



18 June 2024

## SNX prepares to drill silver targets at Blackhawk epithermal project, Nevada

Previous drilling at Blackhawk returned up to 1,270 g/t Ag (BHD006) beneath the historic Endowment Mine, previous rock chip sampling returned +1% silver from the Morning Star Mine<sup>1</sup>

### Highlights

- SNX plans seven-hole 1,500m reverse circulation (RC) drill program to follow up on drillhole BHD006, which was drilled beneath the historic Endowment Mine.
- High-grade silver intercepts are associated with very high-grade lead-zinc (see table 1), demonstrating potential for extremely high value ore at Blackhawk Epithermal Project.
- SNX's geological team will initiate a field program to complete geological mapping, soil geochemistry surveys and rock chip sampling on vein target areas, to further refine drill targets in preparation for drilling in the third quarter of 2024.
- Underground 3D scanning survey of accessible historic workings at the Endowment Mine will map extent and location of historic workings to accurately target planned drill holes following up on drill hole BHD006.
- SNX will initiate a focused, 100m dipole-spaced Induced Polarization (IP) geophysics survey over preferred portions of the vein field to assist with drill hole targeting.
- Blackhawk epithermal project has potential for a significant silver discovery, with 22.5-line kilometres of high-grade silver-gold-lead-zinc veins identified<sup>1</sup>.
- SNX completed a \$2.6 million capital raising in May 2024 to advance exploration at Blackhawk epithermal project.<sup>2</sup>
- It has commenced a strategic review to progress full or partial asset sales or joint venture partnerships over remaining copper, gold and silver assets in Nevada, USA.

**SNX Executive Chairman Peter Moore** said "We were encouraged by the strong support for our recent \$2.6 million share placement and proceeds from this will allow the company to accelerate our exploration program at Blackhawk as we look to uncover its potential to be a significant silver discovery. We have several activities planned to ensure our drill targets are well defined ahead of mobilising a rig to site in Q3 2024 to follow up these exciting earlier silver results."

<sup>1</sup> Reported in Sierra Nevada Gold Replacement Prospectus – Page 32, 33 and ASX Announcement dated 21 May 2024.

<sup>2</sup> See ASX Announcement 30 May 2024 – SNX secures \$2.6 million Placement to advance Blackhawk silver exploration.



**Sierra Nevada Gold** (ASX: SNX) is pleased to announce it is preparing a drilling program to follow up drill hole BHD006 which returned results including **0.5m at 1,270 g/t Ag** and **1m at 823g/t Ag** at Endowment Mine, part of its Blackhawk Epithermal project in Nevada, USA.<sup>1</sup>

SNX has identified a large and high-grade intermediate sulphidation polymetallic epithermal Ag-Au-Pb-Zn vein system at Blackhawk, which is related to a large porphyry system. Partially coincident with, and located north of the Blackhawk Porphyry system, the vein field 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 figures 1 & 2).

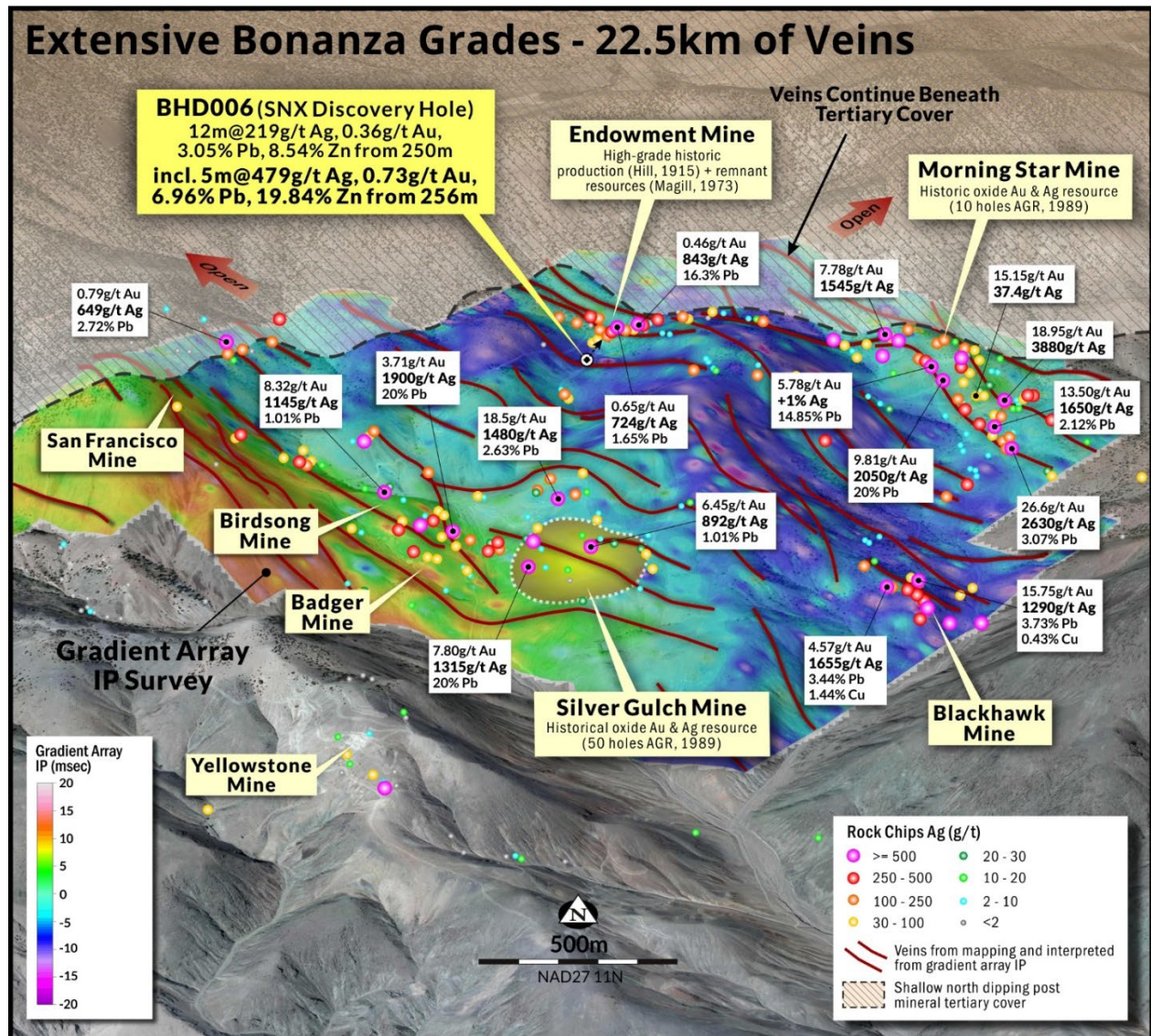


Figure 1: Oblique view looking north of the Blackhawk Epithermal Project with a 3.5km by 2.5km field of view. The Blackhawk Porphyry project is situated in the foreground with the epithermal system being partially coincident with the porphyry system's surface expression.<sup>3</sup>

SNX's geological team will initiate a field program to complete geological mapping, soil geochemistry surveys and rock chip sampling on mapped vein target areas, to further refine drill targets in preparation for drilling. A program of seven reverse circulation (RC) holes is planned for 1500m in the third quarter of 2024 to follow up the result of **1,270 g/t Ag** hit in BHD006 drilled in 2017.

<sup>3</sup> Reported in Sierra Nevada Gold Replacement Prospectus – Page 198 - 205 and ASX Announcement dated 31 May 2023.

SNX plans to use underground 3D scanning survey of accessible historic workings at the Endowment Mine, adjacent to drillhole BHD006, to map the extent and location of historic workings to accurately target planned drill holes and will initiate a focused, 100m dipole-spaced Induced Polarization (IP) geophysical survey over select sections of the vein system to assist with drill hole targeting, prior to mobilising a rig to site.

While its focus is now on Blackhawk epithermal project, SNX has commenced a strategic review to progress full or partial asset sales or joint venture partnerships over its remaining copper, gold and silver assets in Nevada, USA.

*Table 1. Diamond drill-hole assay intersections for mineralised zones (Significant Intersections) from BHD006. Actual vein width not precisely determined at this stage. A true width of vein is estimated to be approximately 60% of downhole sample length. Assay information marked (+) indicates the upper limit of assay technique used.<sup>4</sup>*

Hole ID	Sample Number	From (m)	To (m)	Interval (m)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Cu (%)	Comments
<b>BHD006</b>	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>1,270</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

<sup>4</sup> See ASX Announcement 21 May 2024 – SNX to follow up 1,270g/t silver intercept in hole BHD006 at Blackhawk, Nevada, USA



## 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.

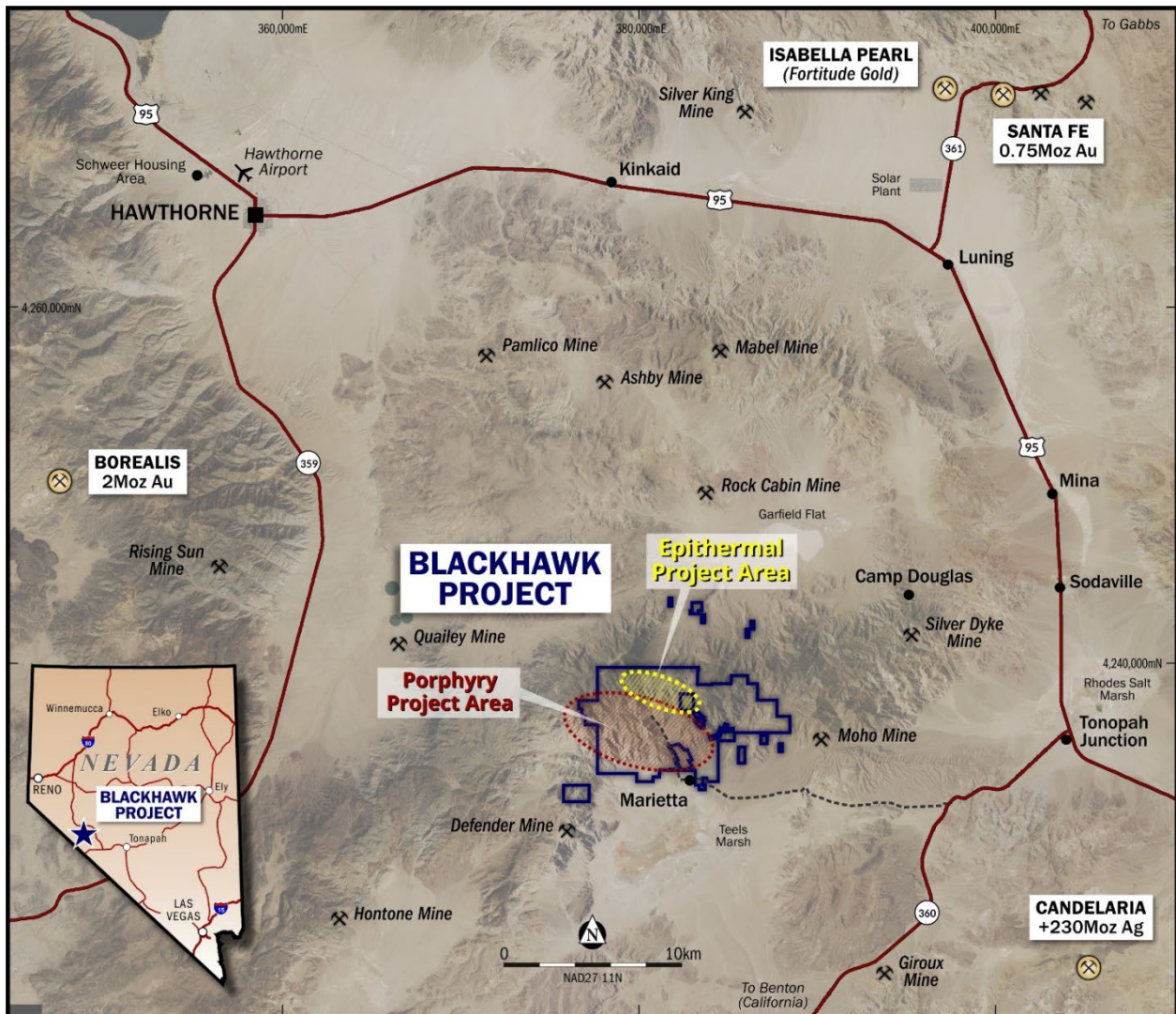


Figure 2. Location of the Blackhawk Epithermal and Porphyry project's.



Table 2. Epithermal prospect register, Blackhawk Project<sup>5</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, 1,480g/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>5</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.

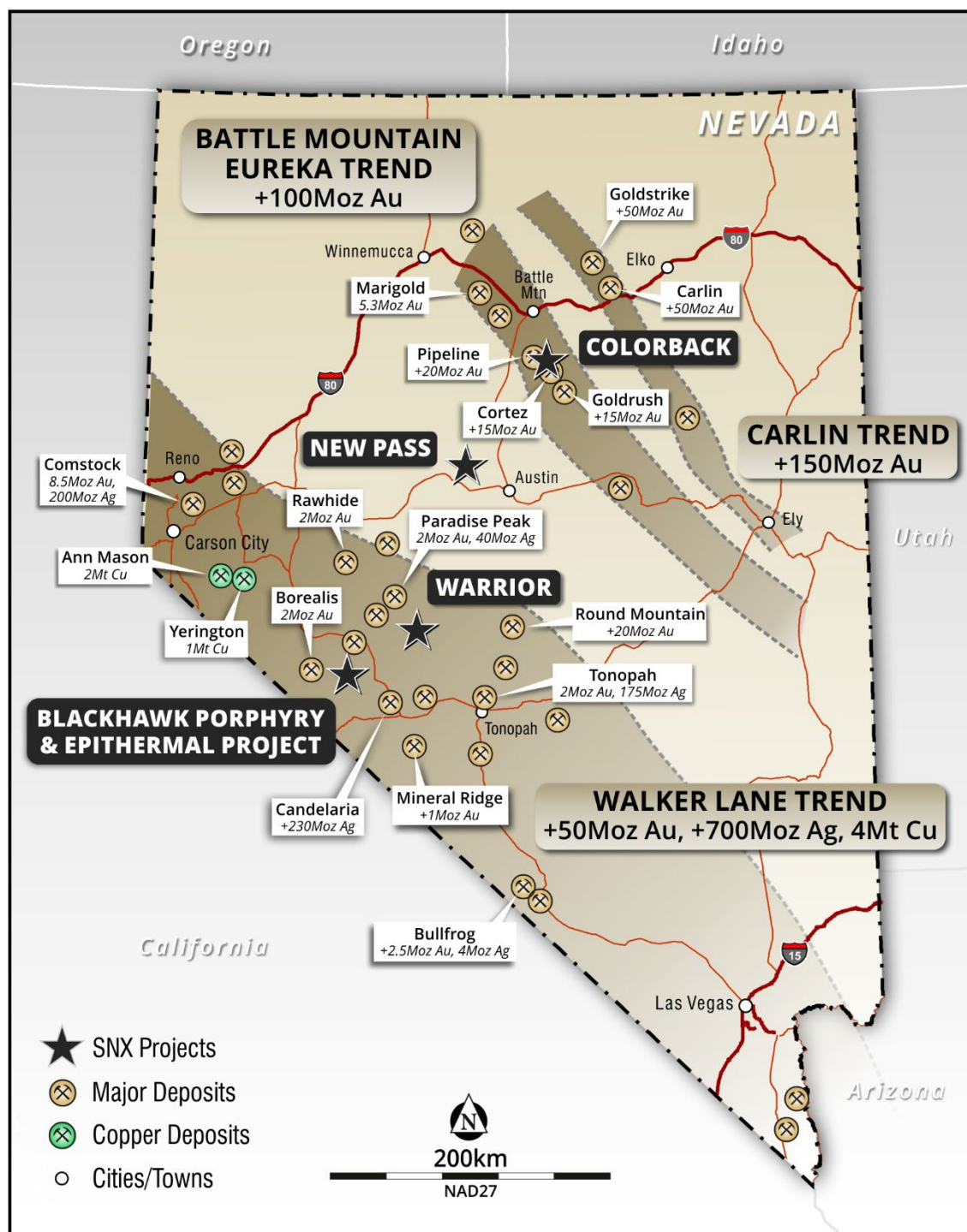


Figure 3. Location of SNX projects in Nevada, USA showing the location of the major gold and copper deposits.



This announcement was authorised for release by the Company's Board of Directors.

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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.