

18th June 2024

6,216g/t Silver (Ag) intercept within high-grade target zone

Historical data and drilling assessment identifies target zone with exceptional high-grade intercepts on north-west of Maverick Springs resource boundary.

Highlights:

- Exceptional historical drill results which form part of high-grade target zone include:
 - 303.08g/t Ag over 54.86m from 202.69m in MR06-1671¹, including:
 - <u>1.5m at 6,216g/t Ag</u> from 240m
 - 278.41g/t Ag over 54.86m at from 227.07m in MR08-182¹, including:
 - <u>1.5m at 5,340g/t Ag</u> from 239m
 - 142.72g/t Ag over 53.24m from 236.22m in MR03-141¹; and
 - 113.16g/t Ag from 109.73m from 173.74m in MR06-166¹, including:
 - <u>1.5m at 5,399g/t Ag</u> from 204m
- High-grade target zone defined on the north-west boundary of the existing Resource as part of ongoing historical drill material and data assessment.
- Historical results interpreted to be located on-trend from rocky outcrops identified with pathfinder elements up to 1.2km from the current known mineralisation.²
- Drill targets for Sun Silver's imminent inaugural drilling campaign currently being finalised based on fieldwork and high-grade zone assessment results.

Sun Silver Limited (ASX Code: **"SS1**") (**"Sun Silver**" or **"the Company**") is pleased to advise that it has identified an outstanding high-grade target zone within the north-western section of its globally significant Maverick Springs Silver-Gold Project in Nevada, USA ahead of its upcoming inaugural drilling campaign.

The high-grade target zone was defined as part of an ongoing comprehensive review of historical data, drill material and recent field activities. During these reviews, the team has uncovered exceptional high-grade silver intervals in multiple historic drill-holes of up to **6,216g/t Silver (Ag)**, including:

- 1.5m at 6,216g/t Ag from 241m in MR06-167
- 1.5m at 5,399g/t Ag from 204m in MR06-166

¹ Refer to the Company's Replacement Prospectus dated 17 April 2024

 $^{^2\,}$ Refer to Sun Silver announcement dated $12^{th}\,$ June 2024 $\,$



• 1.5m at 5,340g/t Ag from 239m in MR08-182

These zones are significant as they lie on the north-western boundary of the defined mineralised zone and the **grades and intercept widths are significantly** larger than the average grades and intercepts of the current JORC modelled Mineral Resource³. Recent fieldwork has identified rocky outcrops and pathfinder elements up to 1.2 km from the current defined mineralisation boundary in the North-West, supporting the theory that potential resource extensions may be located in this area. The absence of rocky outcrops within the current mineralised zone excites the team about the possibility of surface mineralisation in the north-west area of the property.

Carlin trend deposits are known for the formation of consistent uniform orebodies of micron size silver and gold. The evidence of the ore body widening and increasing in grade on the north-western border is highly encouraging and indicates strong potential that the mineralisation continues at higher grades and greater widths to the north-west of the existing Resource. Structural controls are considered to play an important role in mineralisation extents and this area is currently undergoing review and additional data collection to increase knowledge around this for drill targeting.

SS1's exploration team is now finalising drill-hole locations to target the high-grade zone as well as extensional targets along trend. The Maverick Springs mineralisation is open in all directions and at depth and, based on previous technical assessments carried out by SGS, is thought to flatten out in the northern section of the deposit³. Definition and mapping of these high-grade intercepts near the north-western corner has guided the exploration team in targeting continuation of mineralisation along-trend but also focusing on higher grade areas as part of its inaugural drilling campaign.

Sun Silver Executive Director, Gerard O'Donovan, said:

"Defining this high-grade zone and generating inaugural drill targets validates our diligent analysis of crucial data and drill information at Maverick Springs.

"Mapping high-grade results near the north-western border of the current Resource has boosted confidence in potential for extension of mineralisation beyond defined boundaries and the potential for discovering higher grades. We look forward to testing these theories in our upcoming inaugural drill campaign."

In the United States, historical exploration data isn't as readily accessible through government databases as it is in countries like Australia and Canada. As a result, the responsibility for maintaining and passing on historical exploration records lies with the asset owners. Sun Silver has successfully obtained a substantial amount of additional data on the historical exploration of Maverick Springs from multiple previous owners and service providers.

 $^{^{3}}$ Refer to the Company's Replacement Prospectus dated 17 April 2024



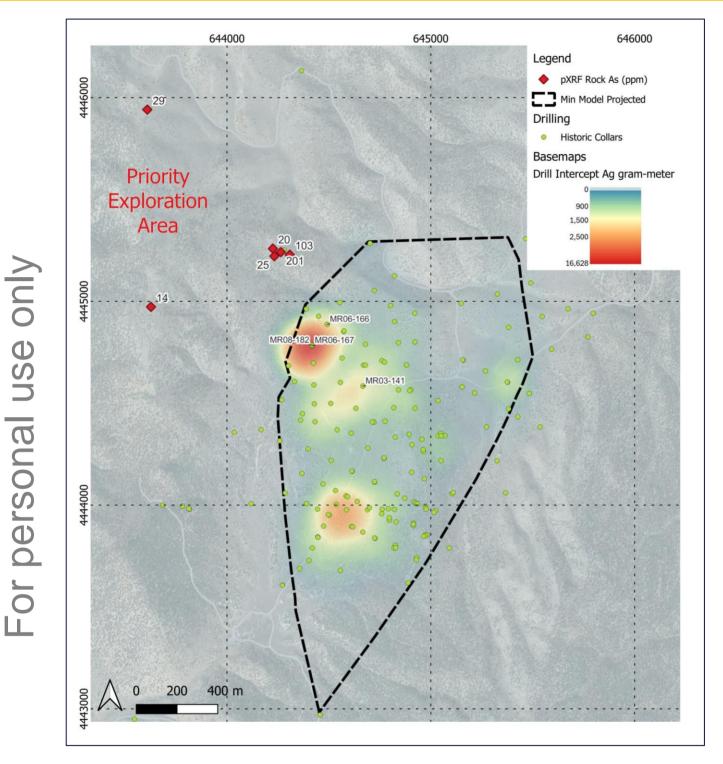


Figure 1 - High grade intercepts on north-western boundary of current resource

Hole ID	Ag (g/t)	Interval (m)	From (m)	To (m)	Notable Intervals
MR06-167	303.08	54.86	202.69	257.56	1.5m at 6,216g/t Ag from 240m
MR08-182	278.41	54.86	227.08	281.94	1.5m at 5,340g/t Ag from 239m
MR03-141	142.72	53.34	236.22	289.56	1.5m at 623.6g/t Ag from 274m
MR06-166	113.16	109.73	173.74	283.46	1.5m at 5,399g/t Ag from 204m

Table 1 - Significant intercepts in high grade zone



Maverick Springs Project

Sun Silver's cornerstone asset, the Maverick Springs Project, is located 85km from the fully serviced mining town of Elko in Nevada and is surrounded by several world-class gold and silver mining operations including Barrick's Carlin Mine.

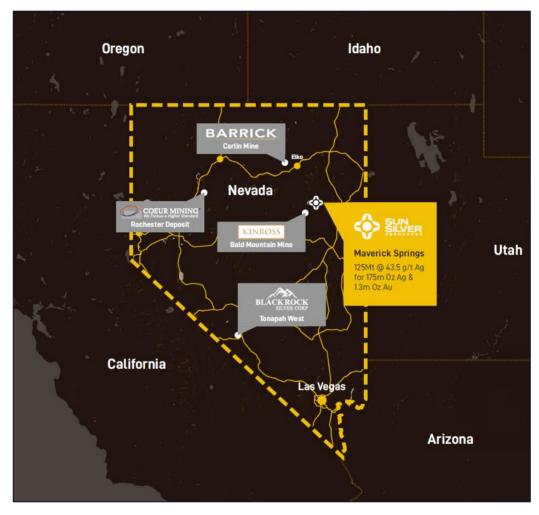


Figure 2 – Sun Sliver's Maverick Springs asset location and surrounding operators.

Nevada is a globally recognised mining jurisdiction which was rated as the Number 1 mining jurisdiction in the world by the Fraser Institute in 2022.

The Project, which is located in the prolific Carlin Trend, hosts a JORC Inferred Mineral Resource of 125.4Mt grading 43.5g/t Ag and 0.34g/t Au for 175.7Moz of contained silver and 1.37Moz of contained gold (292Moz of contained silver equivalent).

A total of ~200 holes for ~60,000 metres of drilling has been completed at the Project to date, covering an area representing only ~20% of the property.

The deposit itself remains open along strike and at depth, with multiple mineralised intercepts located outside of the current resource constrained model.⁴

This announcement is authorised for release by the Board of Sun Silver Limited.

⁴ Refer to the Company's Replacement Prospectus dated 17 April 2024.



ENDS

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Forward-looking statements

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

Competent Person Statement

The Exploration Results reported in this announcement are based on, and fairly represent, information and supporting documentation reviewed, and approved by Mr Brodie Box, MAIG. Mr Box is a geologist and has adequate professional experience with the exploration and geology of the style of mineralisation and types of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Box consents to the form and context in which the Exploration Results are presented in this announcement.

Competent Person Statement – Previous Results

The information in this announcement that relates to exploration results or estimates of mineral resources at the Maverick Springs Project is extracted from the Company's Replacement Prospectus dated 17 April 2024 (**Prospectus**). The Company confirms that it is not aware of any new information or data that materially affects the information contained in the Prospectus and, in the case of estimates of mineral resources, that all material assumptions and technical parameters underpinning the estimates in the Prospectus continue to apply and have not materially changed.



Appendix 1 -	Drill Colla	r Position
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Hole ID	Depth (m)	Easting (m)	Northing (m)	Elevation (m)	Azimuth	Dip	Drill Year
MR03-141	304.8	644667	4444584	2192	57.98	-89.7	2003
MR06-166	335.28	644492	4444888	2223	263.07	-89.7	2006
MR06-167	316.99	644418	4444783	2223	50.77	-89.6	2006
MR08-182	335.28	644416	4444785	2223	591.5	-70.5	2008
NAD 92 LITM Zor	IAD 83 LITM Zone 11N						

NAD 83 UTM Zone 11N

ASX Announcement



JORC Code, 2012 – Table 1

Section 1 Sampling Techniques and Data – Maverick Springs Silver Gold Project

Criteria in this section apply to all succeeding sections.)

O	Criteria	JORC Code explanation	Commentary
SG	Criteria	JORC Code explanation	Commentary
For personal u	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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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. 	 Legacy samples have been assayed at various laboratories through the history of ownership. Vista's 2002-2003 drilling utilised 5 foot (1.5m) samples, including wet samples (flocculent mix) and were assayed by AAL in Sparks, Nevada. 2003-2006 drilling by Vista, although not recorded, is assumed to follow similar protocols to the '03 methods. 2008 RC drilling was also done with wet samples through a cyclone and rotary wet splitter to minimize loss of fines and was sampled by ALS in Nevada. Pre-2002 samples are reported to have been subject to 1 assay ton (AT) fire assay with AA finish, additional tests via cyanide soluble leach were not used in resource calculations. The same analysis is recorded for 2002-2003 drill samples which record typical dry, crush, split, pulverise preparation work. Routine analyses at AAL included 1 assay ton fire with an AA finish for gold and 0.4-gram aqua regia leach with AA finish for silver. Any silver value of 100 parts per million (ppm) or greater was re-run by 1 assay ton fire with a gravimetric finish. Results were reported in ppm with detection limits of 0.005 ppm for gold and 0.05 ppm for silver. Post 2003 drilling is not fully provided but reviewing 2004 and 2008 assays shows the same standards outlined in '02-03 analysis above. Assay certificates have not been provided for all drilling. Snowden (2004) references checking two holes from Goldbar drilling and all AAL results from 2002-2003 drilling with no issues.



Criteria	JORC Code explanation	Commentary
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	 Drilling referred to in this report relates to historic reverse-circulation drilling. Not all drill rig details or specifications are available, but records show industry standard 5.5" drill bits have been used in some cases often utilizing tri-cone drill bits.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 Drilling recoveries are not specifically recorded in the logging database and drill recovery issues in RC drilling have been reported in '02-03 drilling with additional procedures utilised to minimise this. A rotary wet splitter was used to collect composites which were mixed with a flocculent and large 20-30pound samples taken to minimise loss of fines since the 2003 RC drilling. This drilling also included using hammers with a cross-over sub and tricone bits. A similar method is noted in the 2008 drilling with information on other drill campaigns lacking details. No sample recovery issues or relationships are known to exist for drilling reported in this release.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 The logging is qualitative in nature. The current dataset shows 55% of the total drill holes at the Project have been logged. Legacy data compilation remains ongoing.



	Criteria	JORC Code explanation	Commentary
nal use only	Subsampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 5ft (1.5m) composite samples were taken during percussion drilling (RC, rotary). RC drilling records are minimal but reports (Snowden, 2004) detail splitting samples fed from a cyclone. Later 2002-2003 drilling details the use of RC tricone bits and hammers with a cross-over sub to improve recovery. 2003 drilling details the use of wet sampling via 24" rotary wet splitter, mixed with a flocculent and collected into a sample bag before being allowed to dry. This produced large ~9kg samples in an attempt to minimise loss of fines. 2008 drilling also utilized a flocculent and collected wet samples bags. Field duplicates are reported to have been used since the 2002 RC drilling but only 2008 samples have been reviewed. No records have been found from prior drilling. Sample sizes are considered to reflect industry standards and be appropriate for the material being sampled and show attempts made to improve recovery.
FOr persor	Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	 QAQC protocols utilising Certified Reference Material (standards), blanks and duplicates have been reported in 2002-2003 drill programmes under instruction from Snowden. Results from standards have been reviewed but no blanks or duplicates have been. No issues were raised by Snowden, SRK or SGS in previous resource reports. All samples from 2002-2003 were prepared and assayed by an independent commercial laboratory (AAL) whose instrumentation are regularly calibrated, utilising appropriate internal checks in QAQC. 2003-2006 drilling is assumed to follow these standards. 2008 drilling utilized ALS laboratories and also included duplicates, standards and blanks which were reviewed and showed acceptable results.
	Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Significant intercepts have not specifically been verified but SS1 plans to review historic drill chips and core where possible in upcoming field work and re-sample if applicable. Primary data and data entry details are not fully provided but all data has been provided in csv(digital) format which is assumed to have been collected accurately from prior operators. 2004 assay certificates have been reviewed, and 2008 results have also been located digitially and reviewed.



Criteria	JORC Code explanation	Commentary
ŚIL		 Twin holes are not specifically reported but drill holes within 5-10m from each other can be observed in 3D space and show generally good correlation with grades. Assay data relevant to this release has not been adjusted, however results have been converted between ppb,ppm and ounce/ton.
Location of data points	 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 Drill holes were located using handheld GPS, with accuracy to within 5m. Drill collars with locations to 1 decimal place are assumed to have been located by a DGPS but this is not detailed in reports. Downhole survey data appears to have been completed by gyroscopic tool, although this is only specifically stated for the 2002-2003 drilling. Historic data has been collected in NAD27, and transformed to the current Grid NAD 83 UTM Zone 11.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	 Selective data has been reported from historic drilling to highlight high-grade target zones within the established resource. The surrounding drilling including drill intercepts have previously been reported in the company's prospectus but is not relevant to this release. Samples have not been composited. Sample lengths reported in the field (5ft /1.5m).
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 The drilling is predominantly conducted at or close to vertical with an average dip of -85°. The dip is approximately perpendicular to the flat-lying mineralisation. The drill orientation is not expected to have introduced any sampling bias.
Sample security	The measures taken to ensure sample security.	 Samples were sent from site to laboratory, but no record of security protocols are reported.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 Reviews of sampling techniques, data and assays have been undertaken by Newmont in 2001, by Snowden in 2002, 2003, SRK in 2016, and by SGS in 2022. Results of these reviews regard the post 2002 drilling that is the subject of this release to be satisfactory. Pre- 2002 drilling has been subject to regression calculations as previously reported.



Section 2 Reporting of Exploration Results – Maverick Springs Silver Gold Project

(Criteria listed in the preceding section also apply to this section.)

>	Criteria	JORC Code explanation	Commentary
onal use only	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. 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 Maverick Springs property is in northeast Nevada, USA, ~85 km SE of the town of Elko, Nevada. The property currently consists of 247 Maverick, Willow and NMS unpatented lode mining claims registered with the US Department of the Interior Bureau of Land Management ("BLM") with a total area of approximately 4800 acres. The tenements are held in the name of Artemis Exploration Company ("AEC"). Sun Silver has exercised a binding option agreement with Element79 to acquire a 100% interest in the Maverick Springs Project properties. Gold and Silver Net Smelter Royalties (NSR) to tenement owner AEC of 5.9% which include ongoing advance royalty payments, and to Maverix Metals of 1.5 is reported by SGS, 2022 and assumed to still be relevant. Additional NSR of 2.9% exists for all other metals. All claims are in good standing and have been legally validated by a US based lawyer specialising in the field
For perso	Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Gold exploration at the Project area has been carried out by three previous explorers – Angst, Inc from 1986-1992, Harrison Western Mining L.L.(Harrison) C in 1996, Newmont in 2001, Vista Gold Corp (Vista) and Silver Standard in 2002-2016. Angst undertook first stage exploration with geochemical surveys, mapping, and drilling 128 drill holes for 39,625m outlining initial mineralisation at the project. Harrison drilled 2 exploration holes in 1998 for 247m. Vista advanced the project significantly drilling 54, mostly deep, RC holes over several years until 2006 which equated to ~15,267m. Silver Standard completed 5 deep diamond drill holes for 1,625m in 2008. Reviews of the historic exploration show it was carried out to industry standards to produce data sufficient for mineral resource calculations.
	Geology	Deposit type, geological setting and style of mineralisation.	Previous Technical Reports have identified the Maverick Springs mineralisation as a Carlin-type or sediment/carbonate hosted disseminated silver-gold deposit. However, the 2022 review by SGS is of the opinion that the deposit has more affinity with a low- sulphidation, epithermal Au-Ag deposit. Carbonate replacement



Criteria	JORC Code explanation	Commentary
al use only		 deposits also have similar settings and characteristics. The definition may be in conjecture, but the geological setting remains the same. The mineralisation is hosted in Permian sediments (limestones, dolomites). The sediments have been intruded locally by Cretaceous acidic to intermediate igneous rocks and overlain by Tertiary volcanics, tuffs and sediments and underlain by Paleozoic sediments. Mineralisation in the silty limestones and calcareous clastic sediments is characterised by pervasive decalcification, weak to intense silicification and weak alunitic argillisation alteration, dominated by micron-sized silver and gold with related pyrite, stibnite and arsenic sulphides associated with intense fracturing and brecciation. The mineralisation has formed a large sub-horizontal gently folded (antiformal) shaped zone with a shallow plunge to the south with the limbs of the arch dipping shallowly to moderately at 10-30° to the east and west.
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: o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o hole length. 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 	 Drill information relevant to this release has been provided above. This is an extract from the full dataset which has previously been reported.
Data aggregation methods	 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated 	 Data aggregation has not taken place. Reporting is of raw assay data provided in the legacy database. Downhole intercepts are reported for intersections averaging over approx. 20g/t silver. Metal equivalent has not been reported in this release.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	Drill hole intersections may not always be true widths but generally thought to be close to based on the flat-lying mineralisation and near to vertical drill holes.



Criteria	JORC Code explanation	Commentary
Diagrams	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.	 Appropriate maps and figures have been included in this announcement.
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	 All relevant and material exploration data to highlight the target areas discussed have been reported or referenced. Additional drii data from the historic dataset has been reported in the company prospectus and is not deemed necessary to this release.
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	All relevant and material exploration data for the target areas discussed, have been reported or referenced.
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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Further work will include but not limited to systematic geological mapping, channel and rock chip sampling, soil sampling, pXRF and/or LIBS measurements, geophysics, structural interpretation, historic data compilation, and drilling to identify suitable host rock geology and structural architecture for silver/gold mineralisation