

8th May 2025

Strategic land expansion at Independence Gold Project

James Bay Minerals adds 1,206 acres boosting land holding by 184% and enhancing optionality for future development and greenfield exploration prospects

Highlights:

- New claims secured adjacent to the Independence Gold Project, expanding exploration prospects and development optionality – total land holding increased by 184% to 1,861 acres
- Additional claims support expanded mining and processing scenarios for future developments
- Northern claims cover highly prospective geology, including the same stratigraphy as the nearby Buffalo Valley Silver-Gold-Copper Mine
- 2.2km untested trends analogous with Rebel Trend
- The Battle Mountain region is a highly sought-after location for mineral exploration with strong demand for gold, silver, and copper exploration
- The Independence Gold Project contains a JORC Mineral Resource Estimate of a combined 1.4Moz AuEq across near-surface (419,599 oz AuEq) and skarn (984,412 oz Au) mineralisation¹.

James Bay Minerals (ASX: **JBY**) ("**James Bay Minerals**" or "**the Company**") is pleased to advise that the Company has staked 66 new claims (JBY 100%) in the highly sought-after Battle Mountain district, adding 1,206 acres adjacent to the 655-acre Independence Gold Project ("**Independence Project**" or "**the Project**"), located in Lander County, Nevada.

The new claims enhance flexibility for future millsite planning and greenfields exploration prospects.

James Bay Executive Director, Matthew Hayes, commented:

"Following the announcement of a 1.4Moz AuEq JORC resource, James Bay Minerals is moving to the next phase of growth at the Independence Project. With drilling at Rebel Peak underway, the Company has secured additional claims to support future expanded exploration and development studies.

The newly staked claims sit in the heart of Nevada's Battle Mountain district, one of the world's most prolific gold regions with over 60Moz produced and 150Moz of in-ground resources. Positioned near the Buffalo Valley mine and underpinned by the same host rocks, the area also offers significant upside for future gold, silver, and copper discoveries in a Tier 1 jurisdiction."

¹ Refer to ASX Announcement dated 5 March 2025

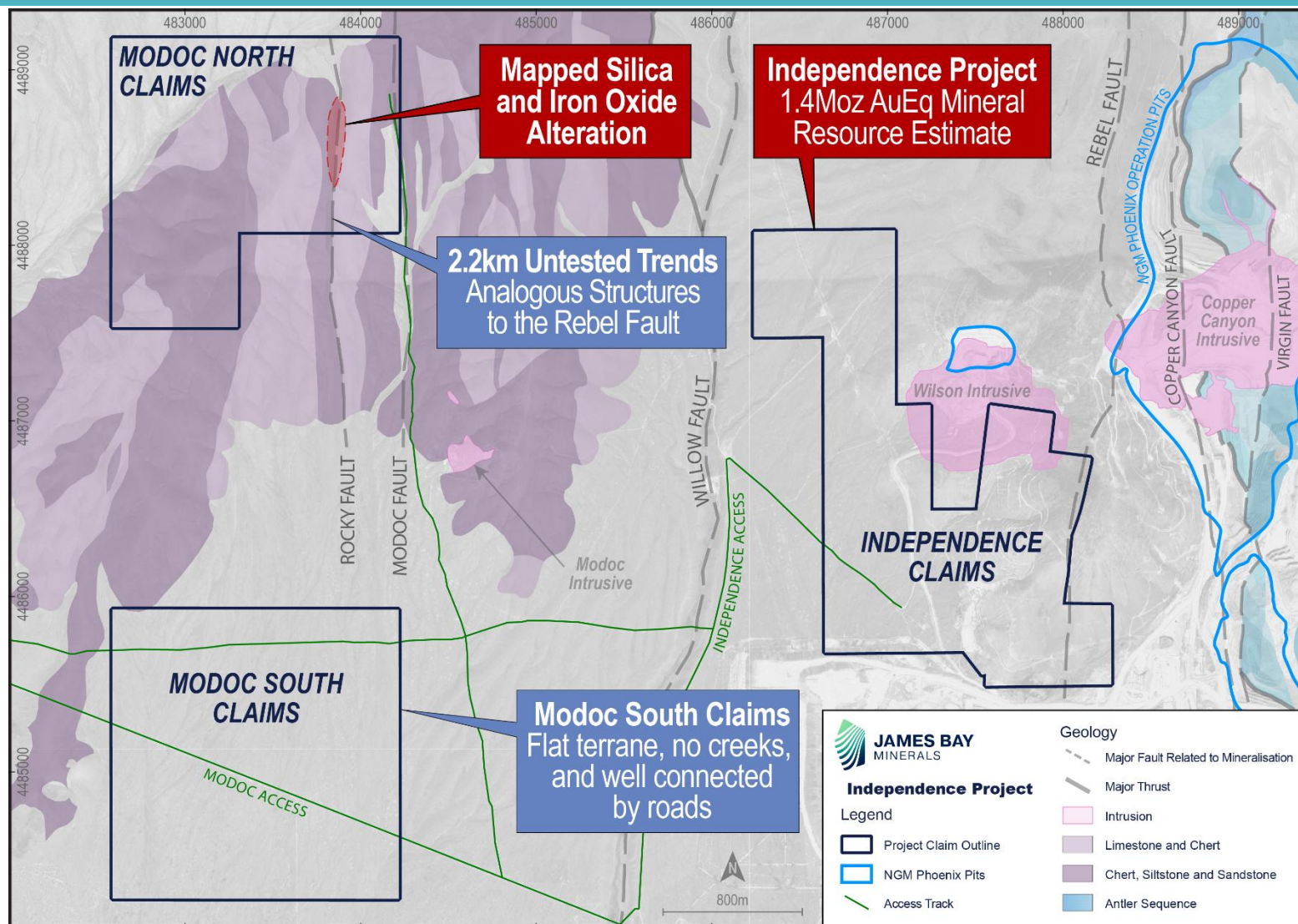


Figure 1: Independence Project topographic map.

Modoc Claims

The Modoc claims are located 2km west of the Independence Project claims and are accessible by well serviced roads. The additional 66 staked claims take James Bay Minerals' holdings in the Battle Mountain region to a total of 1,861 acres (Figure 1).

The southern Modoc claims span the flat valley between the Wilson and Rocky creeks and are connected to the Independence Project claims by the Buffalo-Phoenix service road, positioning the Modoc South as an ideal setting for an expanded millsite plan for the greater Independence Project.

The northern Modoc claims are situated along strike of the historic Modoc mine, located on the southern flank of the Modoc Intrusive, and encompasses the same stratigraphic units that are host to the Buffalo Valley silver-gold-copper mine; cherts, siltstones and limestones of the Havallah Sequence.

Little known exploration has occurred over the claims, though Open File maps show the presence of silica and iron oxide alteration on the flanks of the Rocky Fault that dissects the claim area as well as various historic prospects and workings proximal to the Modoc Fault².

Next Steps

Staking of the additional Modoc claims directly west of the Independence Project claims provides the Company with flexibility for millsite planning to be investigated in a planned future Scoping Study, as well as offering additional exploration targets for greenfields exploration in a Tier 1 mining district.

Drilling has commenced at the Independence Project with a 4,000m RC drill program underway targeting extensions to the 419.6koz epithermal resource³, following up on the promising initial result at Rebel Peak in 2024 drill hole AGEI-65 (18.3m @ 1.0g/t Au from 36.6m, including 3.1m @ 2.7g/t Au)⁴, and testing below surface rock chip samples of up to 31.7g/t Au⁵.

Elsewhere, through the engagement of external metallurgical consultants, the selection of drill core from existing drillholes has commenced at the Independence Project. The Company aims to evaluate the potential for enhancing gold recovery to improve the economic viability of both the epithermal and skarn resources. The results of the metallurgical testwork will be incorporated into future Project development and feasibility assessments.

² Nevada Bureau of Mines, Geologic Map of the Antler Peak 7.5-minute quadrangle, Lander County, Nevada

³ Refer to ASX Announcement dated 5 March 2025

⁴ Refer to ASX Announcement dated 5 February 2025

⁵ Refer to ASX Announcement dated 27 November 2024

Background on James Bay Minerals

Independence Gold Project – Nevada.

Project Overview

The Independence Project consists of 80 unpatented mining claims and 84 unpatented mill sites, situated in Lander County, Nevada, and spans approximately 1,861 acres of Bureau of Land Management (BLM) administered lands. It is adjacent to the Nevada Gold Mine's Phoenix Project and about 16km south of Battle Mountain. In addition, the Project encompasses Section 17, 470 acres of private fee surface land in the Battle Mountain Mining District where the company holds the exclusive water rights and where it will locate any future production water wells.

For personal use only

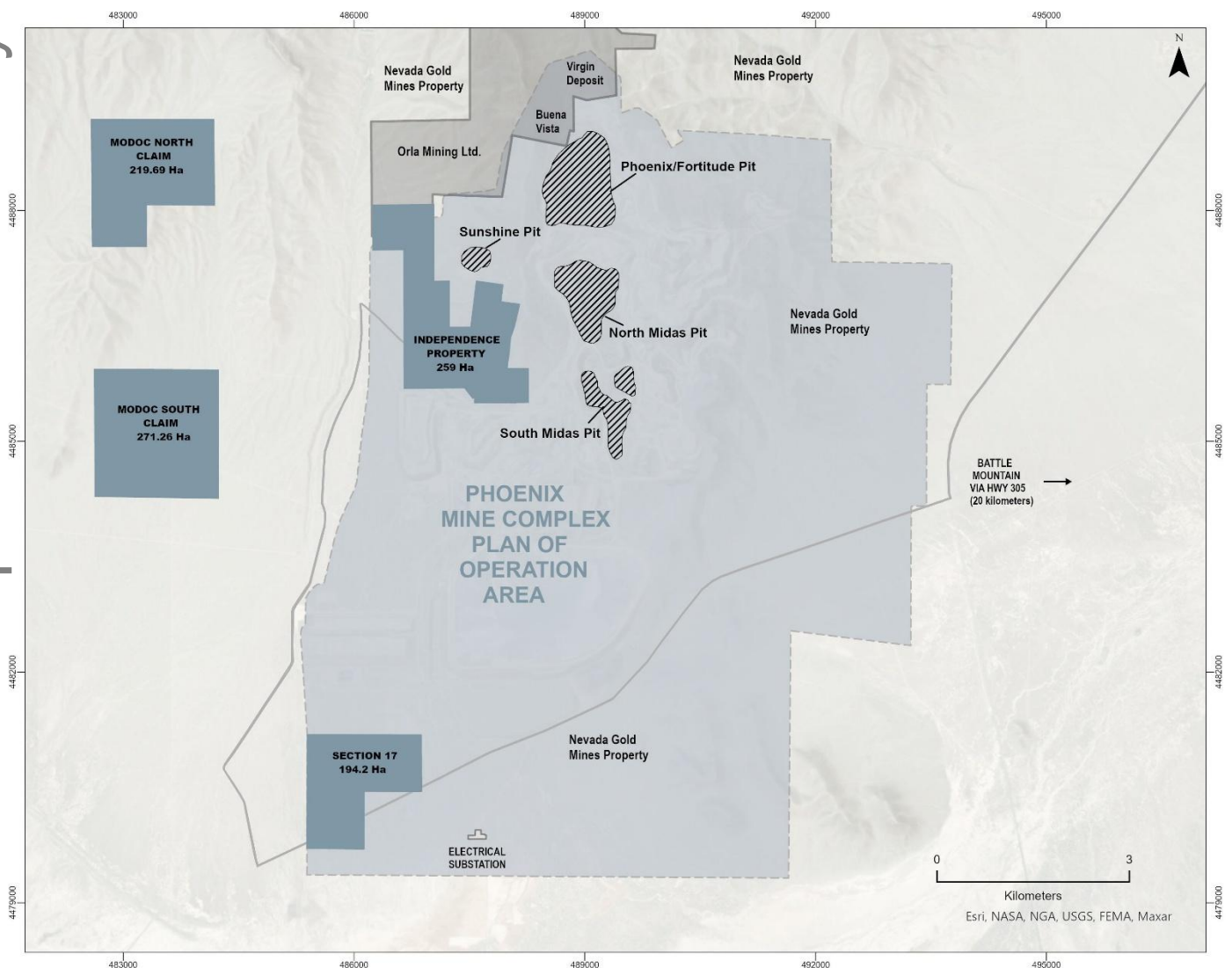


Figure 2: Independence Property overlaid with active Nevada Gold Mines (Newmont Barrick JV) Phoenix Mine Complex, Plan of Operations.

Nevada – Tier 1 Jurisdiction

Nevada is widely regarded as one of the premier mining jurisdictions in the world, known for its rich mineral resources and supportive regulatory environment. Nevada consistently ranks within the top countries of the Fraser Institutes best mining jurisdictions. Key features include:

1. **Rich Mineral Deposits:** Nevada is a leading producer of gold and silver, with numerous active mines and significant exploration potential.
2. **Stable Regulatory Framework:** The state offers a predictable and transparent regulatory process, which fosters investor confidence and encourages mining activities.
3. **Infrastructure:** Well-developed infrastructure, including roads, power, and water supply, supports mining operations and logistics.
4. **Skilled Workforce:** A robust labour market with experienced professionals in the mining sector enhances operational efficiency.
5. **Proximity to Markets:** Its location in the western United States provides easy access to major markets and transportation networks.
6. **Pro-mining Policies:** State policies generally favour mining development, with efforts to streamline permitting and reduce bureaucratic hurdles.

These factors collectively make Nevada a highly attractive destination for mining investment and exploration.

For personal use only

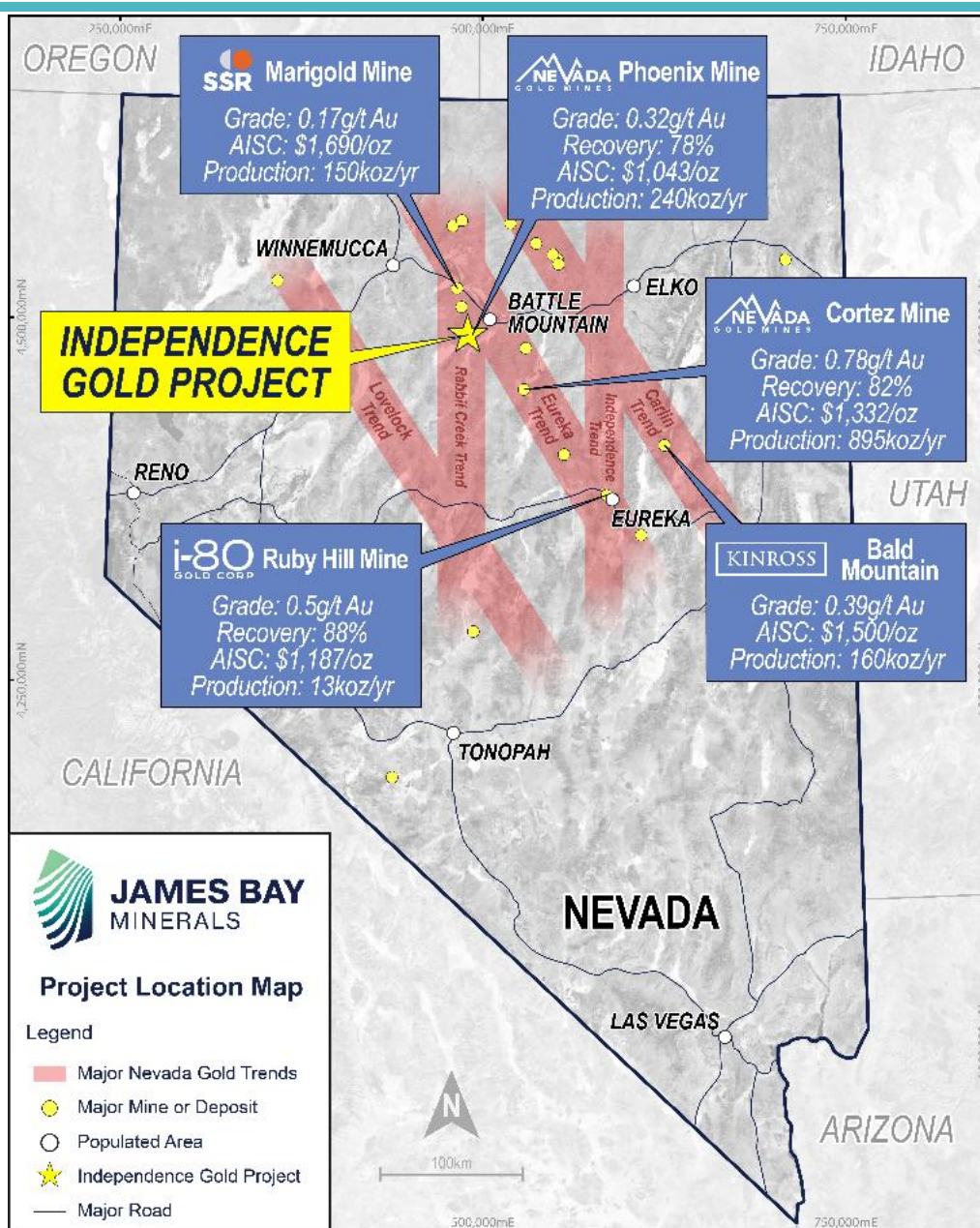


Figure 3: Independence Gold Project in relation to major gold trends and deposits.

The Project contains a JORC 2012 Mineral Resource as outlined below⁶:

Description	Tonnes	Gold (Au) g/t	Gold (Au) g/t Equivalent	Gold (Au) Oz	Gold (Au) Equivalent Oz ⁷
Skarn – Mineral Resource					
Inferred	4,592,370	6.67	-	984,412	-
Near-Surface – Mineral Resource					
Indicated	23,176,458	0.40	0.43	294,395	321,584
Inferred	8,716,172	0.32	0.35	90,702	98,015

⁶ Refer to ASX announcement dated 5 March 2025.

⁷ Gold Equivalent of the near-surface estimate has been calculated per block in resource estimation and is a function of metal prices, based on a Gold Price of US\$2,412.50/oz and Silver Price of US\$28.40/oz, and metal recoveries for both gold and silver. The recovery of gold is stated as 79% in the oxide, 50% in transitional and 22% in fresh (**AU Recovery**). Silver averages 27% across all material. Resultantly, the AuEq calculation is = g Au/t + (g Ag/t * (28.4 x 0.27) / (2,412.5 x Au Recovery)). The Company believes that all metals included in the metal equivalent calculation have a reasonable potential to be recovered and sold.

Quebec Lithium Assets

James Bay has 100% interest in one of the largest lithium exploration portfolios in the James Bay region, covering an area of 41,572Ha or 416km². The Joule, Aero, Aqua and La Grande East Properties are located in the La Grande sub-province along-trend from the Shaakichiuwaanaan deposit, where Patriot Battery Metals (ASX: PMT) reported an updated Indicated and Inferred Mineral Resource Estimate⁸ and completed a Preliminary Economic Assessment outlining the potential for a competitive and globally significant high-grade lithium project targeting production of up to ~800ktpa spodumene concentrate⁹.

This announcement is authorised for release by the Board of Directors of James Bay Minerals Ltd.

ENDS

For more information:

Investors:

Matthew Hayes
 Executive Director
 James Bay Minerals
info@jamesbayminerals.com.au

Media:

Nicholas Read
 Read Corporate
 Phone: (08) 9388 1474
 E: nicholas@readcorporate.com.au

Forward-looking statements

This announcement may contain certain forward-looking statements, guidance, forecasts, estimates or projections in relation to future matters (Forward Statements) that involve risks and uncertainties, and which are provided as a general guide only. Forward Statements can generally be identified by the use of forward-looking words such as “anticipate”, “estimate”, “will”, “should”, “could”, “may”, “expects”, “plans”, “forecast”, “target” or similar expressions and include, but are not limited to, indications of, or guidance or outlook on, future earnings or financial position or performance of the Company. The Company can give no assurance that these expectations will prove to be correct. You are cautioned not to place undue reliance on any forward-looking statements. None of the Company, its directors, employees, agents or advisers represent or warrant that such Forward Statements will be achieved or prove to be correct or gives any warranty, express or implied, as to the accuracy, completeness, likelihood of achievement or reasonableness of any Forward Statement contained in this announcement. Actual results may differ materially from those anticipated in these forward-looking statements due to many important factors, risks and uncertainties. The Company does not undertake any obligation to release publicly any revisions to any “forward- looking statement” to reflect events or circumstances after the date of this announcement, except as may be required under applicable laws.

Competent Person Statement

*The information in this announcement that relates to previously reported Exploration Results and Mineral Resource Estimates is extracted from the Company’s ASX announcements dated 27 November 2024, 5 February 2025 and 5 March 2025 (**Original Announcements**). The Company confirms that it is not aware of any new information or data that materially affects the information contained in the Original Announcements and, in respect of the Mineral Resource estimates, the Company confirms that all material assumptions and technical parameters underpinning the Mineral Resource estimates continue to apply and have not materially changed.*

⁸ See PMT ASX Announcement dated 8 August 2024
⁹ See PMT ASX Announcement dated 22 August 2024