

## **EXPLORATION ACCELERATES AT DESERT STAR PROJECT WITH FIELDWORK UNDERWAY IN CALIFORNIA, USA**

### **Highlights**

- **Exploration Program Launched:** Initial fieldwork is now underway at the Desert Star Project, focused on early-stage evaluation of REE potential through targeted sampling and geological reconnaissance.
- **Proximity to World-Class Deposit:** Located just 4.5 km northeast of MP Materials' Mountain Pass REE Mine, one of the largest and highest-grade rare earth operations globally.
- **Systematic Targeting:** Field program includes geological mapping, prospecting, and the collection of up to 100 rock chip, soil, and heavy mineral samples across multiple high-priority zones.
- **Radiometric & Lithological Indicators:** Targets identified from radiometric anomalies across the project area (K, Th, U), coincident with mapped occurrences of carbonatite-related lithologies and alkaline intrusives, which are considered key indicators of REE-bearing systems in the area.
- **Assay Work Underway:** Samples to be analysed by ALS Laboratory in Reno, with assay results expected within 3 to 4 weeks of submission.
- **Data-Driven Advancement:** Results will support a detailed geochemical and structural interpretation, guiding refinement and prioritisation of future exploration phases.

**Bayan Mining and Minerals Ltd (ASX: BMM; "BMM" or "the Company")** is pleased to announce the commencement of fieldwork at Desert Star Project, located in the prolific Mountain Pass rare earth element (REE) district of southeastern California.

The current exploration program will include reconnaissance mapping and surface sampling across target areas identified through regional datasets and historical geological mapping. The company is aiming to collect approximately 100 samples comprising rock chips, soils, and heavy mineral concentrates to evaluate surface expressions of REE-bearing lithologies and pathfinder geochemistry.

The Desert Star Project is strategically located in a structurally favourable position northeast of the Mountain Pass Mine, a North America's highest-grade, producing rare earth element (REE) deposit<sup>1</sup>.

<sup>1</sup> MP Materials Corp. (NYSE:MP). [www.mpmaterials.com](http://www.mpmaterials.com)



Interpretation of 2018 USGS airborne radiometric data reveals a series of radiometric anomalies across the project area, coinciding with mapped occurrences of carbonatite-related lithologies and alkaline intrusives, which are considered key indicators of REE-bearing systems.

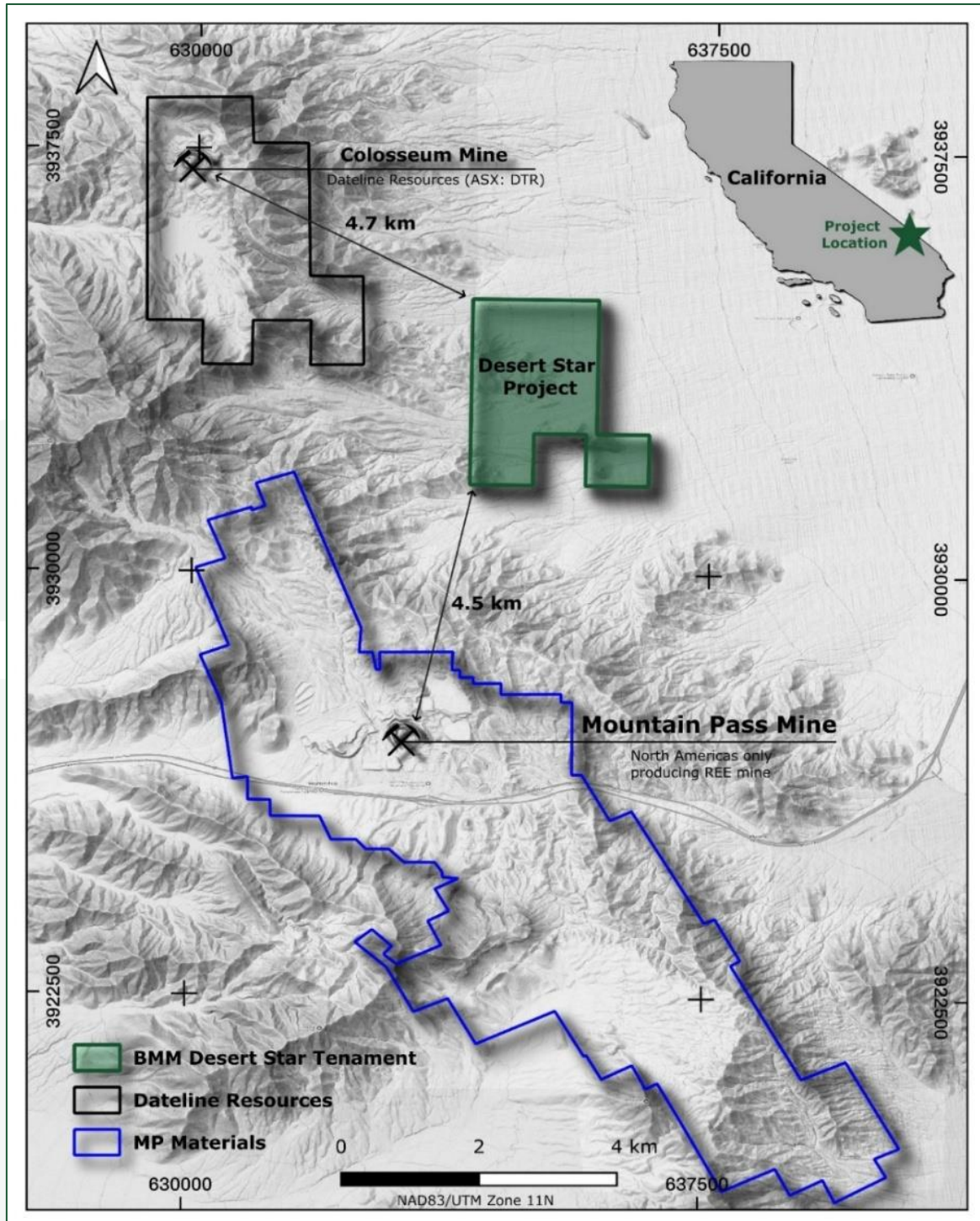


Figure 1 - Desert Star Project Location Map



Figure 2 – Collected rock chips and heavy minerals concentrate samples



Figure 3 – Aerial photo looking north-westerly toward outcropping metamorphic and felsic plutonic rocks

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*Figure 4 – Field photo of young alluvial pan crosscutting basement metamorphic and felsic plutonic rocks*



*Figure 5 – Field photo of unnamed adit located in the northwestern portion of the tenement*

**Executive Director Fadi Diab commented:**

*"We are excited to announce the commencement of fieldwork at the Desert Star Project, a key asset in our growing portfolio. The project's strategic location, just 4.5 km northeast of the world-class Mountain Pass REE Mine, offers significant potential. The early-phase exploration program is designed to build on the compelling geological indicators identified through radiometric anomalies and the presence of REE-favourable lithologies. Our goal is to validate surface mineralisation and gain crucial insights into the geochemical and structural characteristics of the system. The results from this initial program will play an important role in shaping our future exploration efforts, and we are confident this work will continue to demonstrate the potential of Desert Star as a promising REE asset."*

**Next Steps**

Following the completion of the fieldwork program, samples to be analysed by ALS Laboratory in Reno, with assay results expected within 3 to 4 weeks of submission. BMM will conduct a comprehensive analysis of the geochemical data to define priority exploration targets. Pending results, the Company may proceed with next exploration phase, including potential detailed mapping, detail sampling and targeted drilling to further evaluate mineralisation potential.

**About Desert Star Project**

The Desert Star Project comprises 72 federal lode claims covering approximately 6 km<sup>2</sup> in California's Mojave Desert, within a region highly prospective for rare earth elements (REEs). The project is easily accessible via paved and gravel roads from Interstate 15 and is supported by key infrastructure, including high-voltage transmission lines and a Union Pacific rail line located approximately 25 km away.

Located just 4.5 km northeast of the world-class Mountain Pass REE Mine, Desert Star sits within a structurally uplifted Paleoproterozoic basement block intruded by a Mesoproterozoic alkaline intrusive suite, including shonkinite, syenite, granite, and carbonatite, rock types commonly associated with REE mineralisation. The tenement is bounded by major normal faults (Ivanpah and Clark Mountain), which define a regional-scale structural corridor considered favourable for intrusion-related REE systems.



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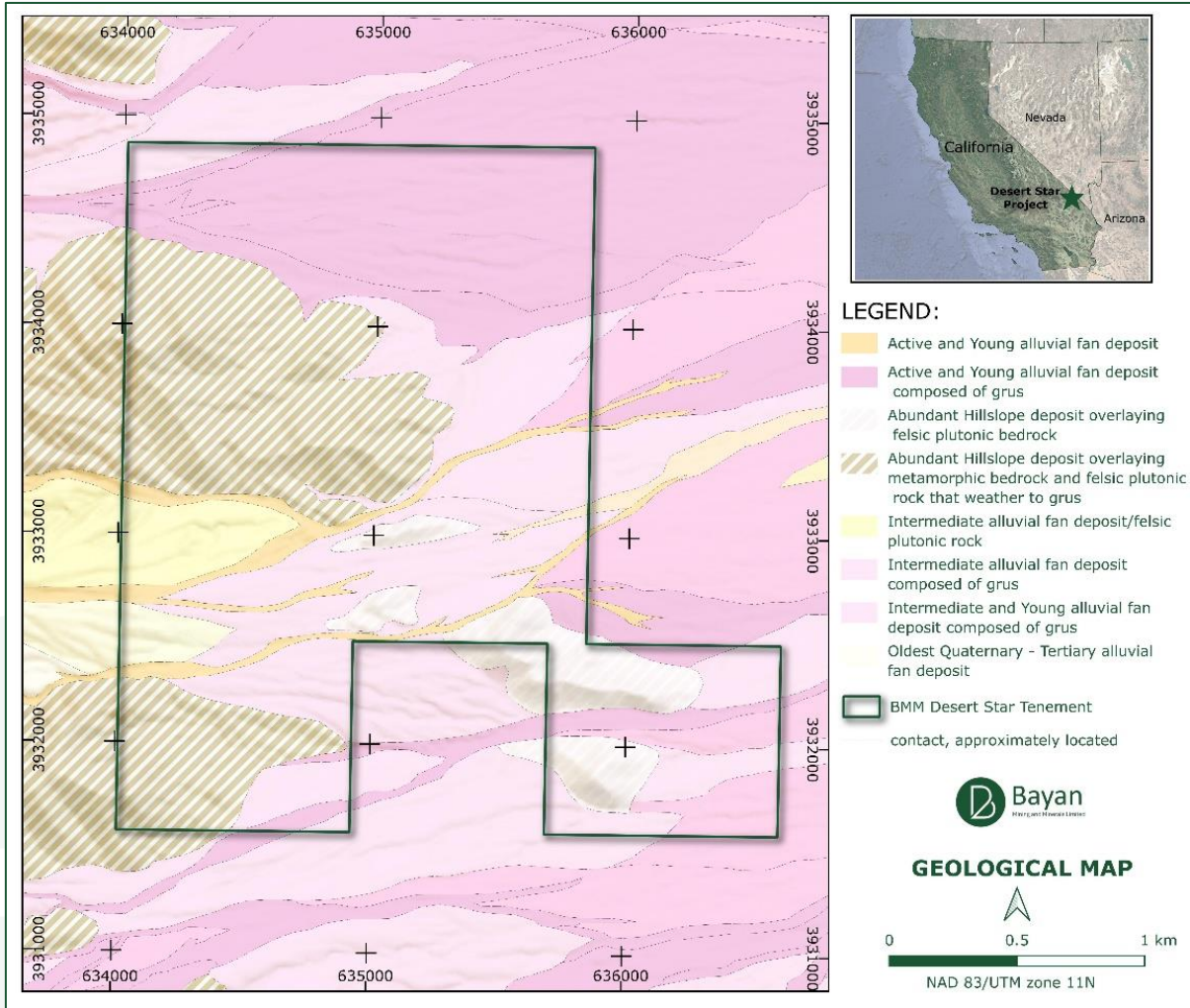


Figure 6 - Desert Star Project Location Over Detail Geological Map (Map source: Kevin M. Schmidt and Matthew McMackin, 2001–2004 - USGS Mapping)

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**Authorised for release by the Board of Bayan Mining and Minerals Limited**

**-ENDS-**



### **Competent Persons Statement**

The information in this report that relates to Exploration Targets or Exploration Results is based on information compiled by Mr Dejan Jovanovic, a Competent Person who is a Member of the European Federation of Geologists (EurGeol). The European Federation of Geologists is a Joint Ore Reserves Committee (JORC) Code 'Recognised Professional Organisation' (RPO). An RPO is an accredited organisation to which the Competent Person under JORC Code Reporting Standards must belong to report Exploration Results, Mineral Resources, or Ore Reserves through the ASX. Mr Jovanovic is the General Manager of Exploration and is a part-time contractor of the Company. Mr Jovanovic has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jovanovic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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.

The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

### **Forward-looking Statements**

Certain statements included in this release constitute forward-looking information. Statements regarding BMM's plans with respect to its mineral properties and programs are forward-looking statements. There can be no assurance that BMM's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that BMM will be able to confirm the presence of additional mineral resources, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of BMM's mineral properties. The performance of BMM may be influenced by a number of factors which are outside the control of the Company and its Directors, staff, and contractors.

These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements.

Except for statutory liability which cannot be excluded, each of BMM, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in these forward-looking statements and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in forward-looking statements or any error or omission. BMM undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules. Accordingly, you should not place undue reliance on any forward-looking statement.

### **Proximate Statements**

This announcement contains references to mineral exploration results derived by other parties either nearby or proximate to the Desert Star Project and includes references to topographical or geological similarities to that of the Desert Star Project. It is important to note that such discoveries or geological similarities do not in any way guarantee that the Company will have similar exploration successes on the Desert Star Projects, if at all.