



21 May 2024

## SNX to follow up 1270 g/t silver intercept in hole BHD006 at Blackhawk, Nevada, USA

### Highlights

- Sierra Nevada to review potential for a large, high-grade epithermal silver-dominated vein system.
- Previously drilled 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 at its Blackhawk Epithermal Project in Nevada, USA.<sup>1</sup>
- This high-grade intercept is situated 150m vertically below the deepest portion of the historic mine and includes higher grade intersections of:
  - 0.5m at 1270g/t Ag from 256.5m
  - 1m at 823g/t Ag from 257m
  - 1m at 654g/t Ag from 258m
- These silver intercepts are associated with very high-grade lead-zinc-gold (*see table 1*), demonstrating the potential for extremely high value ore.
- Potential for a company-making silver discovery at Blackhawk, where SNX has identified 22.5-line kilometres of high-grade silver-gold-lead-zinc veins.<sup>1</sup>
- Two shallow oxide resources (historic, non-JORC) estimated at Silver Gulch and Morning Star.<sup>1</sup>
- SNX has recently defined several high priority drill targets, and a multi-hole drill program is permitted.

**SNX Executive Chairman Peter Moore** said *"These results which returned up to 1270 g/t silver from Blackhawk are very promising, coming from a vast and extensive vein network. We've identified 22.5-line kilometres of veins at Blackhawk, but this known mineralisation has sat largely untouched since mining ceased in the area in the 1920s. We have two shallow oxide resources which have not been defined to a JORC-compliant level but this provides us the opportunity to deliver value from an existing project with further drilling and mineral resource definition. Our 20-hole drill program is permitted and ready to drill, providing us with the opportunity to use modern exploration techniques to potential to return further high-grade results and shape this as a company-making discovery for Sierra Nevada."*

**Sierra Nevada Gold** (ASX: SNX) is pleased to announce plans to follow up drill hole BHD006 which returned up to **1270 g/t silver** at Endowment Mine, part of its Blackhawk Epithermal project in Nevada, USA.

SNX has previously identified a large and high-grade intermediate sulphidation epithermal Ag-Au-Pb-Zn vein system, likely related to a large porphyry system located immediately to the south. Partially coincident with

<sup>1</sup> Details previously reported - Sierra Nevada Gold Replacement Prospectus - Page 32, 33



the porphyry system, the Blackhawk epithermal project vein system covers about 5km<sup>2</sup> and is open under cover to the north and northeast, with 22.5-line km of veins identified to date (see figure 1).<sup>1</sup>

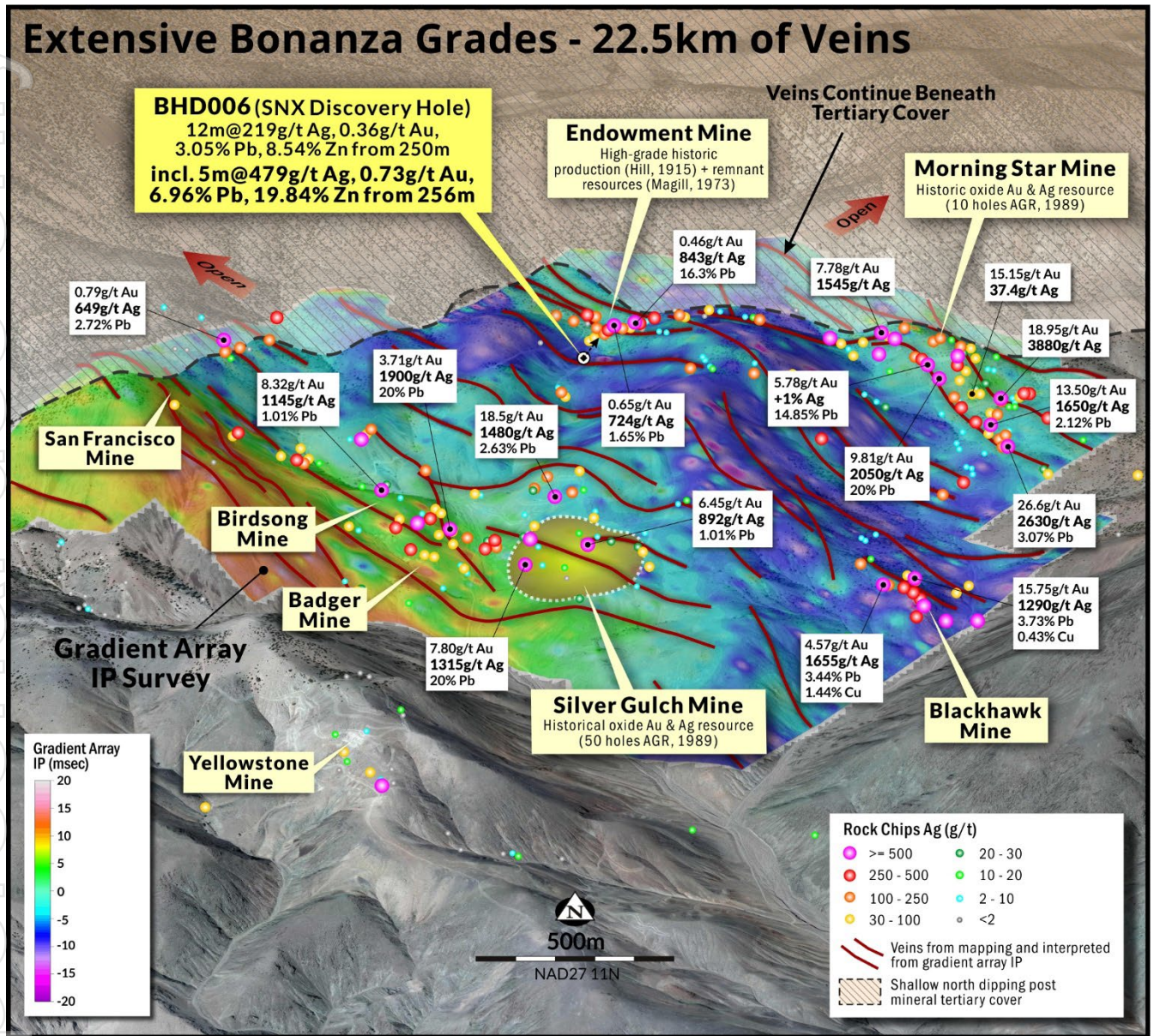


Figure 1: Oblique view looking north of the Blackhawk Epithermal Project with a 3.5km by 2.5km field of view. The Blackhawk Porphyry project is situated in the foreground with the epithermal system being partially coincident with the porphyry system's surface expression.<sup>2</sup>

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)**

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



As shown in *Table 1*, 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.

*Table 1. Diamond drill-hole assay intersections for mineralised zones (Significant Intersections) from BHD006. Actual vein width not precisely determined at this stage although a true width of vein of 50-60% of sample length is assumed. Assay information marked (+) indicates the upper limit of assay technique used.*

Hole ID	Sample Number	From (m)	To (m)	Interval (m)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Cu (%)	Comments
BHD006	1518	247	248	1	24.4	0.075	0.12	0.31	0.02	Minor quartz and sulphide stringers.
	1519	248	249	1	29.5	0.006	0.08	0.32	0.00	Minor quartz and sulphide stringers.
	1520	249	250	1	5.12	0.011	0.10	0.32	0.00	Minor quartz and sulphide stringers.
	1521	250	251	1	2.37	0.012	0.14	0.34	0.00	Minor quartz and sulphide stringers.
	1522	251	252	1	6.39	0.071	0.13	0.51	0.00	Minor quartz and sulphide stringers.
	1523	252	253	1	2.55	0.015	0.07	0.53	0.00	Minor quartz and sulphide stringers.
	1524	253	254	1	10.5	0.024	0.17	0.41	0.02	Minor quartz and sulphide stringers.
	1525	254	255	1	<b>187</b>	0.367	0.95	0.49	0.28	Sulphide rich breccia with minor banded veining.
	1526	255	256	1	15.35	0.094	0.24	0.67	0.01	Quartz and sulphide infilled breccia.
	1527	256	256.5	0.5	7.93	0.029	0.20	1.44	0.00	Occasional banded veins containing sulphides.
	1528	256.5	257	0.5	<b>1270</b>	2.58	<b>10.05</b>	<b>11.45</b>	0.27	Banded quartz, yellow-red sphalerite, galena, and MnO after rhodochrosite.
	1529	257	258	1	<b>823</b>	1.075	1.78	<b>29.20</b>	0.29	Banded quartz, yellow-red sphalerite, galena, and MnO after rhodochrosite.
	1530	258	259	1	<b>654</b>	0.347	<b>+20.00</b>	<b>+30.00</b>	0.02	White sphalerite (Fe-poor) and galena cut by MnO after rhodochrosite.
	1533	259	260	1	<b>243</b>	0.54	<b>7.03</b>	<b>14.65</b>	0.05	Banded quartz, yellow-red sphalerite, galena, and MnO after rhodochrosite.
	1534	260	261	1	37.3	0.402	0.85	<b>18.90</b>	0.07	Yellow-red sphalerite, silicified vein and breccia, some MnO.
	1535	261	262	1	5.83	0.035	0.08	0.29	0.00	Minor quartz and sulphide stringers
	1536	262	263	1	4.84	0.041	0.05	0.18	0.00	Minor quartz and sulphide stringers

SNX has recently defined several high priority silver drill targets at Endowment. A 20-hole drill program is permitted. Targets defined by recent work look to investigate for direct vein extensions within the near mine environment and to step out from drillhole BHD006 that effectively doubled the depth of the known vein system from the historic mine.

## 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 2. *Epithermal prospect register, Blackhawk Project*).

The Endowment mine was discovered 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 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 mainly to previous ownership issues.

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

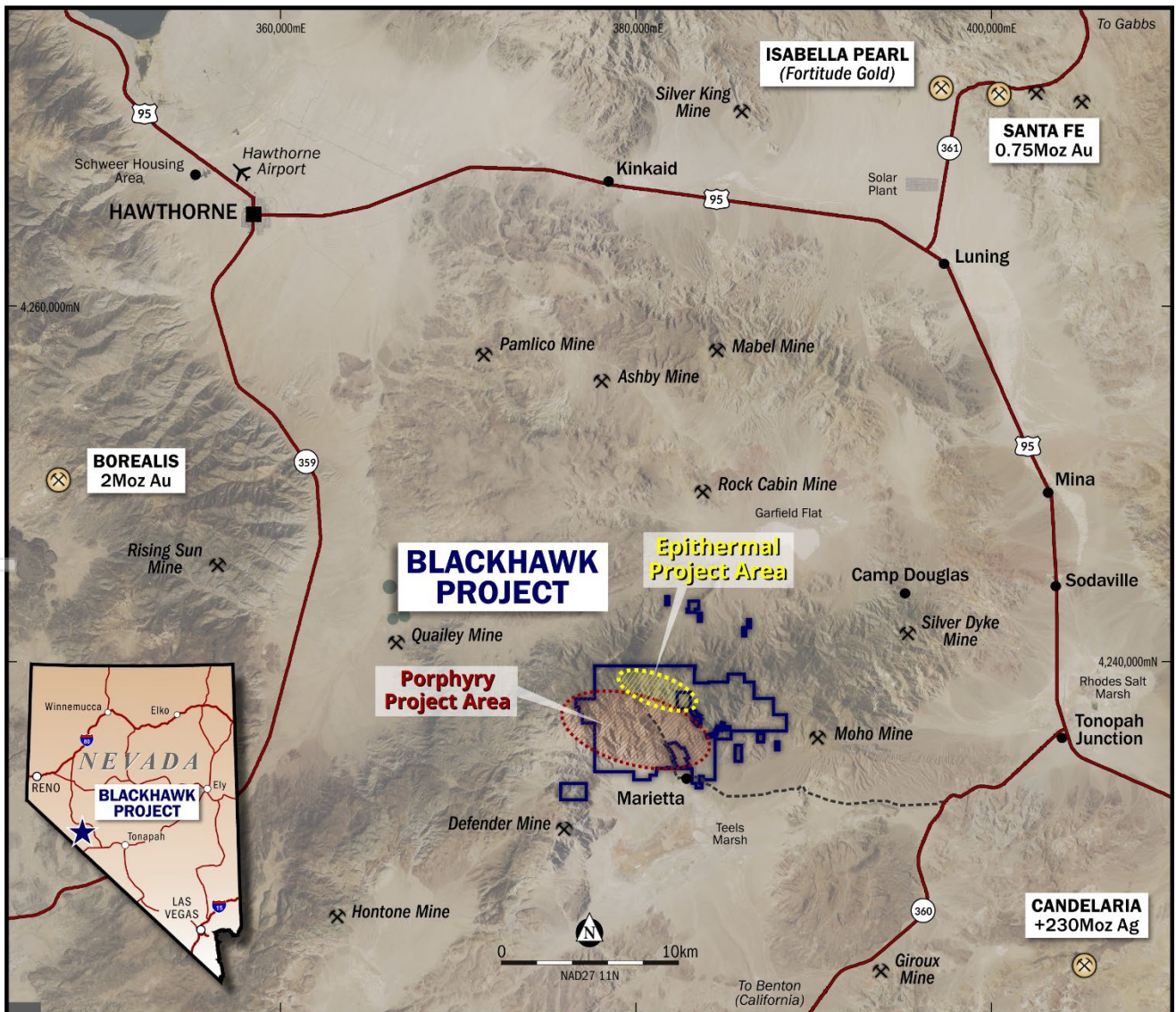


Figure 2. Location of the Blackhawk Epithermal and Porphyry projects.



Table 2. Epithermal prospect register, Blackhawk Project.<sup>3</sup>

Prospect	Geochemical Zonation	Number of Veins	Strike length of Veins (km) (combined)	Past Production	Resources Remnant Ore	Comments
<b>Endowment</b>	<b>Surface</b> Ag – Au – Pb. <b>Mine Levels</b> Ag – Au – Pb. <b>Depth</b> 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. <b>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.</b>
<b>Morning Star</b>	<b>Higher Elevations</b> Surface Au – Ag. <b>Lower Elevations</b> Surface Ag – Au – Pb. <b>Mine Levels</b> 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 <b>+1% Ag and 36g/t Au</b>	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.
<b>Blackhawk Mine</b>	<b>Surface</b> 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 <b>15g/t Au and 2,930g/t Ag</b>	2 well defined veins have been mined to a significant depth. Well established mining centre with significant mullock present.
<b>Silver Gulch</b>	<b>Surface</b> 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 <b>18.5g/t Au, 1480g/t Ag over 1.5m</b>	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.
<b>Nellie</b>	<b>Surface</b> Au – Ag – Pb.	2 sub parallel veins	0.8km	Unknown but minor	Sampling has returned up to <b>26.6g/t Au and 2,630g/t Ag</b> 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.
<b>San Francisco</b>	<b>Surface</b> Ag – Au – Cu.	2 main veins	0.7km	Unknown but minor	Limited sampling with results up to <b>368g/t Ag, 8.5g/t Au, 1.6% Cu</b>	Intensive alteration, veins and breccia's proximal to a rhyolitic intrusive with associated phreatomagmatic breccias (carapace).
<b>Gold Cliff</b>	<b>Surface</b> Au – Ag – Cu.	Numerous veins and shears host mineralisation	1.2km's	Unknown but significant mine infrastructure present	Sampling returned results up to <b>60g/t Au, 845g/t Ag and 5.01% Cu.</b>	Generally, narrow highly structurally deformed mineralised shears and veins present – generally a quartz deficient system.

<sup>3</sup> 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.

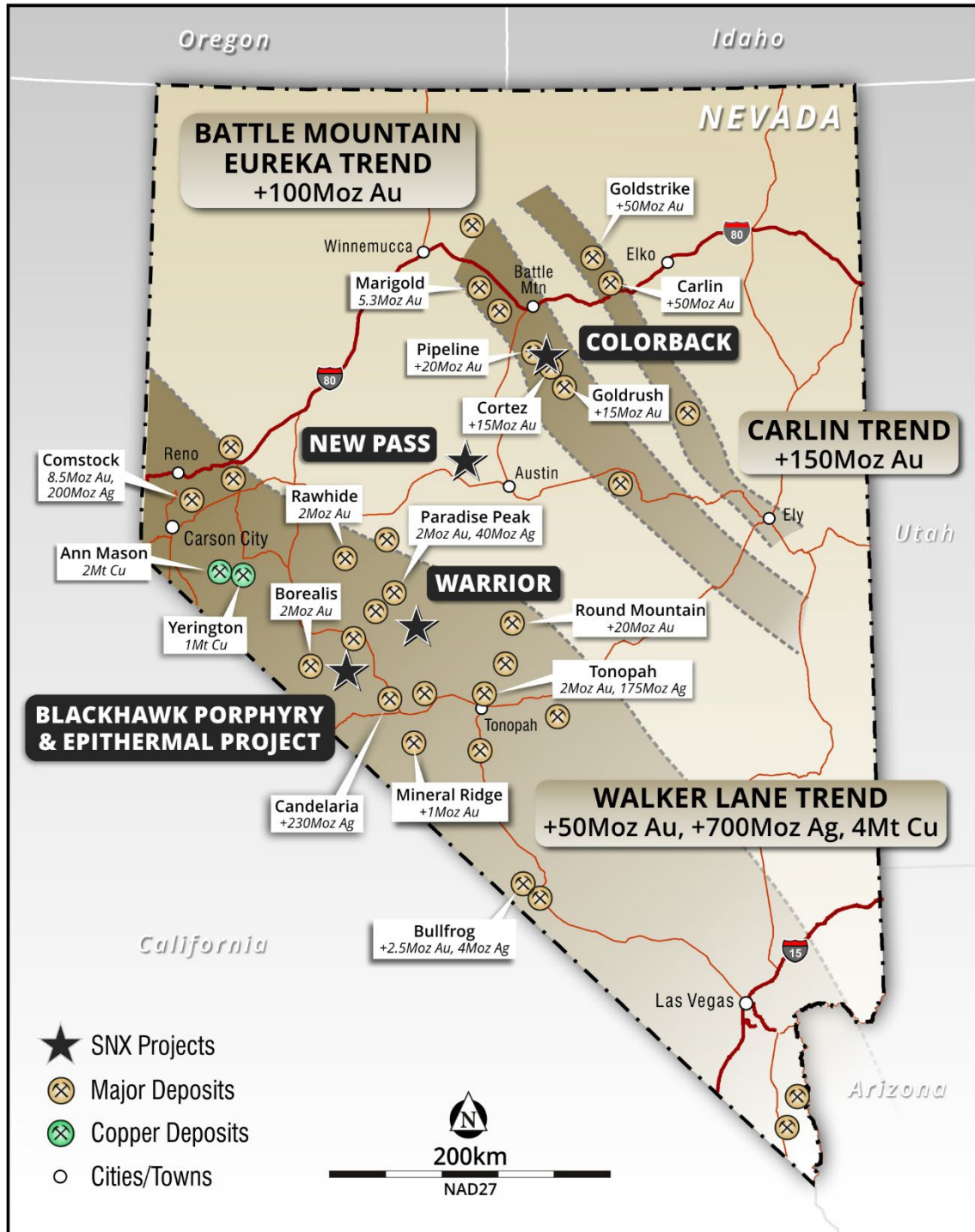


Figure 3. Location of SNX projects in Nevada, USA showing the location of the major gold and copper deposits.



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

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**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 (AIG). 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.

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