

# GEOPHYSICAL SURVEY COMPLETE OVER HIGHLY PROSPECTIVE WALKER TREND PROJECTS

Magnum Mining and Exploration Limited (ASX:MGU, OTCQB: MGUFF) (Magnum, or the Company) is pleased to announce that an ultra-high resolution aeromagnetic and radiometric survey at the Parker Gold and La Cienega Copper-Gold Projects has been completed (Figure 1 & Figure 2). Further, Magnum will undertake a detailed surface sampling program, comprising systematic soil sampling and targeted rock-chip sampling to refine and prioritise previously identified high grade zones.



**Figure 1** - Helicopter used for the ultra-high resolution airborne aeromagnetic and radiometric survey at the Parker Gold (Cu-Au) Project, shown at the base station magnetometer.



**Figure 2** - The location of the Parker Gold and La Cienega Projects in Arizona, USA. The projects sit at the intersection of the Walker Trend and the Colorado River Extension Zone, both areas of intensive and extensive gold, copper, and REE exploration.

The surveys were done at a line spacing of 40m and a nominal altitude of 20m using a helicopter platform. These are considered ultra-high resolution specifications that compare well with ground surveys and are superior to drone surveys. The added advantage of the manned survey is that radiometric data is collected concurrently.

Preliminary images of the unprocessed data exhibit a great deal of detail that is not evident in existing geological mapping, and the Company looks forward to receiving the final processed data. Once the final processed data are received, Magnum will drive the next phase of exploration. Initially, that will consist of extensive surface sampling prior to designing a drilling programme. Final processed data delivery is expected to be in approximately four weeks, given the intervening Christmas/New Year period.

Geological mapping data is being collated to support the interpretation of the geophysical data.

The Parker Gold and La Cienega Projects represent a Mississippi Valley Type mineralised system with possible associations with a classic IOCG style copper-gold system. At Parker, surface rock samples with up to 83.87 g/t gold, 359 g/t silver, 8.37% copper and 16.1% lead have previously been returned, with samples including visible gold (Figure 3). Further, the historic Eagle's Nest Mine accessed copper to approximately 4.7% and gold to 6 to 7 g/t.<sup>2</sup>

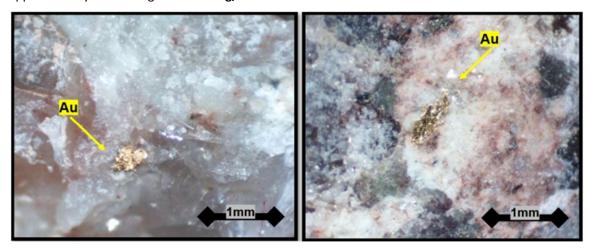


Figure 3 – Micrographs of gold crystals in sample 1843959 (left) and sample 1844230 (right); taken under plain light and 20x magnification.<sup>3</sup>

Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

## SURFACE SAMPLING PROGRAM

Magnum will undertake a detailed surface sampling program across at the Parker Gold Project. The programme will comprise systematic soil sampling along 100m spaced profile lines, with samples collected at nominal 50-100m intervals to provide consistent coverage and support the delineation of geochemical anomalies. In addition, targeted rock-chip sampling will focus on previously identified mineralised structures and alteration zones, including mapped veining and brecciation associated with known gold and copper mineralisation. Soil samples will be screened using pXRF prior to laboratory submission, with only samples exceeding predefined thresholds selected for laboratory analysis.

<sup>&</sup>lt;sup>1</sup> Refer to ASX release, "Magnum Acquires High Grade US Copper-Gold Projects", 9 April 2025

<sup>&</sup>lt;sup>2</sup> 2011-01-1217, ADMMR mining collection, Arizona Geological Survey. <a href="http://docs.azgs.az.gov/OnlineAccessMineFiles/C-F/EaglenestmineLapaz32.pdf">http://docs.azgs.az.gov/OnlineAccessMineFiles/C-F/EaglenestmineLapaz32.pdf</a>

<sup>&</sup>lt;sup>3</sup> Refer to ASX release, "Magnum Acquires High Grade US Copper-Gold Projects", 9 April 2025

Geochemical results from the surface sampling programme will be integrated with data from the recently completed heliborne magnetic survey and updated geological interpretation. This integrated approach is expected to refine and prioritise drill targets and support the planning of follow up drilling at the Parker Gold Project.

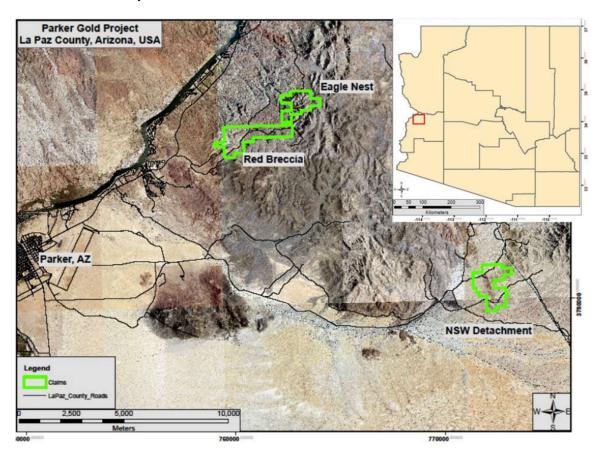


Figure 4 – Location of the Red Breccia, Eagle Nest and NSW Detachment areas at the Parker Project, Arizona.

## **NEXT STEPS**

# Parker Gold & Le Cienega Projects

- The Parker Gold & Le Cienega aeromagnetic and radiometric survey data processing are expected to be completed within four weeks.
- Interpretation of this geophysical data is set to begin on final data delivery and integrated with geological mapping.
- The final design of a surface soil sampling programme will be informed by geophysical data interpretation. The survey will be supported by in-field pXRF assaying.
- Execution of detailed surface sampling program.

ASX Release: 30 December 2025

#### NO NEW INFORMATION

The information in this announcement as footnoted throughout the release and as noted 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 Acquires High Grade US Copper-Gold Projects", released on the ASX on the 9<sup>th</sup> April 2025 and available to view on <a href="https://www.mmel.com.au/site/investor-information/asx-annoucements-and-financial-reports">https://www.mmel.com.au/site/investor-information/asx-annoucements-and-financial-reports</a>

#### 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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