



26 September 2024

LiDAR survey further defines targets for drilling at Endowment Mine, Nevada

Highlights

- In conjunction with its upcoming drilling program, Sierra Nevada continues to re-evaluate historic high-grade silver mines within its Blackhawk Epithermal Project, Nevada, USA, where previous drilling at the Endowment Mine returned up to 1270g/t Ag and 823g/t Ag.
- Previously drilled and reported core hole BHD006 returned 5m at 479 g/t Ag within a larger mineralised zone of 12m at 219 g/t Ag from 250m beneath the Endowment mine.¹
- LiDAR survey of the accessible underground workings of Endowment Mine completed to create accurate 3D model of the historic mine (see figure 1).
- A multi-hole RC drill program is permitted and due to commence in early October 2024 (see figure 1).
- **Importantly, the silver intercepts are associated with very high-grade lead-zinc-gold demonstrating the potential for extremely high value polymetallic-silver ore.**

Sierra Nevada Gold (ASX: SNX) is pleased to announce recent exploration progress to follow up previous drilling which returned up to **1270 g/t silver** in BHD006 at the Endowment Mine, part of its Blackhawk Epithermal project in Nevada, USA, where it plans to commence drilling early next month.

SNX has identified a large and high-grade intermediate sulphidation epithermal Ag-Au-Pb-Zn vein system, related to a large porphyry system located immediately to the south of the epithermal project. Partially coincident with the porphyry system, the Blackhawk epithermal project vein system covers about 5km² and is open under cover to the north and northeast, with 22.5-line km of veins identified to date (see figure 2).¹

LiDAR Survey

SNX completed a LiDAR survey of the accessible underground workings within the Endowment Mine, which allowed for the precise mapping of the historical workings and production of a 3D solid model of the workings, which in turn has enabled SNX to more accurately locate and rectify underground historical maps, positively impacting future exploration drill targeting. From the increased detail and accuracy afforded by the LiDAR survey SNX has been able to improve its understanding of the vein and structure morphology and relationships (see figure 1). This in turn has allowed for a reinterpretation of the geological model allowing for refinement of the upcoming drilling program, scheduled to commenced in early October 2024.

¹ Details previously reported - Sierra Nevada Gold Replacement Prospectus - Page 32, 33

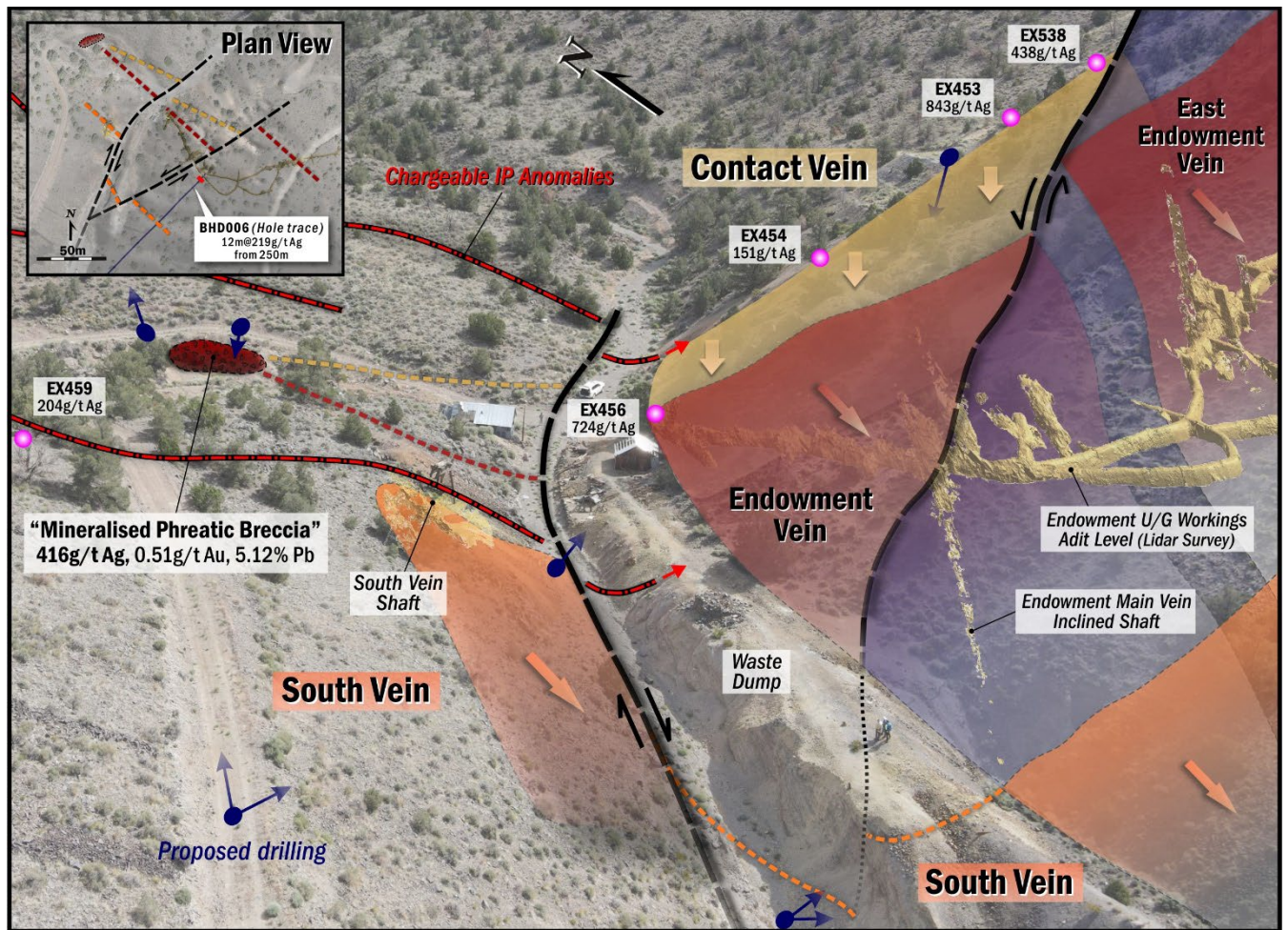


Figure 1: Oblique view looking north of the Endowment Mine. Schematically presented are the various mineralised veins, main structures, LiDAR survey (in gold), proposed drilling and selected rock chips samples (previously reported). Also shown as red/black lines are untested chargeable features generated from a detail Gradient Array Induced Polarisation (GAIP) survey. Inset plan shows the surface trace of the obliquely elements shown in main image. Note – the northern two GAIP features are covered by active colluvium coming down from the north.

Endowment Mine

The Endowment mine was initially mined in the 1860s with most mining completed by the 1880s, achieving reported production of 70,000oz Au equivalent (Hill, 1915). Mining ceased at Endowment in the 1920s due to the inability to process sulphide ores and prevailing depressed economic conditions. Mineralisation is reported to remain within, and within reach of, the current infrastructure (Magill, 1973).

Most ore within Endowment Mine was reportedly won from the Endowment Vein – a moderately SW dipping (45deg), NW striking polymetallic vein that was exploited to the 4th Level, approximately 90m below surface. High grade shoots within the Endowment vein structure moderately to steeply plunge to SE. Between the 3rd and 4th levels, mineralisation transitioned from dominantly oxide to sulphide ore. Other notable veins include the South Vein a sub parallel vein to the Endowment vein which was accessed from the west side of the gulch.

Importantly, previously reported SNX hole BHD006 (discussed above) intersected the downdip extension of the Contact vein, a steeply SW dipping (80deg), NW striking high-grade polymetallic vein. The Contact vein was exploited at surface by a shallow open cut which broke through into the workings below – little historical information is recorded of production from this vein.



Previous drilling by SNX beneath the Endowment mine at Blackhawk returned **12m at 219 g/t Ag from 250m** including **5m at 479 g/t Ag from 256m**. This drill intercept is 150m vertically below the deepest portion of the mine and includes higher grade intersections of:

- **0.5m at 1270 g/t Ag from 256.5m (21.5% Pb + Zn)**
- **1m at 823g/t Ag from 257m (30.1% Pb + Zn)**
- **1m at 654 g/t Ag from 258m (+50% Pb+ Zn)**

The intersection described above comes with considerable polymetallic credits. The complete mineralised intersection of 12m at 219g/t Ag also contains 3.05% Pb and 8.54% Zn across the interval, significantly increasing the potential value of mineralisation within the vein/structures.

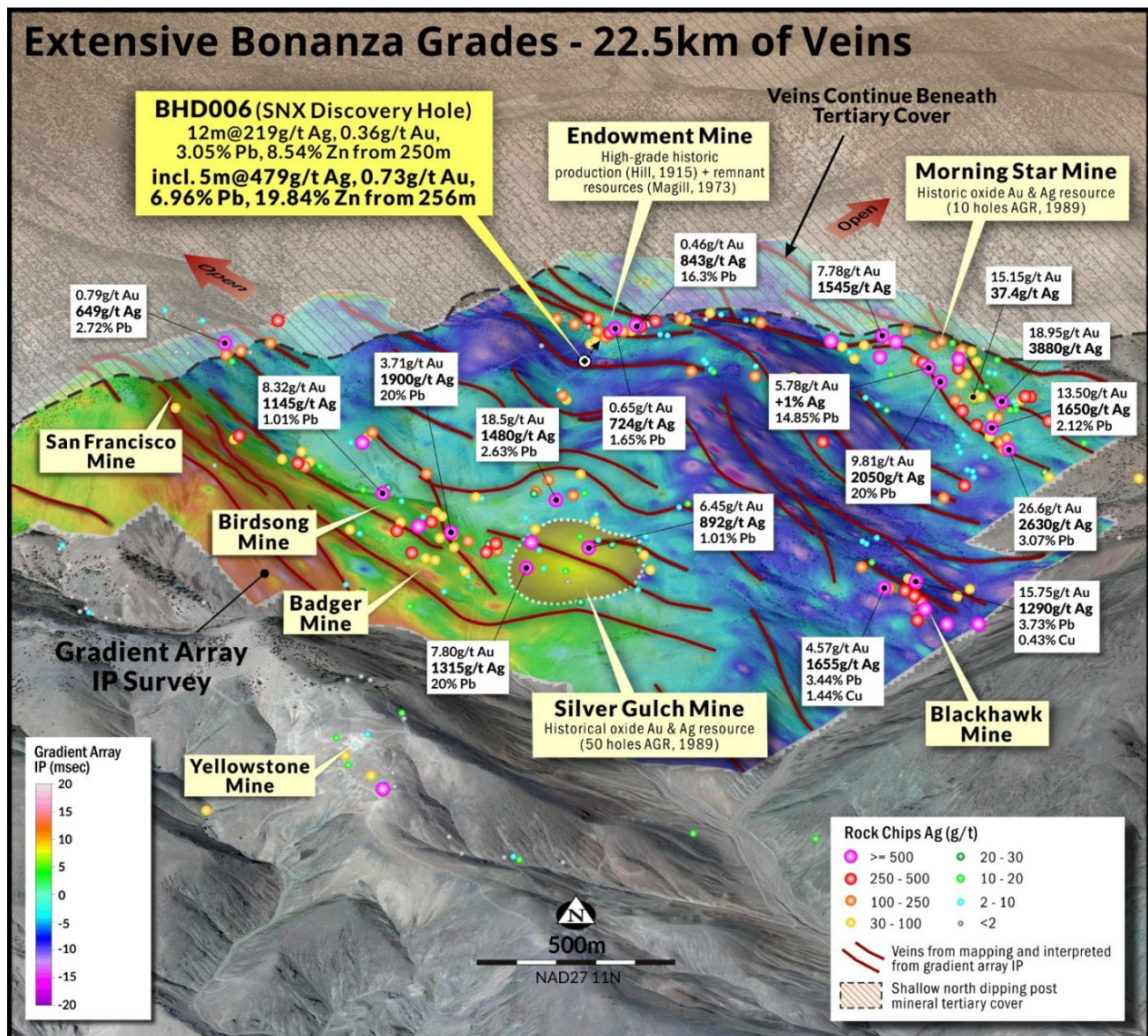


Figure 2: Oblique view looking north of the Blackhawk Epithermal Project with a 3.5km by 2.5km field of view. The Blackhawk Porphyry project is situated in the foreground with the epithermal system being partially coincident with the porphyry system's surface expression.²

² See ASX Announcement 31 May 2023 – SNX initiates Blackhawk Porphyry JV process: and prepares for drilling at Warrior, Nevada, USA

Next steps

A 1,500m RC drill program is scheduled to commence in early October 2024. Mapping and sampling will continue prioritising the Morning Star, Nellie, and San Francisco prospects where previous sampling has returned high-grade silver such as +1% Ag (Morning Star EX398), 2,630g/t Ag (Nellie EX354) and 649g/t Ag (San Francisco EX638).

Blackhawk Background

Blackhawk epithermal project hosts eight mining centres of note with main production coming from the historic Endowment, Silver Gulch, and Blackhawk mines (*see Table 1. Epithermal prospect register, Blackhawk Project*). The historic mines exploited mineralisation from a well-developed Intermediate Sulphidation Epithermal vein system that is exposed over 5km² and remains open. Importantly the high-grade epithermal system overlaps and is likely related to the adjacent large scale porphyry system, this relationship is common in porphyry environments.

The Endowment mine was initially mined in the 1860s with most mining completed by the 1880s, achieving reported production of 70,000oz Au equivalent (Hill, 1915). Mining finally ceased in the 1920s due to the inability to process sulphide ores and prevailing depressed economic conditions, mineralisation remains within and within reach of the current infrastructure (Magill, 1973).

The area has seen little modern-day exploration. Prior to SNX, last exploration occurred in the mid to late 1980s by American Gold Resources (AGR). The focus of these programs was to outline shallow oxide gold and silver deposits. Two shallow oxide resources were estimated by AGR at Silver Gulch and Morning Star (non-JORC), located within the Blackhawk project. Prior to Sierra Nevada Gold there has been no recorded exploration drilling within 600m of the Endowment Mine, due to previous ownership issues.

Rock chip sampling across the project by SNX has returned multiple high grades (*see figure 2*), up to +1% silver, demonstrating a widespread distribution of very high silver across the camp.

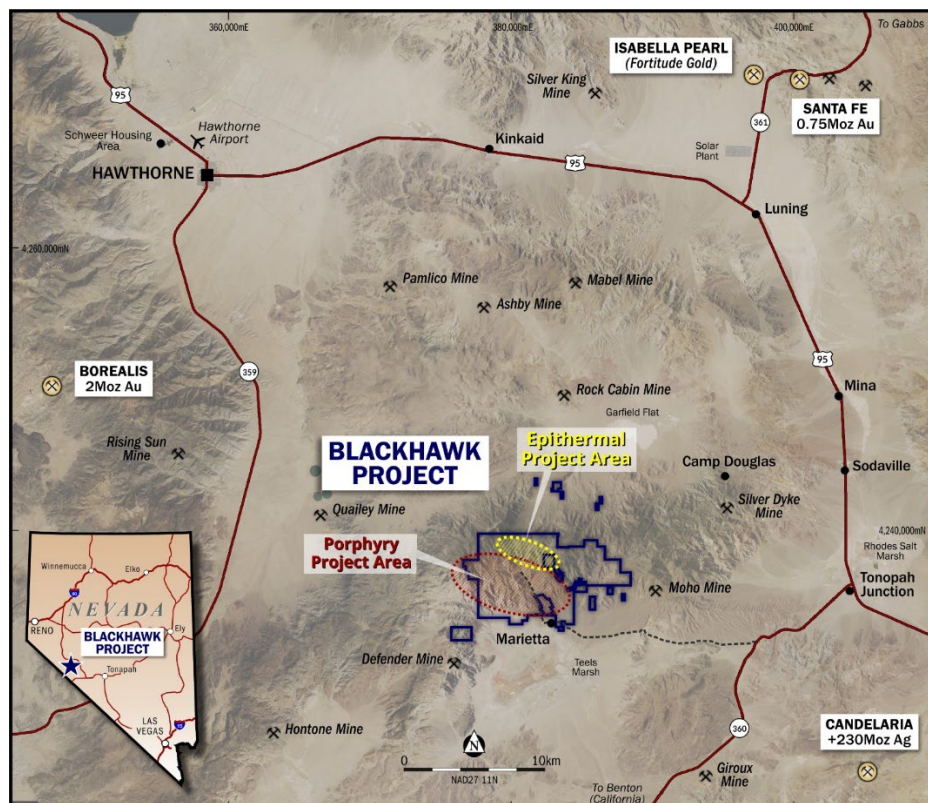


Figure 3. Location of the Blackhawk Epithermal and Porphyry project's.



Table 1. Epithermal prospect register, Blackhawk Project.³

Prospect	Geochemical Zonation	Number of Veins	Strike length of Veins (km) (combined)	Past Production	Resources Remnant Ore	Comments
Endowment	Surface Ag – Au – Pb. Mine Levels Ag – Au – Pb. Depth Ag – Au – Zn – Pb +/-Cu.	3 major veins with 3 subordinate veins within the immediate mine camp	1.5km's	Estimated from historical records 70,000oz Au (Hill 1915, non-JORC) from the main vein only 1860's - 1920's. Mining ceased within transitional sulphide material	Remnant ore within existing workings. (Magill 1973 non-JORC)	Mined to less than 100m depth. At least 6 interconnected veins. SNX have sampled the upper levels. Open along strike and down dip. Only a small portion of the structures exploited. No historic drilling. SNX drilled the vein system some 150m vertically below the existing mine and returned an intersection of 5m at 0.73g/t Au, 479g/t Ag, 6.96% Pb, 19.84% Zn within a wider mineral zone that returned 12m at 0.36g/t Au, 219g/t Ag, 3.05% Pb, 8.54% Zn.
Morning Star	Higher Elevations Surface Au – Ag. Lower Elevations Surface Ag – Au – Pb. Mine Levels Ag – Au – Pb.	3 main parallel veins host bulk of mineralisation	2.2km's	Unknown but significant from several draw points	Historic oxide resource (AGR, 1989) non-JORC. Sampling up to +1% Ag and 36g/t Au	Shallow oxide resource (non-JORC) drilled in the 1980's. Mining activities over a large area with numerous well developed draw points. SNX sampling has defined a well mineralised Au/Ag vein system over 3 parallel veins with a combined strike of 2.1km. Results of +1% Ag and +1oz Au.
Blackhawk Mine	Surface Ag – Au – Pb +/-Cu.	2 parallel veins with a well defined steep plunge	0.9km	Unknown but significant with latest activity 1960's	Sampling of remnant ore returned up to 15g/t Au and 2,930g/t Ag	2 well defined veins have been mined to a significant depth. Well established mining centre with significant mullock present.
Silver Gulch	Surface Ag – Au – Pb.	Numerous veins and breccia systems support resource	2.4km's	Unknown but significant from several draw points	Historical oxide Au & Ag resource (50 holes AGR, 1989) non-JORC. Sampling has returned up to 18.5g/t Au, 1480g/t Ag over 1.5m	Shallow oxide resource (non-JORC) drilled in the 1980's by AGR (50 holes). Complex array of mining infrastructure exploiting breccia and vein structures. Mineralised epithermal breccias and veins host mineralisation as well as earlier porphyry "D" style veins from the overlapping porphyry system to the south.
Nellie	Surface Au – Ag – Pb.	2 sub parallel veins	0.8km	Unknown but minor	Sampling has returned up to 26.6g/t Au and 2,630g/t Ag from mine dump material and veins	Small series of workings on trend south of Morning Star. Mineralisation hosted by continuous breccia/vein system that displays strong MnOx after rhodochrosite.
San Francisco	Surface Ag – Au – Cu.	2 main veins	0.7km	Unknown but minor	Limited sampling with results up to 368g/t Ag, 8.5g/t Au, 1.6% Cu	Intensive alteration, veins and breccia's proximal to a rhyolitic intrusive with associated phreatomagmatic breccias (carapace).
Gold Cliff	Surface Au – Ag – Cu.	Numerous veins and shears host mineralisation	1.2km's	Unknown but significant mine infrastructure present	Sampling returned results up to 60g/t Au, 845g/t Ag and 5.01% Cu.	Generally, narrow highly structurally deformed mineralised shears and veins present – generally a quartz deficient system.

³ Details previously reported - Sierra Nevada Gold Replacement Prospectus - Page 36, 37



About Sierra Nevada Gold (SNX)

Sierra Nevada Gold (SNX) is actively engaged in the exploration and acquisition of precious and base metal projects in the highly prospective mineral trends in Nevada, USA since 2011. The Company is exploring five 100%-controlled projects in Nevada, comprising four gold and silver projects and a large copper/gold porphyry project, all representing significant discovery opportunities for the company.

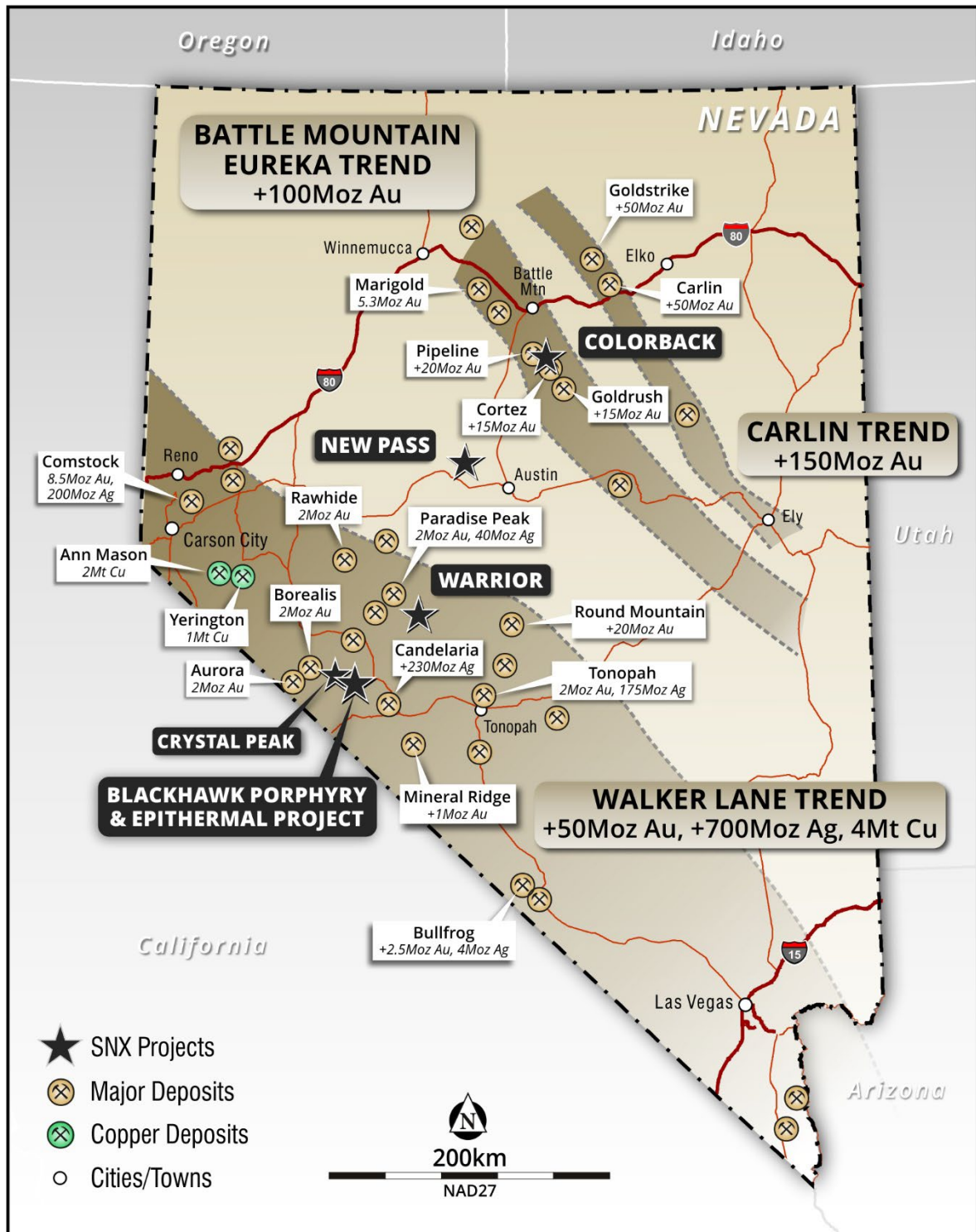


Figure 4. Location of SNX projects in Nevada, USA showing the location of the major gold and copper deposits.



This announcement was authorised for release by Mr Peter Moore, Executive Chairman of the Company.

For more information, please contact:

Peter Moore

Executive Chairman

Email: peter@sngold.com.au

Investors/Media:

Nathan Ryan

NWR Communications

Email: nathan.ryan@nwrcommunications.com.au

Ph: +61 420 582 887

Competent Persons Statement

Information in this document that relates to Exploration Results is based on information compiled or reviewed by Mr. Brett Butlin, a Competent Person who is a Fellow of the Australian Institute of Geoscientists (FAIG). Mr. Butlin is a full-time employee of the Company in the role of Chief Geologist and is a shareholder in the Company. Mr. Butlin has sufficient experience which 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Butlin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.