

BAYAN SECURES PROSPECTIVE RARE EARTH TENEMENT IN WORLD CLASS MOUNTAIN PASS DISTRICT, CALIFORNIA, USA

Highlights

- **Strategic Land Position Secured:** Bayan has filed staking applications for 72 Lode Claims (the "Desert Star Project") covering 6 km² in a prospective rare earth elements (REE) corridor in California's Mojave Desert.
- **Tier-1 Location:** Situated just 4.5 km from the globally significant Mountain Pass REE Mine, and 4.7 km from Dateline Resources' Colosseum Project, highlighting strategic importance of the district.
- **Geological Advantage:** Located within the same Precambrian terrane that hosts the Mountain Pass deposit, one of the world's richest and most significant rare earth deposits¹.
- **Favourable Host Rocks:** The project area features potassic alkaline intrusives, similar to those associated with REE mineralisation at Mountain Pass.
- **Geophysical Signatures:** Radiometric data² shows elevated K, eTh, and eU values indicate alteration halos and geochemical markers typical of carbonatite-hosted REE systems. Surface radioactivity and barite occurrences further highlight potential REE prospectivity.
- **Exploration Momentum:** A desktop geological review is underway, including field reconnaissance and rock chip sampling, will begin shortly to delineate early-stage targets.
- **Capital Raising:** Binding commitments received to raise \$250,000 via placement at an issue price of \$0.04 per share, a 14.3% premium to BMM's last closing price, to existing and new sophisticated and professional investors.

Bayan Mining and Minerals Ltd (ASX: BMM; "BMM" or "the Company") is pleased to announce it has filed staking applications for 72 federal lode claims covering approximately 6 km² in a highly prospective rare earth elements (REE) district in the California's Mojave Desert.

The Desert Star Project is located in San Bernardino County, within a prolific REE and gold-bearing region of the eastern Mojave Desert. The Project sits within a

¹ MP Materials Corp. (NYSE:MP). www.mpmaterials.com

² 2020. David A Ponce & Kevin Denton. High-Resolution Airborne Radiometric Survey of Mountain Pass, California. Available at: <https://www.usgs.gov/data/high-resolution-airborne-radiometric-survey-mountain-pass-california>.

geologically permissive environment for rare earth mineralisation, strategically position just 4.5 km northeast of the world class Mountain Pass REE Mine.

In addition to rare earth elements, the area is also considered prospective for gold and antimony, further enhancing its strategic value.

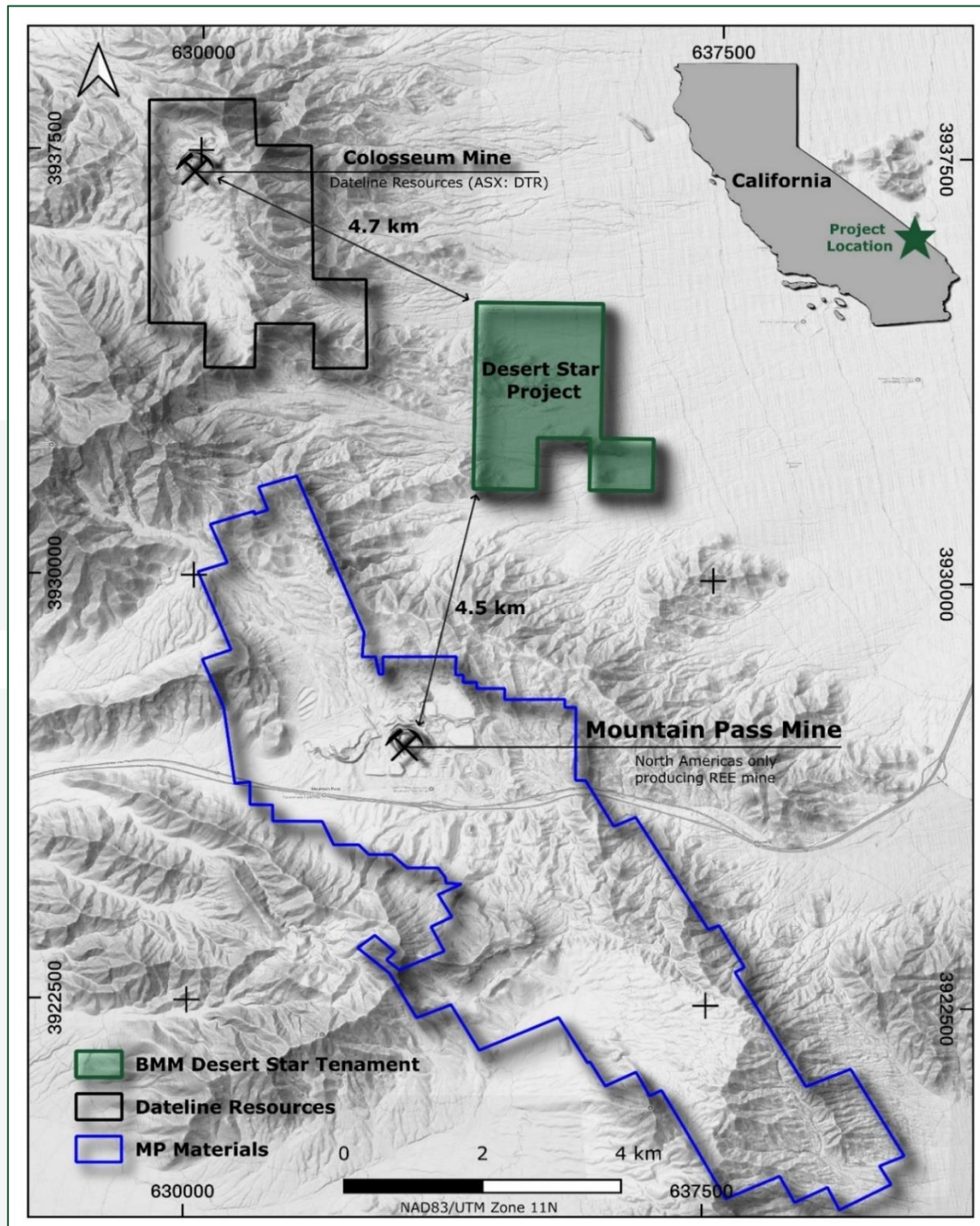


Figure 1 - Desert Star Project Location Map

Accessibility and Infrastructure

The Desert Star Project is easily accessible via well-maintained paved and gravel roads. From the town of Primm, Nevada, the site can be reached by travelling south on Interstate 15 for approximately 20 km to the Mountain Pass exit, followed by local access roads and existing mine infrastructure leading directly to the tenement area. The project is located approximately 85 km southwest of Las Vegas, Nevada, and around 320 km northeast of Los Angeles, California, both of which provide major commercial airports, essential services, and logistical support. The project also benefits from proximity to key infrastructure, including high-voltage transmission lines servicing the nearby Mountain Pass mine, offering potential access to grid power in the future. A Union Pacific rail line passes within 25 km of the site, presenting options for bulk material transport as the project advances.



Figure 2 – Photograph shows staking team at the Desert Star Project



Figure 3 – View east across the Desert Star Project toward the Ivanpah Solar Electric Generating System

Geological Settings

The Desert Star Project is located in the southern part of the Clark Mountain Range within the northern Mojave Desert of California, approximately 4.5 km northeast of the Mountain Pass Rare Earth Mine. The project lies within a structurally uplifted block of Paleoproterozoic metamorphic and igneous basement rocks, flanked to the east and west by major regional fault systems, and bounded to the east by Tertiary basin-fill sediments in the Ivanpah Valley.

This basement block is dominated by high-grade gneisses, schists, and granitic intrusives, which have been intruded by a Mesoproterozoic alkaline intrusive suite comprising shonkinite, syenite, granite, and carbonatite. These intrusions are genetically related to REE mineralisation in the region. The intrusives occur as northwest-trending dikes, sills, and composite stocks, emplaced along a regional-scale structural corridor associated with significant crustal extension during Basin and Range tectonism. Structurally, the basement rocks are confined by two major normal faults: the Ivanpah fault to the east and the Clark Mountain fault to the west, each causing approximately 10,000 to 12,000 feet of downward displacement in both directions.

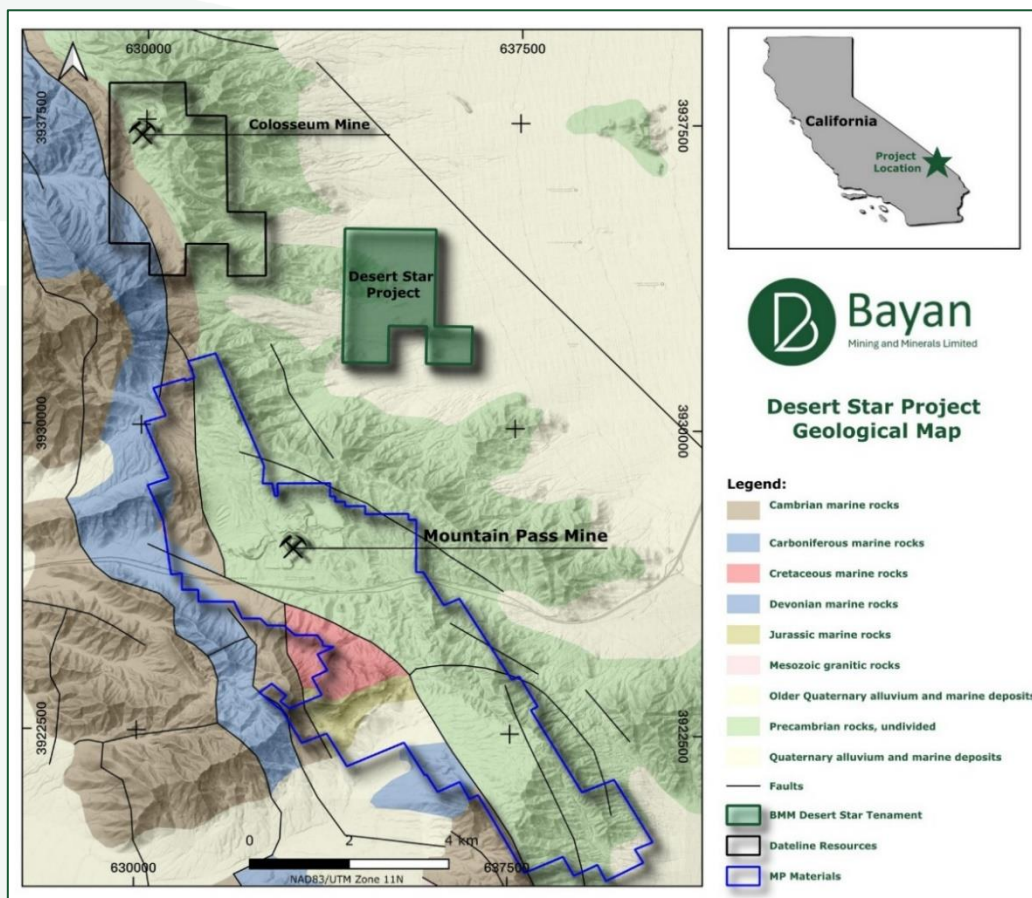


Figure 4 – Desert Star Project Location Over Regional Geological Map

The REE mineralisation in this terrane is primarily associated with carbonate-rich rocks interpreted as carbonatites, which host high concentrations of bastnaesite, parisite, and other rare-earth-bearing minerals. These are often enriched in thorium (eTh) and uranium (eU), reflecting the substitution of REEs into minerals with similar ionic radii and valence states. Associated alteration assemblages include barite, fluorite, hematite, phlogopite, chlorite, and calcite, indicative of a hydrothermal to magmatic origin. Past geochemical surveys reveal that REE minerals are frequently accompanied by accessory minerals such as barite, fluorite, and celestine, and are often intergrown with calcite and dolomite.

Radiometric Survey

A high-resolution airborne radiometric survey was conducted in 2018 by CGG Canada Services Ltd. on behalf of the U.S. Geological Survey as part of a regional geophysical investigation of the eastern Mojave Desert. The results, compiled and published in 2019 under USGS Scientific Investigations Map 3412-C³, include full radiometric coverage over the area now secured by BMM's Desert Star Project.

The survey measured natural gamma radiation from potassium (⁴⁰K), thorium (²³²Th), and uranium (²³⁸U) decay products, expressed as percent K, and equivalent concentrations of eTh and eU in parts per million. Radiometric signals are primarily sourced from the top 30–50 centimetres of the Earth's surface, meaning that results reflect shallow geochemical conditions rather than deeper geological structures. While radiometric surveys cannot directly detect buried carbonatites, they are highly effective at identifying surface expressions such as alteration halos, leached zones, or weathered outcrops that may be spatially associated with rare earth element mineralisation.

Within the Desert Star Project area, moderate radiometric anomalies have been identified northwestern portion of the tenement over outcropping Paleoproterozoic metamorphic and igneous rocks. These show coherent enrichment in potassium, thorium, and uranium, which are characteristic of radiogenic lithologies, and surface geochemical patterns associated with potassic alteration. In contrast to the elevated anomalies recorded over the Mountain Pass Mine which may be partially influenced by surface stockpiles and ongoing mining activity these features are interpreted to reflect natural, undisturbed surface signals. When considered alongside mapped structural trends and basement lithologies, the radiometric patterns at Desert Star provide an important vectoring tool to guide field-based exploration and targeting.

³ 2020. David A Ponce & Kevin Denton. High-Resolution Airborne Radiometric Survey of Mountain Pass, California. Available at: <https://www.usgs.gov/data/high-resolution-airborne-radiometric-survey-mountain-pass-california>.

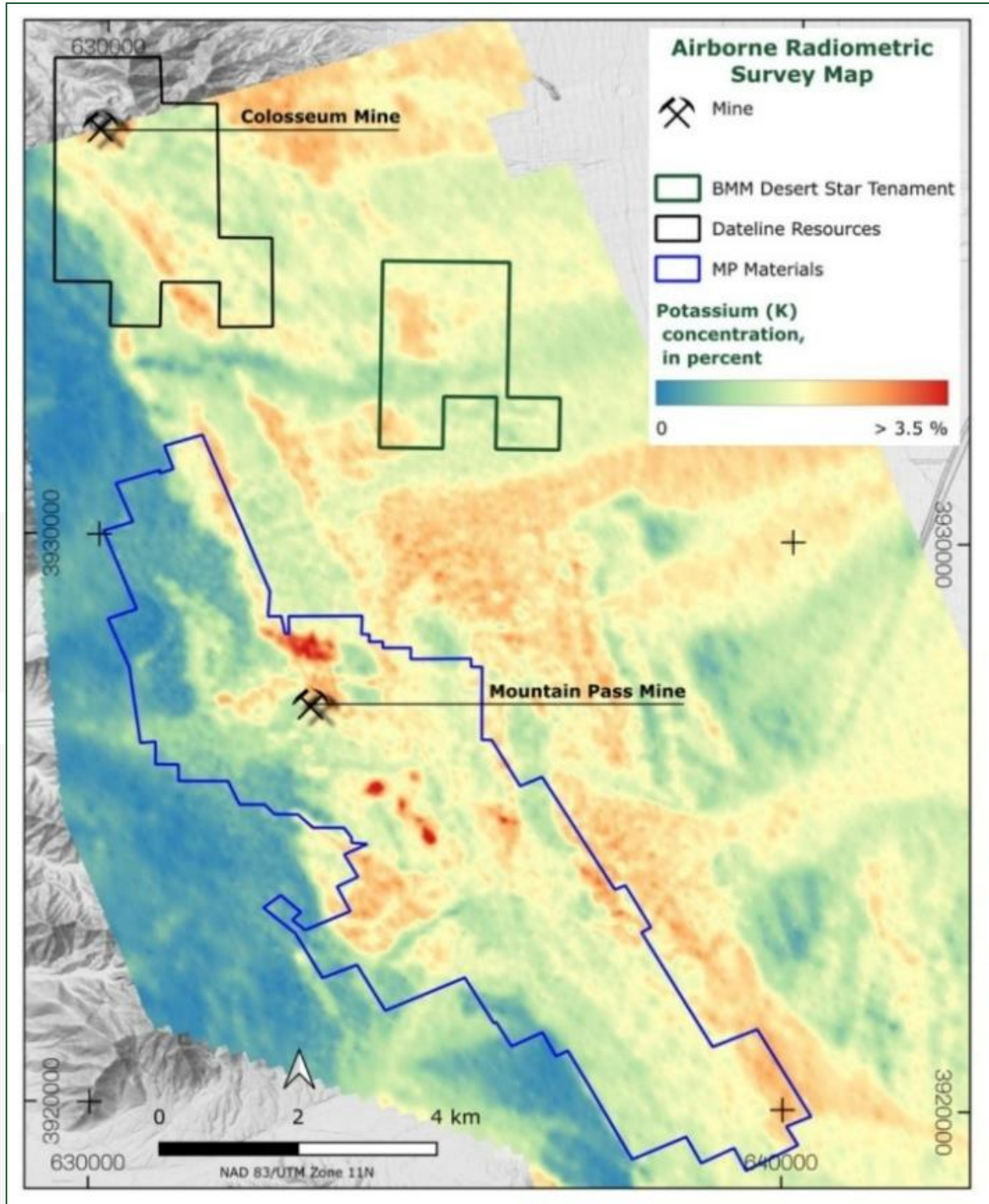


Figure 5 - Airborne Radiometric Survey – Potassium (K%) Distribution Map

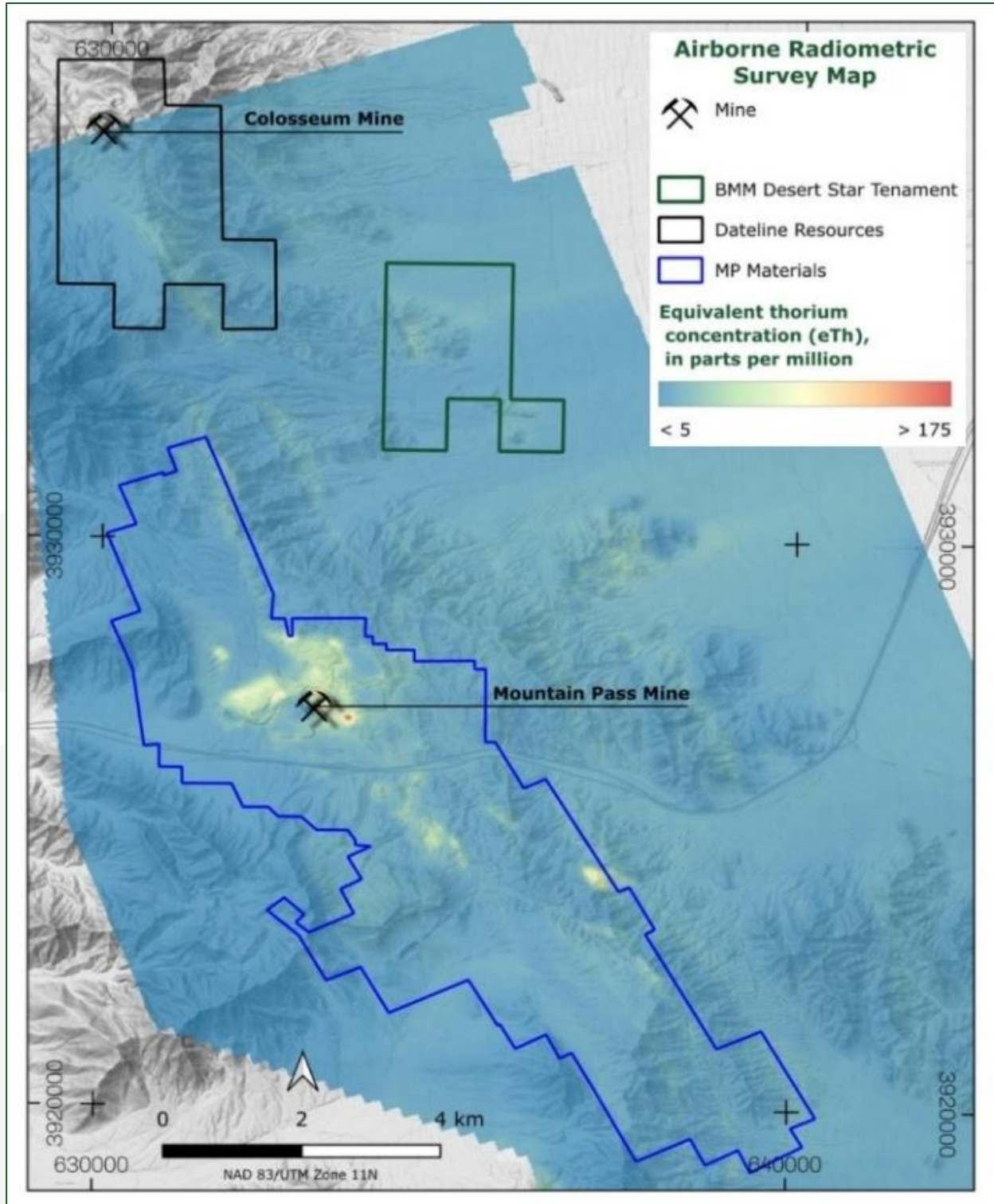


Figure 6 - Airborne Radiometric Survey – Thorium (eTh, ppm) Distribution Map

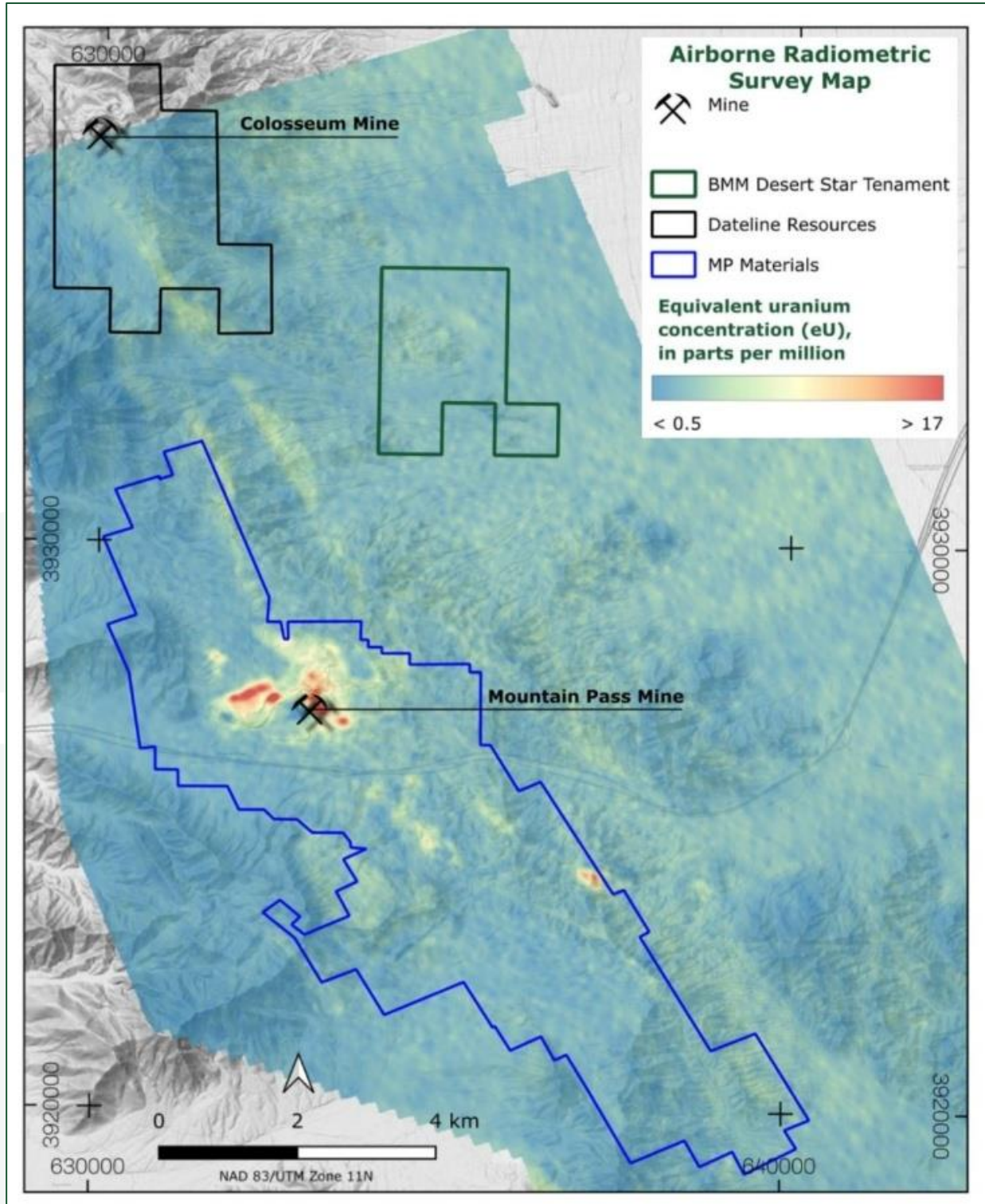


Figure 7 - Airborne Radiometric Survey – Uranium (eU, ppm) Distribution Map

Executive Director Fadi Diab commented:

"The filing of staking application of Desert Star Project claims represents a significant milestone for Bayan Mining and Minerals as we expand our strategic footprint into one of the world's most prospective rare earth districts. Securing ground just kilometres from the globally significant Mountain Pass Mine positions Bayan at the heart of a proven REE corridor with potential opportunity.

The geological setting, structural framework, and early geophysical indicators are highly encouraging, and we believe this Project offers a rare opportunity to explore in a Tier-1 jurisdiction with growing geopolitical importance in the global critical minerals supply chain. In addition to rare earth elements, the area is also considered prospective for gold and antimony, further enhancing its strategic value. We are committed to rapidly advancing exploration to unlock the full potential of Desert Star and build long-term value for our shareholders.

The funds raised through this Placement will enable us to accelerate exploration across both our existing assets and new targets at Desert Star."

Staking and Claim Status

Bayan Mining and Minerals has physically staked the 72 lode claims and submitted the appropriate staking application documentation to the Bureau of Land Management (BLM) and San Bernardino County. The Company advises investors that the tenure status of the Desert Star Project is subject to final confirmation by the BLM. Bayan will update the market in due course once claim grants have been officially confirmed.

Near Term Work Program

Bayan is committed to advancing its strategic growth objectives through a focused and results-driven exploration program. Following the successful registration of its claims, the Company will undertake a detailed technical review of the Desert Star Project. This initial phase will include comprehensive data analysis and the development of a targeted reconnaissance mapping and geochemical sampling program, scheduled to commence in the coming weeks.

Placement Details

The Company has received binding commitments from sophisticated and professional investors pursuant to a placement to raise \$250,000 by the issue of 6,250,000 fully paid shares ("Shares") at an issue price of \$0.04 per share ("Placement").

All New Shares will rank equally with existing fully paid ordinary shares. Settlement of the Placement Shares is expected to be completed on Monday, 21 July 2025.

The issue price represents a 14.3% premium to BMM's last close price on 4 July 2025 of \$0.035, a 15.2% premium to the 5-day VWAP of \$0.0347, a 11.1%

premium to the 15-day VWAP of \$0.0360, and a 24.6% premium to the 30-day VWAP of \$0.0321.

Under the Placement, for every two (2) shares issued under the offer, investors will receive one (1) free attaching unlisted option, with an exercise price of \$0.075 and an expiry of 36 months from the date of issue ('Placement Option').

62 Capital Pty Ltd acted as Lead Manager to the Placement and will receive a 6% fee on funds raised.

The Placement Shares will be issued under to the Company's existing placement capacities pursuant to ASX Listing Rule 7.1A (6,250,000 Shares) and Listing Rule 7.1 (3,125,000 Placement Options).

Proceeds from the Placement will be used to advance exploration activities across both existing projects and the newly staked Desert Star Project. This includes fieldwork, sampling, geological mapping, and permitting to support near-term exploration and value-generating milestones.

Indicative Offer Timetable

INDICATIVE OFFER TIMETABLE	
Event	Time / Date
ASX Announcement	Monday, 07 July 2025
Expected Date of ASX Quotation of New Shares	Monday, 21 July 2025

For further information, please contact:

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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.

Appendix 1: California Claims Application

Claim Name	Serial Number	BLM Claim ID	Customer Name	BLM Product Name	BLM Admin State
DS01 – DS 72	Not yet available	Not yet available	BMM Nevada LLC	Load Claim	CA

Appendix 2: JORC Table 1

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	- Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. - In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	- No physical samples were collected. - The reported data is from a high-resolution airborne radiometric survey flown by CGG Canada Services Ltd. in 2018. - Measurements include natural gamma radiation from potassium (K), equivalent thorium (eTh), and equivalent uranium (eU). - Data were collected using a Radiation Solutions RS-500 spectrometer and are consistent with IAEA-TECDOC-1363 guidelines.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Not applicable. No drilling results are being reported.
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Not applicable. No drilling results are being reported.
Logging	- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. - The total length and percentage of the relevant intersections logged.	Not applicable. No drilling results are being reported.
Sub-sampling techniques and sample preparation	- If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. - For all sample types, the nature, quality and	Not applicable. No drilling results are being reported.

	<i>appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	Radiometric data underwent standard corrections for cosmic and aircraft background, radon, Compton scattering, and altitude. Data were processed and gridded by CGG to a 20 m resolution.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i>	Not applicable. No drilling results are being reported.
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i>	Flightlines were recorded with differential GPS. Line spacing was 100–200 m, tie lines at 1 km, with nominal 70 m ground clearance. Survey azimuth was 70°, tie-line azimuth 160°.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i> <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> <i>Whether sample compositing has been applied.</i>	Approximately 1,814 line-kilometers of data collected. Average sample spacing ~30 m. Gridded output at 20 m intervals. Adequate for mapping radiometric variations and geological interpretations.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	Flightlines were oriented at 70° to crosscut major geological trends (NNW structures) at high angles. This is appropriate for resolving lithological and structural features.
Sample security	<i>The measures taken to ensure sample security.</i>	Samples were handled and submitted to the lab by GeoMap Exploration Inc. in accordance with the defined chain of custody.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	The USGS publication and data were peer-reviewed and edited as part of

-		the Scientific Investigations Map series (SIM 3412-C). Data quality aligns with international radiometric survey standards.
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Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	- Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. - The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Desert Star Project comprises 72 federal lode claims covering approximately 6 km² in San Bernardino County, southeastern California. Claims have been filed and are subject to standard Bureau of Land Management (BLM) procedures. No material native title or third-party access issues have been identified at this stage.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The USGS conducted a high-resolution airborne radiometric survey over the project area in 2018, with data released in 2019 (Ponce & Denton, USGS SIM 3412-C). The geological interpretation presented by the Company is based on the 1:500,000 scale Geologic Map of the East Mojave National Scenic Area (Miller et al., 2007) and the foundational USGS report Rare-Earth Mineral Deposits of the Mountain Pass District, San Bernardino County, California (Olson et al., 1954). While historical mining and geophysical activity are well documented in the broader Mountain Pass district, there is no publicly available information indicating that detailed exploration or sampling focusing on REE has previously been conducted over the Desert Star claim block.
Geology	Deposit type, geological setting and style of mineralisation.	The Desert Star Project is hosted within a Paleoproterozoic metamorphic and igneous basement uplift bounded by major normal faults. The target mineralisation is rare earth element (REE) hosted in Mesoproterozoic carbonatite and associated ultrapotassic intrusives (shonkinite, syenite, granite), analogous to Mountain Pass. Alteration assemblages and geochemical associations suggest a magmatic to hydrothermal REE system with associated barite, fluorite, and calcite.
Drill hole Information	- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole length and interception depth - hole length. - If the exclusion of this information is justified on the basis that the information is not Material and	Not applicable – no drilling has been conducted or reported.

	<i>this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
Data aggregation methods	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Not applicable – no quantitative exploration results are being reported. Radiometric data is presented qualitatively to support exploration targeting.
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	Not applicable – no drilling has been conducted.
Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	- The announcement contains detailed visual content including a project location map, geological context imagery, and radiometric distribution maps highlighting potassium (%K), equivalent thorium (eTh, ppm), and equivalent uranium (eU, ppm) responses across the tenement. - Figures presented within the body of the announcement illustrate the spatial extent of radiometric anomalies and the geological framework relevant to early-stage exploration planning.
Balanced reporting	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	The announcement does not report assay or sampling results. Radiometric data is described in context, without quantitative interpretation, and limitations are noted.
Other substantive exploration data	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	Radiometric patterns (K, eTh, eU) from the USGS airborne survey highlight areas of elevated radioelement concentrations, coinciding with outcropping basement rocks and interpreted alteration zones. These serve as exploration vectors but do not constitute discovery.
Further work	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Planned exploration includes geological mapping and surface geochemical sampling (rock and soil), with the aim of delineating drill targets. A desktop review is underway, and fieldwork is scheduled to begin shortly.