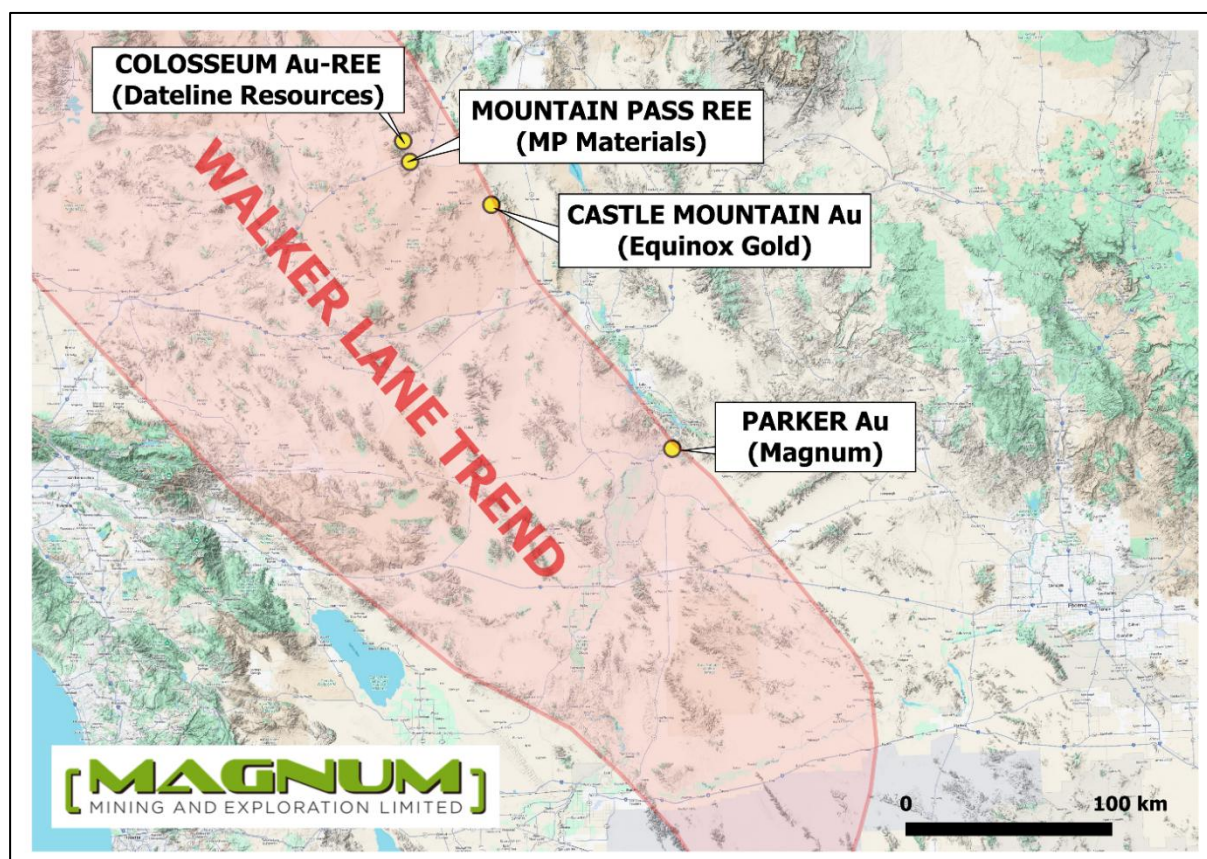


Figure 1 The Parker Gold Project is located on the eastern edge of the Walker Lane Trends, host to multimillion ounce gold deposits and the Mountain Pass REE deposit. There is ongoing uncertainty around the southern extent of the Walker Lane Trend.

⁶ TSX:EQX – "Equinox Gold Announces Positive Feasibility Study for Castle Mountain Phase 2 Expansion", 22 March, 2021

⁷ ASX:DTR – "Updated Scoping Study", 26 May, 2025

The Mountain Pass REE deposit also occurs within the trend and Dateline have recently announced the REE potential of their nearby Colosseum property.

The position of these deposits on the eastern edge of the Walker Lane Trend is noted. The Parker Gold Project is similarly located.

Selected surface rock samples at Parker go up to **83.87 g/t** gold, **359 g/t** silver, **8.37%** copper, and **16.1%** lead⁸. While high-grade, late-stage veins were mined there in the late 1800s to early 1900s, the main feature of interest is a 4km long haematite-magnetite hydrothermal mega-breccia, called the Red Breccia Zone. The breccia zone is interpreted to represent the haematite zone above a porphyritic or carbonatite intrusive or a sinter breccia off that intrusive.

REEs are often linked to carbonatite IOCG deposits, occurring in minerals such as monazite, bastnäsite, and apatite within the iron oxide alteration zones. These elements are typically introduced and transported by hydrothermal fluids, often together with uranium, fluorine, and molybdenum. The presence of REE mineralisation in an IOCG system enhances the overall importance of IOCGs as sources of critical metals.

While carbonatite dominated IOCGs are not as common as porphyry IOCGs, they have precedence in the area. The nearby Mountain Pass Mine had Resource estimate of 31.6 Mt @ 6.6% TREE (Total Rare Earth Elements) for 2.1 Mt of contained TREE⁹. It is hosted in an intrusive complex of potassic igneous rocks, including shonkinite, syenite, alkali granite, and carbonatite.

BUENA VISTA IRON PROJECT

Preliminary investigations on the Buena Vista land holdings show prospectivity for Rare Earth Elements (REE). Taylor ¹⁰ notes that the Buena Vista Iron mines are part of the Humboldt Mafic Complex in Nevada where Ga and REE can be locally abundant.

Magnum engaged Dr Neil Pendock, a world recognised leader in multispectral analysis, to assess the Buena Vista area for REE mineralisation. Dr Pendock's conclusion, based on SENTINEL-2 satellite data, was that¹¹:

"The Buena Vista magnetite mine in Nevada has potential to host REEs. A Sentinel-2 scene over the mining licenses (ML) collected earlier this week (28 August 2024) confirms they are anomalous in a spectral endmember interpreted as neodymium oxide. In addition, the ML are anomalous in helium and radon. The origin of these gasses is likely from the radioactive decay of uranium which is often found in REE deposits".

Three major areas of potential REE mineralisation have been identified. Initial sampling of the Buena Vista Mine area found elevated lithium and scandium¹². Extensive surface geochemical sampling is now being planned for the area.

⁸ ASX:MGU – "Magnum Acquires High Grade Us Copper-Gold Projects", 9 April, 2025

⁹ Van Gosen, B.S., Verplanck, P.L., Seal, R.R., II, Long, K.R. and Gambogi, J. (2017) Rare-Earth Elements. In: Schulz, K.J., DeYoung, J.H., Jr., Seal, R.R. II and Bradley, D.C., Eds., Critical Mineral Resources of the US—Econ & Environ Geol & Prospects for Future Supply, U.S.G.S. Professional Paper 1802, O1-O31.
<https://doi.org/10.3133/pp1802O>

¹⁰ Taylor, et al, "Critical mineral inventory of select IOA-IOCG deposits, southwestern USA" U.S. Geological Survey, 2025

¹¹ ASX:MGU – "Spectral Analysis Identifies Neodymium Targets", 6 September, 2024

¹² ASX:MGU – "Lithium Discovered at Buena Vista", 16 January, 2023

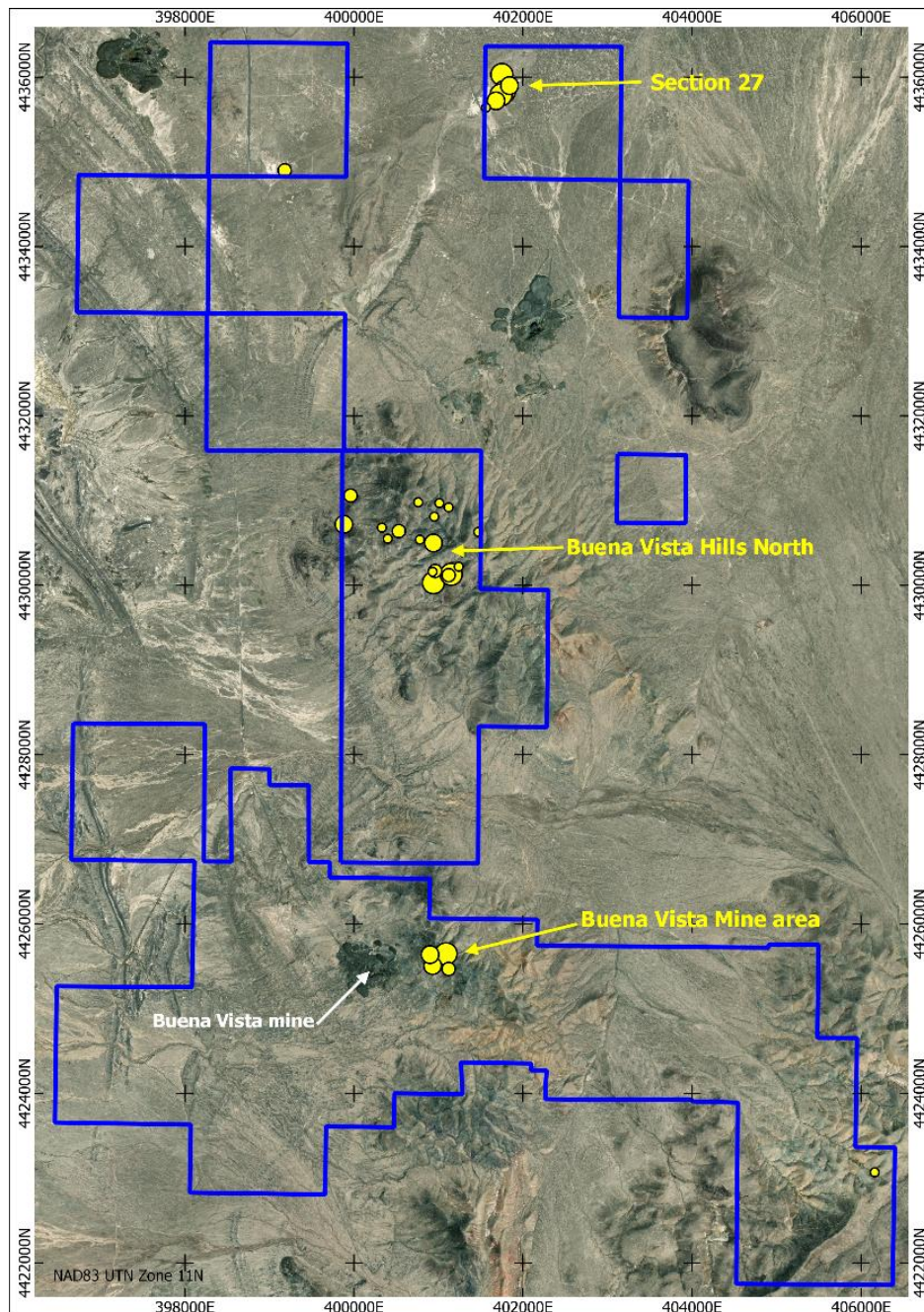


Figure 2 Buena Vista Iron Project leases showing the Sentinel-2 identified REE targets. Symbol size relates to target "strength" or spectral intensity.

NEXT STEPS

Once the review has been completed on all of Magnum's ground, exploration programmes will be formulated, budgeted, and scheduled.

COMPETENT PERSONS STATEMENT

The information in this announcement is based on information compiled by Mr Marcus Flis, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy and a full time employee of Rountree Pty Ltd. Mr Flis 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 Exploration Results, Mineral Resources and Ore Reserves.” Mr Flis consents to the inclusion of the matters outlined in this announcement the form and context in which they appear.

The information in this announcement that is footnoted below relates to exploration results that have been released previously on the ASX. 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 underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s finding is presented have not been materially modified from the original market announcements.

ASX ANNOUNCEMENTS REFERENCED DIRECTLY IN THIS RELEASE

- *“Magnum Board & Company Secretary Updates” released on the ASX on 15th of July 2025 and available to view on <https://www.mmel.com.au/site/investor-information/asx-announcements-and-financial-reports>*
- *“Magnum Acquires High Grade Us Copper-Gold Projects” released on the ASX on 9th of April 2025 and available to view on <https://www.mmel.com.au/site/investor-information/asx-announcements-and-financial-reports> .*
- *“Lithium Discovered at Buena Vista” released on the ASX on 16th of January 2023 and available to view on <https://www.mmel.com.au/site/investor-information/asx-announcements-and-financial-reports>*
- *“Spectral Analysis Identifies Neodymium Targets” released on the ASX on 6th of September 2024 and available to view on <https://www.mmel.com.au/site/investor-information/asx-announcements-and-financial-reports>*

FORWARD LOOKING STATEMENTS

This release contains “forward-looking information” that is based on the Company’s expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to studies, the Company’s business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as ‘outlook’, ‘anticipate’, ‘project’, ‘target’, ‘likely’, ‘believe’, ‘estimate’, ‘expect’, ‘intend’, ‘may’, ‘would’, ‘could’, ‘should’, ‘scheduled’, ‘will’, ‘plan’, ‘forecast’, ‘evolve’ and similar expressions. Persons reading this news release are cautioned that such statements are only predictions, and that the Company’s actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social

uncertainties; the actual results of current development activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of metals; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information.

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BY ORDER OF THE BOARD

Mark Pryn

Company Secretary

Email: info@mmel.com.au

Phone: +61 3 9682 2966

Evan Smith

Investor Relations

evan.smith@advisir.com.au

Phone: +61 431 176 607