

16 January 2025

# First-pass RC drilling returns 4.88m at 481g/t silver and 0.4% antimony at SNX's Endowment Mine, Nevada, USA.

#### **Highlights**

- Phase 1 drilling at Endowment Mine returns up to 4.88m at 481g/t silver, 0.61g/t gold,
   0.6% copper & 0.4% antimony from 87.78m from hole BHRC012.
- BHRC012 was drilled targeting a remnant ore position within the Endowment Vein midway between the 3<sup>rd</sup> and 4<sup>th</sup> levels within the historic Endowment Mine.
- The South Vein was intersected in holes BHRC010 through BHRC017 with BHRC011, BHRC012 & BHRC013 with high silver returns of 1.22m at 275g/t Ag, 1.22m at 126g/t Ag & 2.44m at 116.75g/t Ag.
- A newly discovered near-surface vein returned 3.66m at 93.85g/t Ag from 13.4m in hole BHRC010.
- Veins intersected in several holes generally associated with ore grade lead and zinc with lesser copper and antimony.
- Historic workings intersected in three holes, preventing two from reaching final depth.

**Sierra Nevada Gold** (ASX: SNX) is pleased to announce results of its Phase 1 RC program at the historic high-grade Endowment Mine, part of its Blackhawk Project in Nevada, USA, which focussed on testing remnant historic high-grade ore positions, vein extensions, near-surface mineralised breccias, and chargeability targets generated by SNX's Induced Polarisation (IP) surveys.

SNX completed 11 holes for 1,317.5m (*see Table 1 and Appendix 1 for details*), all assay results have now been returned and forms the basis for this announcement.

Hole BHRC012 was drilled to target the Endowment Vein where historic mine documents suggested the vein had not been mined. BHRC012 returned **4.88m at 481g/t Ag, 0.61g/t Au, 0.6% Cu & 0.4% Sb** from 87.78m validating historic records and providing vectors for future targeting. The vein was intersected between the 3<sup>rd</sup> and 4<sup>th</sup> levels of the mine between historic stopes. The vein is potentially still open down plunge to the SE.

Drilling intersected the previously untested South Vein at shallow depths in holes BHRC010 through BHRC017. The South Vein is sub parallel to and is 40m in the hanging wall, southeast of the Endowment Vein (*see figure 2*). The South Vein was exploited by historic miners although only limited information is available on this phase of past mining activity. Geochemically the South Vein is like the Endowment Vein characterised by high silver, antimony, ore grade lead + zinc and elevated copper and manganese. The South Vein is typically intersected as a 1-5m wide sulphidic argillic altered structure/vein. Importantly another mineralised structure was intersected below the South Vein between the Endowment Vein, the historic miners appear to have not known about this vein.

**Executive Chairman Peter Moore** said: "These initial results from the Endowment drilling are very encouraging, with a high-grade hit of 481g/t silver among other significant intercepts in the majority of holes. A new mineralised

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vein was discovered and historic workings intersected in three of the 11 holes. These results demonstrate the viability of the work leading up to drilling and providing a greater understanding of the historic workings and the exploration upside for high grade silver and gold at the Endowment site. These encouraging initial results will assist to prioritise exploration plans for the next 12 months as we continue to focus on unlocking the potential the Endowment prospect and of the larger Blackhawk high grade epithermal vein system."

Better results returned from the near-surface South Vein include:

- 1.22m at 275g/t Ag, 3.65% Pb, 6.47% Zn, 0.40% Cu and 0.21% Sb from 37.79m (BHRC012)
- 6.10m at 66.04g/t Ag, 1.77% Pb, 4.04% Zn and 0.1% Sb from 41.45m (BHRC013)
- 1.22m at 82.80g/t Ag, 3.45% Pb, 7.69% Zn and 0.21% Sb from 46.33m (BHRC014).

Figure 1 shows the location of the completed RC holes, hole details are provided in Table 1 and Appendix 1.

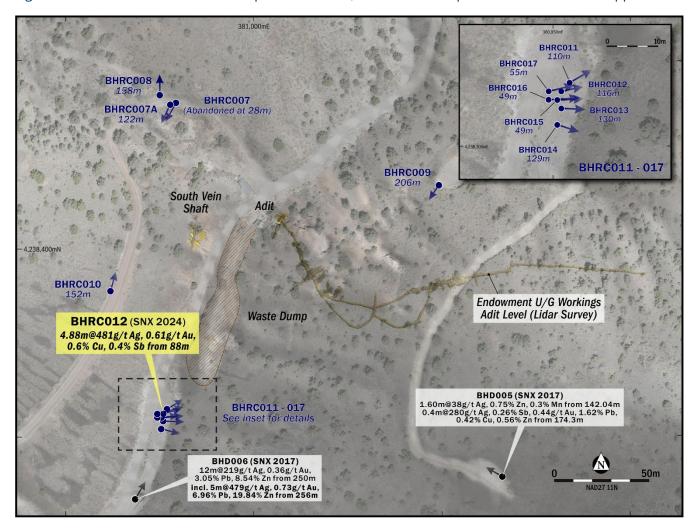


Figure 1: Plan view showing the position of the recently completed RC holes BHRC007 through BHRC017. Shown in gold is the adit level workings and the South Vein shaft as surveyed by LiDAR. Also shown is previously reported core holes BHD006 & BHD005 with significant intercepts annotated. <sup>1</sup>

SNX has identified a large and high-grade intermediate sulphidation epithermal (ISE) Ag-Au-Pb-Zn vein field, related to a large porphyry system located immediately south of the Epithermal Project. Partially coincident with the Blackhawk porphyry system, the Blackhawk ISE vein system covers about 5km² and is open under cover both to the north and northeast, with 22.5-line km of veins identified to date (see figure 3). Recent and ongoing mapping and sampling by SNX has identified further veins within ISE vein field.

<sup>&</sup>lt;sup>1</sup> Details previously reported - Sierra Nevada Gold Replacement Prospectus - Page 32 - 37

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#### **Endowment Mine Background**

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

Importantly, previously reported SNX hole BHD006 intersected the downdip extension of the Contact vein, a steeply SW dipping (80°), 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.

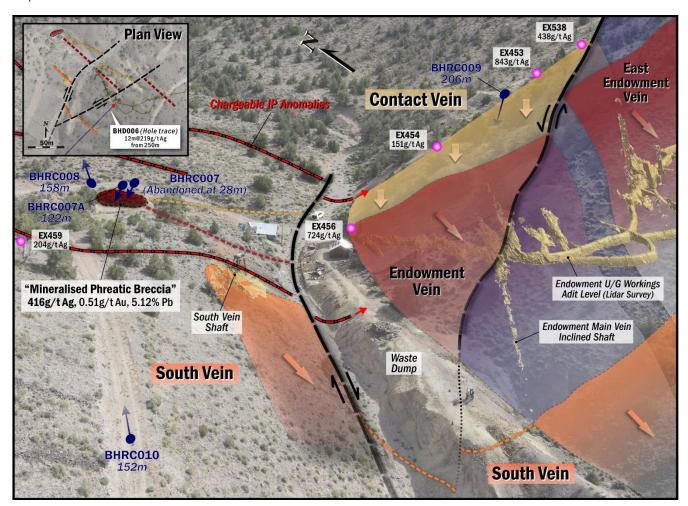


Figure 2: Oblique view looking north of the Endowment Mine. Schematically presented are the various mineralised veins, main structures, LiDAR survey (in gold), completed drilling and selected rock chips samples (previously reported). Also shown as red/black lines are untested chargeable features generated 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.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> See ASX Announcement 9 October 2024 – Drilling to start at Blackhawk to target high-grade silver.
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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** in BHD006. 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)** (Photo 1 below)

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.<sup>1</sup>

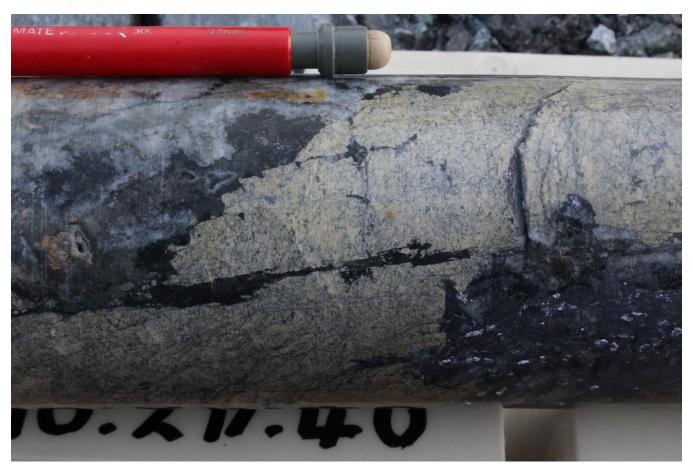


Photo 1: BHD006 (previously reported) 258.5m vein showing massive galena, Fe poor sphalerite, Mn oxide after rhodochrosite and Ag rich sulpho-salts.

#### **Blackhawk Epithermal Project 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 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 related to the adjacent large scale porphyry system, this relationship is common in porphyry environments.

The largest of the historic mines, 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). Sporadic 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 returned multiple high grades (*see figure 3*), up to +1% silver, demonstrating a widespread distribution of very high silver across the camp.

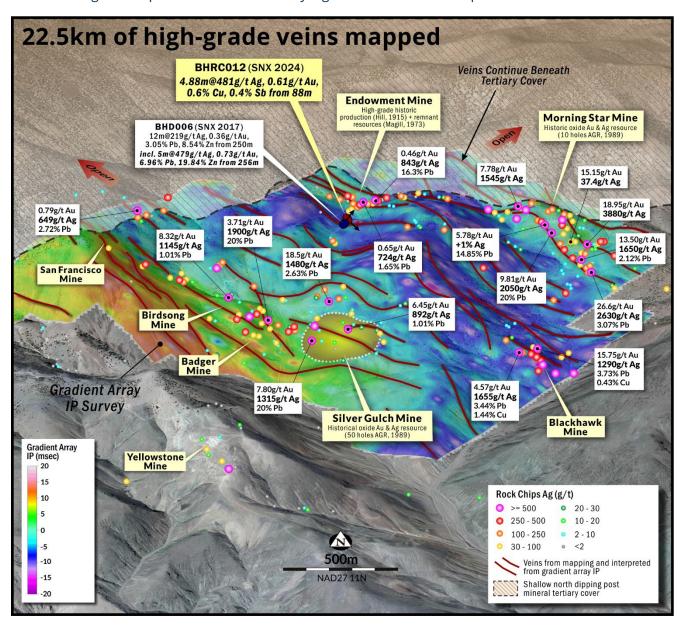


Figure 3: Oblique view looking north of the Blackhawk Epithermal Project with a 3.5km by 2.5km field of view. The Blackhawk Porphyry project is situated in the foreground with the epithermal system being partially coincident with the porphyry system's surface expression.<sup>3</sup>

See ASX Announcement 31 May 2023 – SNX initiates Blackhawk Porphyry JV process: and prepares for drilling at Warrior, Nevada, USA
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Table 1. Drill hole details, Endowment Mine, Blackhawk Project.

Hole ID	Drill Type	Easting NAD27 11N (m)	Northing NAD27 11N (m)	Collar RL (m)	Azi (deg)	Dip (deg)	EOH Depth (m)	Comment
BHRC007	RC	380959	4238478	2115	209	-55	28	Hole abandoned due to drilling issues
BHRC007A	RC	380956	4238477	2115	203	-55	122	
BHRC008	RC	380950	4238482	2116	356	-55	158	
BHRC009	RC	381098	4238434	2133	213	-51	206	
BHRC010	RC	380924	4238378	2121	20	-60	152	
BHRC011	RC	380954	4238315	2093	60	-50	110	
BHRC012	RC	380952	4238313	2093	76	-55	116	
BHRC013	RC	380952	4238309	2092	92	-55	130	Hole abandoned due to historic workings
BHRC014	RC	380951	4238305	2092	110	-55	129	Hole abandoned due to historic workings
BHRC015	RC	380951	4238311	2092	85	-55	49	
BHRC016	RC	380949	4238311	2092	85	-60	49	
BHRC017	RC	380949	4238313	2092	76	-60	55	

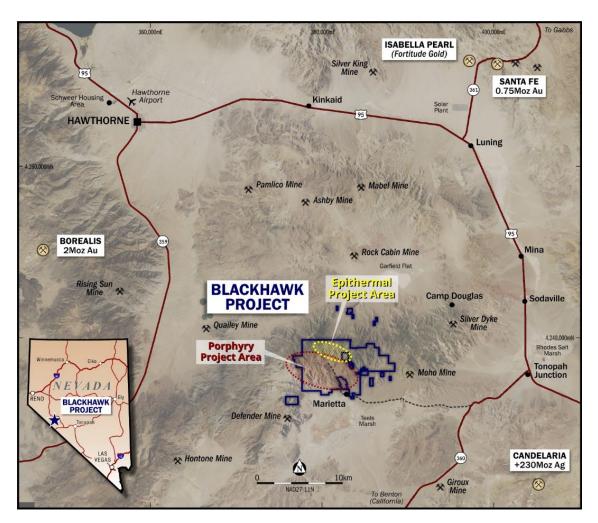


Figure 4: Location of the Blackhawk Epithermal and Porphyry project's.

Table 2. Epithermal prospect register, Blackhawk Project.4

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	<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 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	<b>Surface</b> 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.

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<sup>&</sup>lt;sup>4</sup> Details previously reported - Sierra Nevada Gold Replacement Prospectus - Page 36, 37
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#### **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.

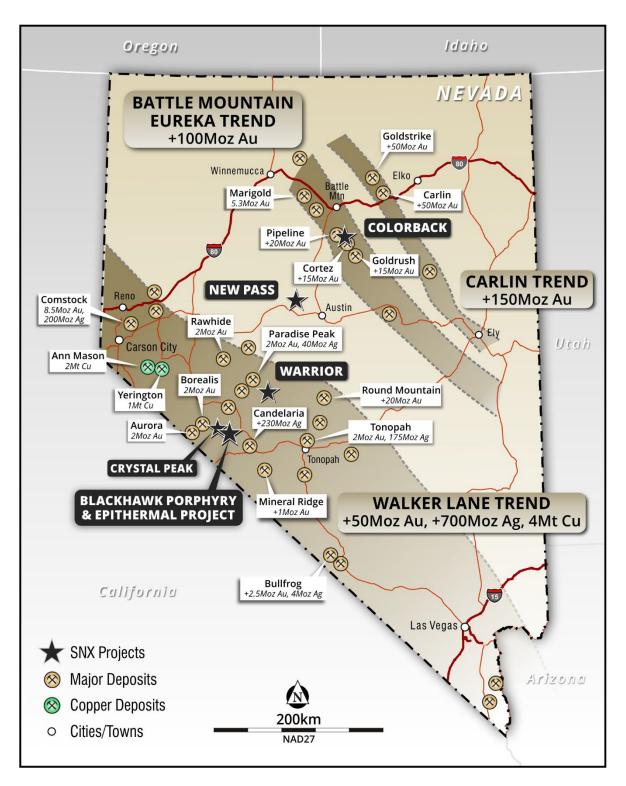


Figure 4. Location of SNX projects in Nevada, USA showing the location of the major gold and copper deposits.

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

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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 (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.



# **Appendix 1 - Results**

#### Table 1 - Drilling information for holes recently drilled at Blackhawk.

Significant intercepts are calculated using a cut off of >=15g/t Ag, over >=1.22m downhole width, including <=1.22m internal waste. All intercepts are down hole widths, true widths are estimated to be approximately 90% of downhole widths where geological control is known.

Hole ID	Drill Type	Easting NAD27 11N (m)	Northing NAD27 11N (m)	Collar RL (m)	Azi (deg)	Dip (deg)	EOH Depth (m)	From (m)	To (m)	Width (m)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Cu (%)	Sb (%)	Comments
BHRC007	RC	380959	4238478	2115	209	-55	28										Hole abandoned
BHRC007A	RC	380956	4238477	2114	204.79	-56.25	122										No significant intercept
BHRC008	RC	380950	4238482	2116	359.89	-54.65	158										No significant intercept
BHRC009	RC	381098	4238434	2133	213.5	-51.06	206	78.02	84.12	6.10	45.18	0.24	0.39	0.75	0.05	<0.01	
								175.56	179.21	3.66	25.37	0.19	0.23	0.25	0.02	<0.01	
BHRC010	RC	380924	4238378	2121	16.6	-59.66	152	13.41	17.07	3.66	93.85	0.19	0.29	0.11	0.03	0.02	New vein
								46.33	48.77	2.44	16.91	0.30	0.19	0.28	0.01	<0.01	South Vein?
BHRC011	RC	380954	4238315	2093	58.5	-50.61	110	21.94	22.16	1.22	62.00	0.22	0.44	0.14	0.07	0.04	
								35.36	36.57	1.22	98.80	0.17	2.15	2.96	0.23	0.08	South Vein
								101.19	102.41	1.22	126.00	1.45	0.66	3.81	0.16	0.09	
BHRC012	RC	380952	4238313	2093	76.35	-55.18	116	37.79	39.01	1.22	275.00	0.20	3.65	6.47	0.40	0.21	South Vein
								52.42	57.30	4.88	17.85	0.04	0.07	0.19	0.02	0.01	
								87.78	92.65	4.88	481.00	0.61	0.48	0.23	0.60	0.40	Endowment Vein
BHRC013	RC	380952	4238309	2092	92.16	-56.03	130	41.45	47.55	6.10	66.04	0.06	1.77	4.04	0.06	0.10	South Vein
								62.18	64.62	2.44	116.75	0.17	0.21	0.25	0.12	0.07	
BHRC014	RC	380951	4238305	2092	106.7	-55.56	129	46.33	47.55	1.22	82.80	0.10	3.45	7.69	0.08	0.21	South Vein
BHRC015	RC	380951	4238311	2092	86.09	-55.94	49	40.23	42.67	2.44	32.00	0.03	1.16	3.25	0.02	0.01	South Vein
BHRC016	RC	380949	4238311	2092	86.67	-60.03	49	41.45	42.67	1.22	60.00	0.14	0.98	2.22	0.14	0.21	South Vein
BHRC017	RC	380949	4238313	2092	76.88	-60.57	55	39.01	41.45	2.44	71.20	0.12	1.30	3.51	0.06	0.04	South Vein

## **Appendix 2 – JORC Code, 2021 Edition Table 1**

## **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g., 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.	<ul> <li>All sampling prior to 2014 are considered historic in nature. Holes (RC and DD) drilled by SNX since 2017 employed industry standard sampling techniques. Prior to 2014 numerous exploration companies undertook drilling and soil sampling;</li> <li>Phelps Dodge 1982 5 RC drill holes (Sultana/Morning Star) for total of 435m. Data captured from scanned hand drawn maps, assay data captured from scanned sections (after Hackett).</li> <li>American Gold Resources (AGR) 1986-94 68 RC drillholes. (50 at Silver Gulch for 5,912m, 12 at Yellowstone for 1,514m, 6 at Sultana/Morning Star for 710m) Samples were reported in 5ft intervals, data captured from historic scanned maps and reports. AGR also completed several phases of soil sampling, rock chip sampling and channel sampling. AGR reported the estimation of two shallow resources (non-JORC) being at Silver Gulch and Morning Star. Both these resources are considered to be historical in nature and not JORC compliant.</li> <li>American Gold Resources (AGR) 1988 collected 47 Rock chip samples and 45 5ft channel samples. Sample location and results captured from scanned rectified map.</li> <li>Asarco 1989 4 RC drillholes totaling 300m, locations captured from historical scanned maps, no assay data available.</li> <li>Prior to 2014, 45 Rock Chip samples were taken by Moore/Snyder (SNX), location data and results available for Au, ME</li> <li>Between 2014 – 2018 SNX collected 865 rock chip samples from across the project area region, where a representative sample of between 0.5-2.5kg was taken and submitted for analysis (Au, ME).</li> <li>Between 2015 – 2018, SNX conducted numerous soil sampling programs for a total of 425 samples, all assay data for Au and ME available. (80 – 120 sieved mesh, sample weight 0.5kg)</li> <li>SNX collected 1,212 geochemical measurements of soil samples on ridge-and-spur lines with an Innov-X Delta Premium pXRF device.</li> <li>In 2017 SNX completed 3 RC, 1 RCD (1m sampling prior to diamond tail) and 2 DD (HQ) drillholes totalling 1,348m.</li></ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>Rock chip sampling since 2021 from the project area are representative samples of between 0.5-2.5kg. Submitted for analysis (Au, ME). All samples had Magsus readings taking utilising a KT-09 Magnetometer.</li> <li>During 2024 SNX drilled 11 RC holes for 1,317.5m. Sampling occurred on 4 ft (1.22m) intervals.</li> </ul>
		Geophysical – Dipole-Dipole Induced Polarisation survey (DPDP IP) method is often used to determine the location of disseminated sulphides. Rocks containing sulphide minerals can be more readily charged than barren ground. An external current is applied, and charge separation can occur on sulphide grain boundaries. When the transmitted current is switched off the decay of the current can be measured. The IP survey was completed by Zonge International. The oversight and auditing (QAQC) of the survey along with data processing was completed by Jim Wright of JL Wright Geophysics, Spring Creek Nevada, USA. Jim is a very experienced geophysicist with geophysical programs in Nevada.
		IP data were acquired using the ZEN distributed array system, developed, and manufactured by Zonge. For L3_200 the receivers were active in the downline (leading) direction from the transmitter dipole. A minimum of 8 receiver dipoles were left active, providing continuous coverage from N=1 to N=8. For L8_400 2-channel receivers were left active during acquisition along the entire length of the line, in both the leading and trailing directions of the active transmitter dipole. This permitted acquisition of n-spacings from n=0.5 to n=16.5. The receiver wire was run along the line and two transmitter wires were offset from the receiver wires by 50-meters to minimize coupling.
		Receiver: Zonge 32-bit, two-channel ZEN receivers, GPS synchronized.  ZEN SN's: 9, 11, 13, 90, 91, 92, 93, 94, 95, 114, 115, 116, 117, 119, 126, 127.  Transmitter: Zonge GGT-10, 10 KVA, Constant current transmitter, serial number 682A.  Power Source: Zonge ZMG-30, 30 KVA Generator, serial number 1.  Array: Dipole-Dipole.  Dipole (a-spacing): L3_200: 200 m, L8: 400m  N-spacing: L3: 1-8, L8: 0.5-16.5  Transmitter Waveform: 0.125 Hz, 50% duty-cycle square wave.  Transmitted Current: 1.5A-7.0A  Transmitting Duration: L3_200: 160 cycles (21 minutes), L8: 192 cycles (26 minutes)
		Receiver Sample Rate: 1024 Hz.  Receiver Electrodes: Non-polarizing ceramic Cu-CuSO4 porous pots.  Transmitter Electrodes: 18-inch stainless-steel stakes (on-line)
	<ul> <li>Include reference to measures taken to en sample representivity and the appropriate of any measurement tools or systems used</li> </ul>	calibration were passed through a three-tier riffle splitter and a nominal 3-5kg sample collected. Core was sampled

Criteria	JORC Code explanation	Commentary
		All sampling prior to 2014 are considered historic in nature.
	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 (e.g., '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 (e.g., submarine nodules) may warrant disclosure of detailed information	
Drilling techniques	Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	After 2014 RC drilling hole diameter is 5.1/4 inch. Drill rig UDR 1000/Foremost MPD 1500. Face sampling bit employed.  After 2014 DD by track mounted UDR1000 HQ triple tube core size. Core orientated by REFLEX Ranger downhole tool.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	All RC drilling completed after 2014, 1m samples were logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. Sample loss or gain was reviewed in the field and addressed in consultation with the drillers to ensure the most representative sample is collected. Samples are visually logged for moisture content, sample recovery and contamination. The RC drill system uses a face sampling hammer which is industry best practice, and the contractor aims to maximise recovery at all times.  All core completed after 2014 by SNX was logged for drilling recovery by measuring core loss. Core loss was measured first by the drilling crew and then checked by company geologists while logging the core.  Prior to 2014 sampling information does not support making the assessment of this criteria.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	RC holes were drilled dry whenever practicable to maximise sample recovery. Prior to 2014 available sampling information does not support making the assessment of this criteria.
	<ul> <li>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.</li> </ul>	No study of sample recovery versus grade has been conducted as these are early-stage drilling programs to outline mineralisation. The drilling contractors used standard industry drilling techniques of the time to ensure minimal loss of any size fraction.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of	Since 2014 all RC and core samples have been geologically logged to record weathering, regolith, rock type, alteration, mineralisation, structural deformation and other pertinent geological features. Where

Criteria	JORC Code explanation	Commentary
	detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	required logging records specific mineral abundance. Prior to 2014 available sample logging information does not support making the assessment of this criteria.
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	Since 2014 RC chip, rock chip and core logging is both qualitative and quantitative.
	The total length and percentage of the relevant intersections logged.	The entire length (100%) of each RC and core hole is logged for all holes drilled after 2014. For drilling prior to 2014 insufficient data exists to make this assessment. Some historical logging sheets and sections are available but not uniformly so.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	Core has been sampled by being cut and half core submitted for analysis.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	For historical RC drilling generally a tri-cone sample splitter was employed to reduce sample size for analysis. For RC drilling since 2017 samples have been acquired via a 3-tier riffle splitter for the purposes of reducing sample size for analysis. Sampling has been undertaken with dry sample media unless otherwise stated.
	<ul> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> </ul>	Since 2014 the sample preparation technique for all samples follows industry best practice, by an accredited laboratory. The techniques and practices are appropriate for the type and style of mineralisation. The RC, rock and core samples are sorted, oven dried, and the entire sample pulverised in a single-stage process to 85% passing 75µm. The bulk pulverised sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the analysis. Prior to 2014 QAQC information is lacking and does not support making this assessment.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	Since 2014 RC and core samples submitted to the laboratory are sorted and reconciled against the submission documents. Blanks are inserted every 20 samples and CRM standards are inserted into the sample stream at a frequency of one standard in every 25 samples. Field duplicates are taken at the frequency of 1 sample every 50 for RC sampling. The laboratory uses its own internal standards of two duplicates, two replicates, two standards and one blank per 50 assays. The laboratory also uses barren flushes on the pulveriser. Prior to 2014 available sampling information does not support making the assessment of this criteria.
	<ul> <li>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.</li> </ul>	Since 2014 RC programs have included taking field duplicates at a rate of 1 in 50. Prior to 2011 available sampling information does not support making this assessment.
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Since 2014 the sample sizes are standard industry practice sample size collected under standard industry conditions and by standard methods and are appropriate for the type, style and thickness of mineralisation which might be encountered at this project.
	The nature, quality and appropriateness of the	Original assay documents before 2014 are not available, as such all assay data prior to 2014 is

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	assaying and laboratory procedures used and whether the technique is considered partial or total.	considered to be historic in nature and is treated as such.  Since 2014 all rock, bulk soil (-2mm), RC and core samples have been analysed by ALS Reno, Nevada utilising Au-ICP21 (30gm FA with ICP-AES finish) and ME-MS61 48 element four acid ICP-MS finish).
	<ul> <li>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.</li> </ul>	Downhole geophysical tools were not used.
	Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	Insufficient data exists on programs prior to 2014 to make the assessment against this criteria.  For sampling programs since 2014 by SNX. The laboratories are accredited and uses their own certified reference material. The laboratory has two duplicates, two replicates, one standard and one blank per 50 assays. SNX submitted standard samples every 25th sample, blanks every 25th and field duplicates every 50 samples.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Since 2014 the holes were logged by both independent geological contractors and SNX staff and the sampling, logging, drilling conditions and RC chips are reviewed. SNX's Chief Geologist verifies the field sampling and logging regime and the correlation of mineralised zones with assay results and lithology.  Prior to 2014 SNX relies on previous workers and consultants' assessments as to the verification of historical significant intersections as reported.
	The use of twinned holes.	No twinned holes.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Since 2014 primary data has been sent to SNX and imported into Micromine software for validation and verification. Assay results are merged when received electronically from the laboratory using Excel and Micromine software.  Prior to 2014 documentation on primary data and data entry procedures, verification and data storage
		protocols are lacking.
	Discuss any adjustment to assay data.	No adjustments have been made.
Location of data points	<ul> <li>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.</li> </ul>	Since 2014 all drillholes, rock chip sample and soil sample sites were located using GPS equipment. Prior to 2011 drill hole locations have been taken from geo-rectified maps from historical reports with field verification undertaken by GPS where possible.
		Geophysical – The transmitter and receiver electrodes positions were located using Garmin 64s

Criteria	JORC Code explanation	Commentary
		handheld GPS, WAAS differential corrections employing datum NAD27 UTM Zone 11N meters.
	Specification of the grid system used.	NAD 27 UTM Zone 11N.
	Quality and adequacy of topographic control.	The topographic data used (drill collar elevation, RL) were obtained from handheld GPS and DGPS units and are adequate for the reporting of initial exploration results.
		NED (US Geological Survey National Elevation Dataset - 10 Meter 7.5 x 7.5 minute quadrangles) data used to establish RL values where needed.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The data spacing of both drilling, downhole sampling and soil sampling programs are appropriate for the reporting of exploration reports.
	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.	Historical data as presented in historical reports and maps detail the presence of two shallow resource area's (non-JORC) where previous workers have reported an estimate of tonnes and grade. These estimates being based on a drill spacing that would be sufficient to establish the degree of geological and grade continuity appropriate for an MRE. Supporting data for these estimates however are not fully available to SNX and SNX makes no assertion as to the validity of these historic MRE's.
		Drilling since 2017 by SNX have not been undertaken to define a mineral resource hence the data spacing would not support a MRE. Instead SNX drilling was confirmatory in nature of previous drilling and tested individual exploration targets.
	Whether sample compositing has been applied.	Sample compositing has not been applied.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	Geophysical and geological interpretations support the drilling direction and sampling method.
	<ul> <li>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</li> </ul>	No drilling orientation and sampling bias has been recognised at this time.
Sample security	The measures taken to ensure sample security.	Since 2017 RC and core samples were packed in bulk bags, secured with cable ties, and transported from the field by SNX personnel to ALS Reno, Nevada. The laboratories then checked the physically received samples against a SNX generated sample submission list and reported back any discrepancies.
		Since 2014 soil and rock samples were transported from the field by SNX personnel to ALS Reno, Nevada. The laboratory then checked the physically received samples against a SNX generated sample submission list and reported back any discrepancies.

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Criteria	JORC Code explanation	Commentary
		Prior to 2014 no details of the sample security measures are available.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	August 2018 Geochemist Mr Mark Arundell of IMEx Consulting of Orange, NSW, Australia undertook a review of SNG's rock chip and XRF soils programs and included QAQC analysis.  December 2018 Geochemist Mr Mark Arundell of IMEx Consulting of Orange, NSW, Australia undertook a study of rock geochemistry fertility and included QAQC analysis.  January 2019 Geochemist Mr Mark Arundell of IMEx Consulting of Orange, NSW, Australia undertook a review of SNG's soil sampling methodologies and included QAQC analysis.

## **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.	Blackhawk Project - Blackhawk 1 Claim, Mineral County (1 mining claim). Record Ownership: Sierra Nevada Gold Inc. Royalties: None.  Blackhawk Project - BH Claims, Mineral County (206 mining claims). Record Ownership: Sierra Nevada Gold Inc. Royalties: None.  Blackhawk Project - BK Claims, Mineral County (194 mining claims). Record Ownership: Sierra Nevada Gold Inc. Royalties: None.  Blackhawk Project - EN, MA and D Claims, Mineral County (12 mining claims). Record Ownership: MSM Resource, L.L.C., a Nevada limited liability company, subject to the Exploration Lease and Option to Purchase Agreement MSM Project dated November 16, 2016, with Sierra Nevada Gold USA Inc. for which the Memorandum of Exploration Lease and Option to Purchase Agreement was recorded in the Office of the Mineral County Recorder on November 1, 2021, Document 179830. Lease term: Ten (10) years. Royalties: 3% net smelter return royalty subject to the Company's option to reduce the royalty percentage rate to 1.5% in consideration of the Company's payment of \$750,000.00.  Blackhawk Project - EX and MEX Claims, Mineral County (230 mining claims). Record Ownership: Sierra Nevada Gold Inc.

Criteria	JORC Code explanation	Commentary
		Royalties: (a) 2% net smelter returns royalty on the EX 1 to EX 15 Claims held by Sierra Nevada Gold Pty Ltd as nominee for John Groom, Anthony Kaiser, Peter Woodford and Peter Moore under the Deed of Royalty Excelsior Project dated effective January 2, 2014; (b) 0.5% net smelter returns royalty on the EX 1 to EX 15 Claims held by Kenneth Snyder as Trustee for the Snyder Living Trust under the Deed of Royalty Excelsior Project dated effective January 2, 2014; and (c) 1% net smelter returns royalty on the EX 1 to EX 15 Claims held by Needmore Investments Pty Ltd as Trustee for the Amicus Family Trust under the Deed of Royalty Excelsior Claims dated effective January 15, 2015.
		Blackhawk Project - GF Claims, Mineral County (8 mining claims). Record Ownership: Sierra Nevada Gold Inc. Royalties: None.
		Blackhawk Project - HP Claims, Mineral County (5 mining claims).  Record Ownership: Desert Pacific Exploration, a Nevada corporation, an affiliate of MinQuest Ltd., a Nevada corporation, which is the successor-in-interest of Min Quest Inc., a Nevada corporation, which pursuant to a plan of dissolution conveyed its interest in the HP Claims to MinQuest Ltd., a Nevada corporation, subject to the Exploration Lease and Option to Purchase Agreement Marietta Project among Desert Pacific Exploration, Inc., Min Quest Inc. and Sierra Nevada Gold (USA) Inc. dated November 12, 2016, as amended by the Amendment of Agreement and Memorandum Marietta Project dated effective November 12, 2016, the Memorandum for which was recorded in the Office of the Mineral County Recorder on July 3, 2017, Document 165947, and, as amended, on November 29, 2021, Document 180138.  Lease term: Ten (10) years to November 12, 2026, subject to the Company's right to extend the term for an additional term of ten (10) years for a payment to be agreed at expiration of the initial term. Under Nevada law, an option to extend a lease subject to the parties' agreement to negotiate the rental amount for the extension term is not enforceable. The lease grants to the Company the option to purchase the leasehold property for \$250,000.00 if the option is exercised before November 12, 2023, and for \$350,000.00 if the option is exercised after that date.  Royalties: 3.0% net smelter returns royalty subject to the Company's option to reducer the royalty percentage rate to 1.5% in consideration of payment of \$750,000.00.
		Blackhawk Project - Patented Mining Claim, San Francisco Bell, Mineral County (1 patented mining claim).  Record Ownership: A.C. Inc., which is a fictitious name used by Aviation Consulting Inc., a Nevada corporation, subject to the Exploration Lease and Option to Purchase Agreement dated effective October 1, 2017, between named party Aviation Consultants Inc., also known as A.C. Inc., lessor and optionor, and Sierra Nevada Gold USA Inc., lessee and optionee, Memorandum recorded November 20, 2017, Document 167315. The agreement does not correctly identify the owner – lessor. The Grant, Bargin (sic) Deed dated June 21, 2013, by which Aviation Consulting Inc. acquired ownership of the patented mining claim identifies the grantee as "A.C. Inc."
		Lease term: Twenty (20) years and so long thereafter as the Company is conducting exploration and mining activities. The lease grants to the Company the option to purchase the leasehold property for \$100,000.00 if the option is exercised before October 1, 2023, and for \$150,000.00 if the option is exercised after that date.  Royalties: 2% net smelter returns mineral production royalty, subject to the Company's option to reduce the royalty percentage rate to 1% in consideration of the Company's payment of the sum of \$250,000.00.
	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 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 claims are in good standing There are no known impediments to obtaining a licence to operate, other than those set out by statutory requirements which have not yet been applied for.



Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Exploration by other parties have been reviewed and is used as a guide to SNX's exploration priorities and activities. Previous workers have completed geological mapping and sampling, geochemical sampling, geophysical programs, RC drilling. Significant historical mining has also occurred with the project and this also informs SNX's exploration priorities.
		Previous workers have also estimated historical non JORC compliant mineral resources.
		Cautionary Statement: References to historic estimates and foreign estimates are not reported in accordance with the JORC Code 2012. The foreign historic non-JORC estimates are included as indications of mineralisation only. We understand that Sierra Nevada does not intend to conduct further assessment of those non-JORC resources and are not exploration targets for Sierra Nevada. As far as we are aware, there are no more recent estimates available. A competent person has not done sufficient work to classify the foreign estimates as mineral resources or ore reserves in accordance with the JORC Code, and it is uncertain that following evaluation and/or further exploration work that the foreign estimates would be able to be reported as mineral resources or ore reserves in accordance with the JORC Code.
Geology	Deposit type, geological setting, and style of mineralisation.	The Blackhawk Porphyry Cu-Au and Epithermal Au-Ag basemetal projects are situated within the Mina Inflexion portion of the Walker Lane Trend, a continental scale transform fault, which exhibits dextural movement (Faulds and Henry, 2008). This structure defines the boundary between the Great Basin Extensional Province in the north and the Sierra Nevada Block in the south (Faulds and Henry, 2008). The Walker Lane Trend hosts several large gold and copper ore bodies, namely: Comstock (approximately 257t of Au and 6,000t Ag, Hudson, 2003), Yerrington (6 Mt Cu, Dilles and Proffett, 1995), Round Mountain (20M oz Au, USGS, 2019), Isabella Pearl high sulphidation epithermal project (2.7 Mt at 2.21 g/t Au and 13 g/t Ag, Gold Resource Corp, 2019), the Gabs porphyry (1 M oz Au, P and E Mining Consultants, 2011), Paradise Peak high sulphidation epithermal (47t Au and 1,255t Ag, Sillitoe and Lorson, 1994), Tonapah Au-Ag field, and the Candelaria Mine (230 M oz Ag, USGS 2020a).
		Sierra Nevada has identified two major and extensive components of a large mineralised system at its Blackhawk Project – an epithermal component and a porphyry component. The Blackhawk epithermal vein system is prospective for high grade, structurally controlled Ag-Au and base metal deposits and is partially coincident with and adjacent to the northern edge of the Blackhawk porphyry-style alteration and mineralisation. At least eight historic mining areas were operated in the Blackhawk epithermal vein system between the 1860s and the early 1900s, the main mining areas being around the Endowment, Morning Star and Blackhawk mines. The epithermal vein system covers an area of approximately 5km² and contains up to 22-line kilometres of mostly untested veins. Sierra Nevada has obtained bonanza grade precious and base metal rock chip samples from the epithermal vein system and has a suite of drill ready targets. The porphyry system is defined by a world class scale, fertile alteration system more than 30km² in size. Centrally the porphyry system is marked by a 4km diameter ring of historic mines that have exploited various porphyry style mineralisation types which is, in turn located coincident with a large +13km² zone of high chargeability (sulphides) defined by IP geophysics. The porphyry system is regarded as having potential to host porphyry-related Cu-Au mineralisation.

Criteria	JORC Code explanation	Commentary
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:	Information found in company's replacement prospectus dated 29th April 2022.  Appendix A (Independent Geologists Report) page 259 (collar information).  Appendix I (Independent Geologists Report). page 291 (collar plan).
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	Weighted averages were calculated over reported intervals according to sample length.  No high-grade cuts have been applied to assay results.
	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.	Since 2017 Intersections are reported as anomalous if the interval is at least 2m wide at a grade greater than 0.1g/t Au and interval contains no more than 2m of continuous internal dilution.  The parameters behind historical significant intercepts calculations are unknown and have been taken directly from reports/plans/sections. Where possible if historic data allows SNX has checked and confirmed reported intercepts.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been used or reported associated with the reporting of drillhole intercepts.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	At this exploration stage, the geometry of the target mineralisation is not adequately defined. All intersections reported are downhole. Historical drilling does drill normal to the previously mined high-grade veins therefore historically recorded intercepts are considered appropriate and close to true width.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Historical reports do not specifically refer to this however generally the angle and direction of the drilling is appropriate for testing the high-grade veins as mined by previous miners.

Criteria	JORC Code explanation	Commentary
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').	All intersections reported are as downhole lengths.
Diagrams	<ul> <li>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.</li> </ul>	Refer to the Report for all relevant maps, sections and diagrams.
Balanced reporting	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.	Not applicable, no new laboratory assays announced.  Information on previous exploration can be found in the company's replacement prospectus dated 29th April 2022.
Other substantive exploration data	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.	Information on previous exploration can be found in the company's replacement prospectus dated 29th April 2022.
Further work	The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).	Covered in the body of the announcement.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Covered in the body of the announcement.