

**8 October 2020**

Company Announcement Officer  
ASX Limited  
Exchange Centre  
20 Bridge Street  
SYDNEY NSW 2000

## **Significant drill results from the Bowdens Silver Northwest High-Grade Zone**

### **HIGHLIGHTS**

- Down plunge drilling extends the Northwest High-Grade Zone.
- **Significant gold** assay results received for the first time in the Northwest High-Grade Zone
- New results include drill hole BD200012 with:
  - **4.6 metres @ 430 g/t silver equivalent (215 g/t silver, 3.1% zinc, 1.9% lead) from 230 metres; and**
  - **2.8 metres @ 706 g/t silver equivalent (169 g/t silver, 3.2 g/t gold, 1.3% zinc, 6.5% lead) from 274 metres.**
- Northwest High-Grade Zone is potentially associated with a source/feeder structure to the Bowdens Silver mineralisation.
- Northwest High-Grade Zone consists of several stacked mineralised horizons 1 to 15 metres thick, with a width of approximately 200 metres, down-plunge extents confirmed over 250 metres and remains open down-plunge to the northwest.
- Drilling program is ongoing.

### **Introduction**

Silver Mines Limited (ASX:SVL) ("Silver Mines" or "the Company") is pleased to announce significant assay results from on-going diamond drilling around the Northwest High-Grade Zone at the Bowdens Silver Project located near Mudgee in New South Wales.

Diamond drilling is continuing with upcoming holes planned to follow the Northwest High-Grade Zone down plunge and test extensions of existing resources and to infill to the Northwest High-Grade silver zone that has previously returned spectacular high-grade silver results.

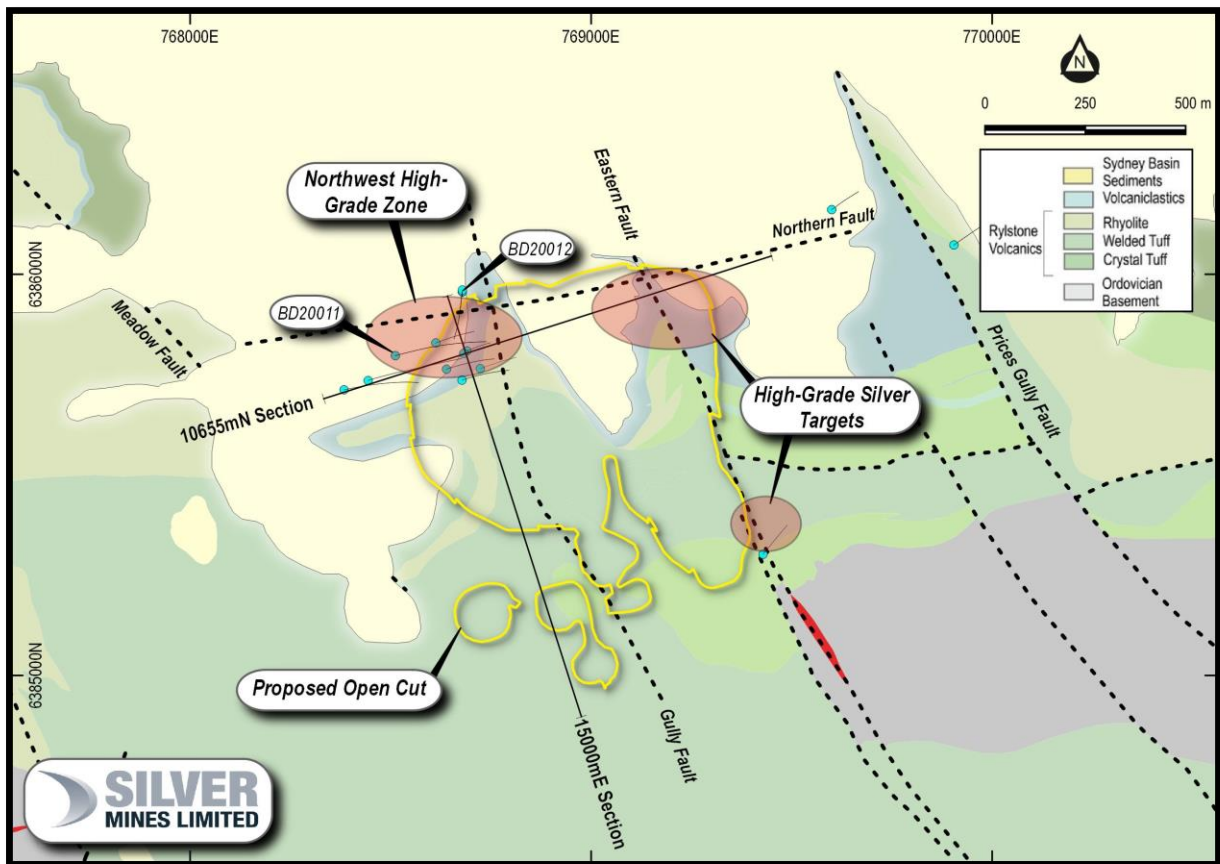


Figure 1. High-Grade silver targets at the Bowdens Silver Project.

The Northwest High-Grade zone is situated some 30 metres below the base of the proposed Bowdens Silver open pit and is a mineralised zone being targeted for potential high-grade silver underground mining scenarios (refer to Figures 1 and 2). Previous drilling in this zone has shown the mineralisation consists of breccia and fracture filling sulphides dominated by galena (lead sulphide), sphalerite (zinc sulphide) and silver minerals within the welded tuff of the Rylstone Volcanics. (refer to Figures 6 and 7).

Mineralisation intersected within BD20012 from 230 to 235 metres show epithermal vein textures, with colloform sulphide banding and pebble breccias (refer to Figures 4 and 5). These textures are indicative of boiling and episodic hydrothermal events consistent with source/feeder mineralisation. The latest results from BD20012 are in close proximity to the modelled position of the Northern Fault, which has the potential to be a significant fluid conduit from a heat and fluid source at depth. Furthermore, for the first time in the Northwest High-Grade Zone, notable gold rich mineralisation has been intersected in a second structure at a depth of 274 metres down hole. (refer to Figure 8 and Table 1).

Hole BD20011 also tested a western extension of the Northwest High-Grade Zone and returned high grade silver intercepts (refer to Table 1).

With the latest results, the Northwest High-Grade Zone target has extents of approximately 1 metre to 15 metres thick, 200 metres width (east to west) and continues down plunge/dip to the northwest for at least 250 metres. This zone is not yet closed off with drilling and presents further potential for expansion (refer to Figure 3). The drilling program is ongoing.

Table 1 Intercept calculations from recent results from the Northwest High-Grade Zone

Hole	From (m)	To (m)	Interval (m)	Silver (g/t)	Zinc (%)	Lead (%)	Gold (g/t)	Silver Eq (g/t) <sup>1</sup>
BD20012	230	234	4.6	215	3.06	1.87	-	430
Incl.	233.2	233.6	0.4	832	0.58	0.66	-	883
	274	276.8	2.8	169	1.26	6.50	3.21	706 <sup>2</sup>
BD20011	292	293	1	131	0.16	0.19	-	145
	317	318	1	378	0.08	0.22	-	389

1. Bowdens' silver equivalent reported consistent with previous reports and current resource modelling based on assumptions: Ag Eq (g/t) = Ag (g/t) + 33.48\*Pb (%) + 49.61\*Zn (%) calculated from prices of US\$20/oz silver, US\$1.50/lb zinc, US\$1.00/lb lead, and metallurgical recoveries of 85% silver + gold, 82% zinc and 83% lead estimated from test work commissioned by Silver Mines Limited. 2. Silver equivalent updated to also include significant gold credit assuming the same recovery as silver, with gold:silver price ratio of 80:1 based on the approximate current price ratio: Ag Eq (g/t) = Ag (g/t) + 33.48\*Pb (%) + 49.61\*Zn (%) + 80\*Au(g/t). All intercepts calculated using a 90g/t Ag cut-off and no internal dilution factor.

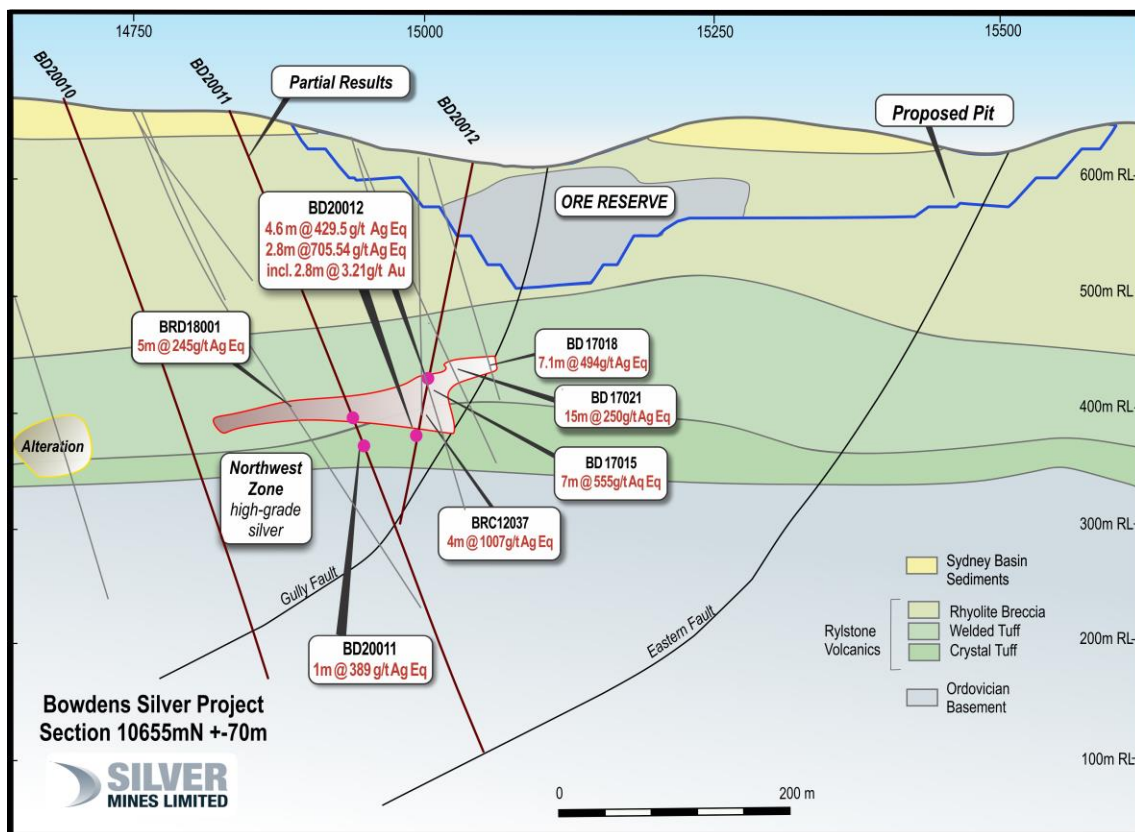


Figure 2. Cross-section 10655mN through the Northwest High-Grade silver zone with drilling.



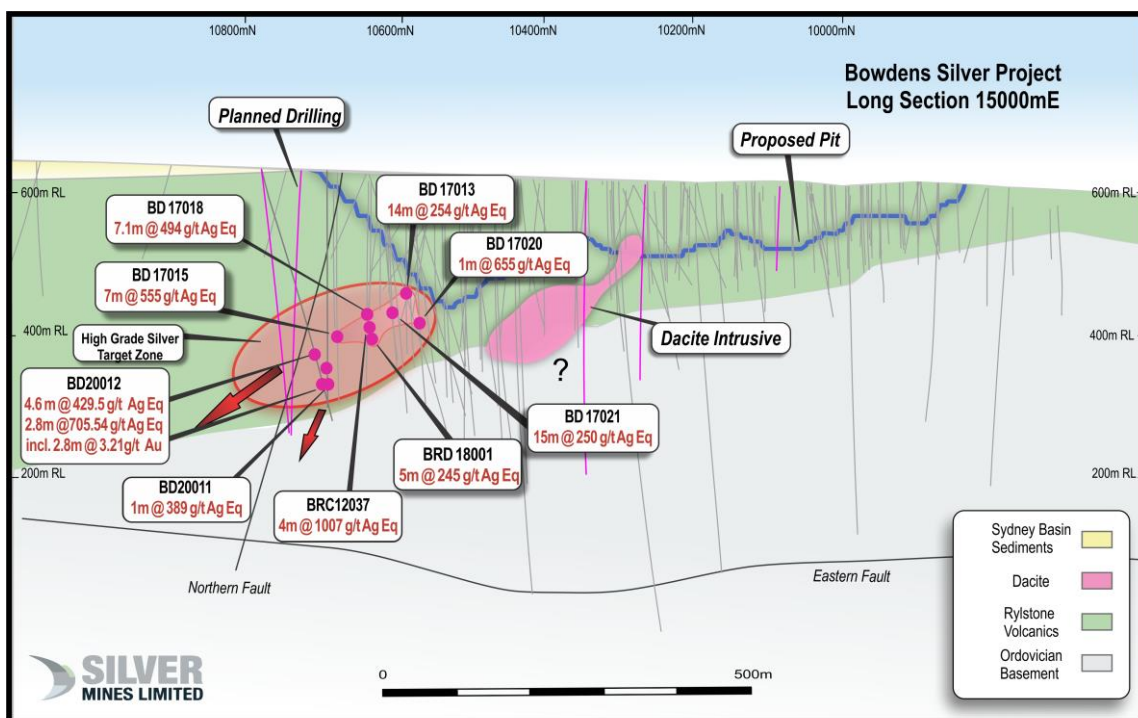


Figure 3. Long section 15000mE through the deposit showing Northwest High-Grade silver zone

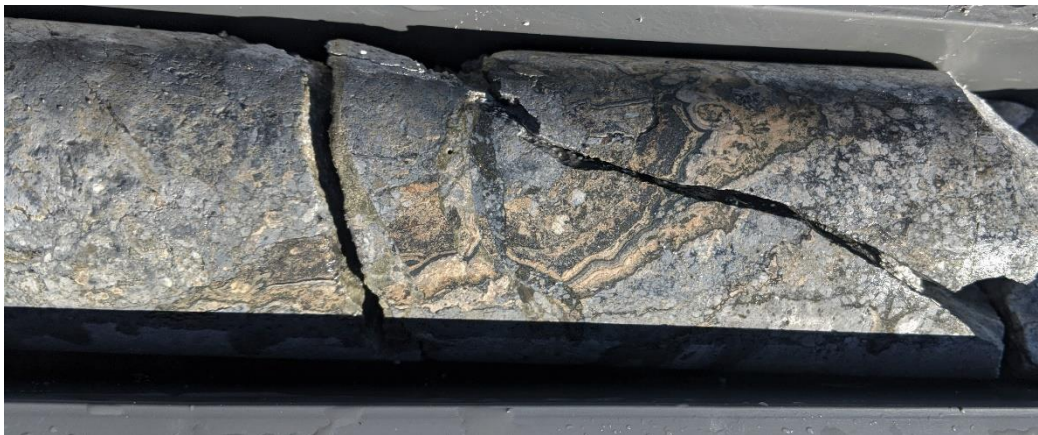


Figure 4. BD20012 from 230-234m: Multiple hydrothermal vein structures with colloform banded sulphides.





*Figure 5 BD20012 from 230-234m: Pebble breccia with sulphide matrix.*



*Figure 6: BD20012 from 230-234m: Thick colloform banded sulphide vein overprinting early fluid brecciation.*



*Figure 7: BD20012 from 230-234m: Significantly mineralised core.*

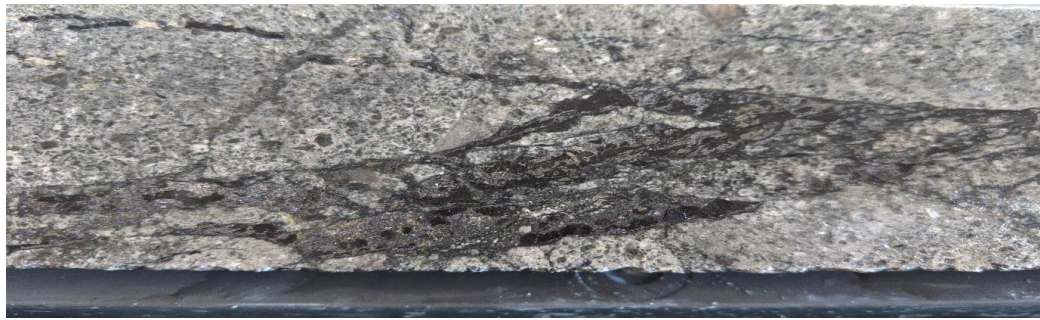


Figure 8: BD20012 at 276 metres: gold bearing sulphide veins.

### **About the Bowdens Silver Project**

The Bowdens Silver Project is located in central New South Wales, approximately 26 kilometres east of Mudgee (refer to Figure 9). The consolidated project area comprises 2,007 km<sup>2</sup> (496,000 acres) of titles covering approximately 80 kilometres of strike of the highly mineralised Rylstone Volcanics. Multiple target styles and mineral occurrences have potential throughout the district including analogues to Bowdens Silver, high-grade silver-lead-zinc epithermal and volcanogenic massive sulphide (VMS) systems and copper-gold targets.

Bowdens Silver is the largest undeveloped silver deposit in Australia with substantial resources and a considerable body of high-quality technical work already completed. The projects boast outstanding logistics for future mine development.

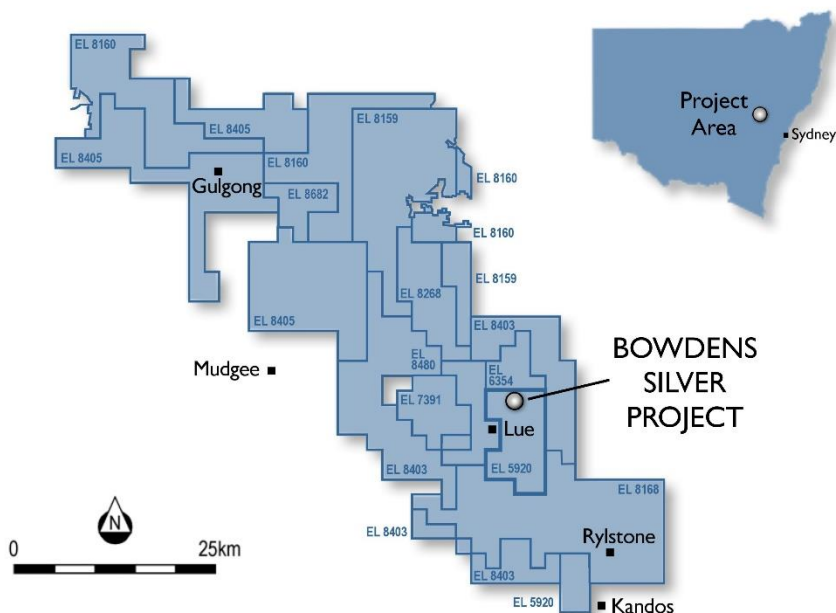


Figure 9: Silver Mines Limited tenement holdings in the Mudgee district.

This document has been authorised for release to the ASX by the Company's Managing Director, Mr Anthony McClure.

**Further information:**

Anthony McClure  
Managing Director  
Silver Mines Limited  
+61 2 8316 3997

Luke Forrestal  
Associate Director  
M+C Partners  
+61 411 479 144

**Competent Persons Statement**

The information in this report that relates to mineral exploration from the Bowdens Silver Project is based on information compiled by the Bowdens Silver team and reviewed by Darren Holden who is an advisor to the Company. Dr Holden is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience that 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' (JORC code). Dr Holden consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

*Table 2. Drill collar locations.*

Target	Hole ID	GDA94 East	GDA94 North	RL (m)	Dip	Azimuth (grid)	Depth (m)	Drill Type	Comment
NW High-Grade Zone	BD20011	768512	6385797	655	-70	75	615.8	Core	Partial Assays received
NW High-Grade Zone	BD20012	768679	6385956	618	-70	186	351.7	Core	Assays received
SE High - Grade Zone	BD20009	769429	6385302	596	-60	40	225	Core	Assays received – no significant results



## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g 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.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling taken continuously downhole from PQ and HQ diameter diamond core.</li> <li>PQ size core – all samples taken as nominal 2 metre intervals, or as otherwise defined by logged geology intervals, from quarter cut core.</li> <li>HQ size core – all samples taken as nominal 1 metre intervals where mineralisation observed from half cut core, or as composite 2 metre samples of quarter core, or as otherwise defined by logged geology intervals and from the same side of the core where downhole orientations permit.</li> <li>Samples vary in weight but are generally between 2 and 4 kilograms of material.</li> <li>Each sample was sent for multi-element assay using ICP technique (ME-ICP61) with the entire sample pulverized and homogenized with a 25g extract taken for assay.</li> <li>Select samples were also sent for gold using fire assay technique (Au-AA25) with a 30g sample taken for assay.</li> <li>Assays are considered representative of the sample collected.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling undertaken using PQ and HQ diamond core rig with triple tube used.</li> <li>All core, excluding PQ size, where unbroken ground allows, is oriented by drilling team and an orientation line drawn along the base of the hole.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>Core recovery is estimated at greater than 98%.</li> <li>Some zones, (less than 5%) were broken core with occasional clay zones where sample loss may have occurred. However, this is not considered to have materially affected the results.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>No significant relationship between sample recovery and grade exists.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All diamond core is logged using lithology, alteration, veining, mineralisation and structure, including geotechnical structure.</li> <li>All core is photographed using both a wet and dry image.</li> <li>In all cases the entire hole is logged by a geologist.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core were taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Selective sub-sampling based on geology to a maximum size of 2 metres and a minimum of 0.3 metres.</li> <li>All core is cut using a Corewise core saw with core rotated 10 degrees to the orientation line to preserve the orientation for future reference.</li> <li>For HQ core the half of the core without the orientation line is removed, bagged and sent to the laboratory for assay.</li> <li>Sample sizes are considered appropriate for the rock type, style of mineralisation, the thickness and consistency of the intersections and assay ranges expected at Bowdens.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation, etc.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Samples dispatched to ALS Global in Orange NSW for sample preparation and analysis. Some sample batches were then on shipped to ALS Global in Adelaide due to the high volume within the Orange Lab.</li> <li>Site standards and blanks are inserted at a rate of 8 per 100 samples, and duplicates are inserted at a rate of 5 per 100 samples to check quality control. Laboratory standards and blanks are inserted every 25 samples.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Significant intersections calculated by Bowdens Silver geologists.</li> <li>All geological logging is entered digitally before inputting into a Maxwell Geoservices database schema.</li> <li>Primary assay data is sent electronically from the laboratory to the Bowdens Silver database administrator and then entered into the geological database for validation.</li> <li>All assays matched with the logging sheets and loaded directly from the output provided by the laboratory with no manual entry of assays undertaken.</li> <li>No adjustments were made or required to be made to the assay data.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>The collar position is initially surveyed using hand-held GPS with accuracy of +/- 3 metres.</li> <li>Down hole surveys collected every 30 metres using an electronic downhole reflex survey camera.</li> <li>The terrain includes steep hills and ridges with a digital elevation model derived from a combination of locally flown LIDAR and publically available point cloud data.</li> <li>All collars recorded in MGA94 zone 55.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>This drilling relates to exploration drilling of the Northwest High-Grade Silver Zone as defined by previous drilling at the Bowdens Deposit. Drilling is not defined to a set spacing.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <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> <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>	<ul style="list-style-type: none"> <li>Drill orientation was designed to intersect the projection of the major structural controls to the Deposit.</li> <li>An interpretation of the mineralisation has indicated that no sampling bias has been introduced.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>All samples bagged on site under the supervision the senior geologist with sample bags tied with cable ties before being driven by site personnel to the laboratory in Orange, NSW (~200 kilometres from</li> </ul>

Criteria	JORC Code explanation	Commentary
		the site)
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>The drilling campaign and drill work includes on-going internal auditing with advice taken on process from external advisors.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Bowdens Resource is located wholly within Exploration Licence No 5920, held wholly by Silver Mines Limited and is located approximately 26 kilometres east of Mudgee, New South Wales.</li> <li>The tenement is in good standing.</li> <li>The project has a 2.0% Net Smelter Royalty which reduces to 1.0% after the payment of US\$5 million over 100% of EL5920</li> <li>The project has a 0.85% Gross Royalty over 100% of EL5920.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The Bowdens project was previously managed by Kingsgate Consolidated and Silver Standard Ltd, however the new results under this table is based on work conducted solely by Silver Mines/Bowdens Silver.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Bowdens Deposit is a low sulphidation epithermal base-metal and silver system hosted in Permian aged Volcanic rocks.</li> <li>Mineralisation includes veins, shear veins and breccia zones within tuff and ignimbrite rocks.</li> <li>Mineralisation is overall shallowly dipping (~15 degrees to the north) with high-grade zones preferentially following a volcanic dome. There are several vein orientations within the broader mineralised zones including some areas of stock-work veins.</li> <li>The mineralisation reported in this release is hosted in the main Rylstone Volcanics which unconformably overlie the Ordovician Coomber Formation (sediments). The mineralization reported in this</li> </ul>



Criteria	JORC Code explanation	Commentary
		report is related to Bowdens and represents a higher-temperature zone.
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar;</li> <li>elevation or RL (Reduced Level elevation above sea level in metres) of the drill hole collar;</li> <li>dip and azimuth of the hole;</li> <li>down hole length and interception depth; and</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All information is included in Table 1 and Table 2 of this report above.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <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> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Intersection calculation are weighted to sample length. The average sample represents 1 metre of drill core.</li> <li>Reported intersections are based on a cut off of 90g/t silver with no internal dilution factors</li> <li>No top cutting of data or grades was undertaken in the reporting of these results.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation is both stratabound and vein hosted. The stratigraphy dips moderately to the north within the volcanics and moderately to the west in the basement units, while the majority of mineralised veins dip west. Some individual veins intersected were sub-parallel (~10 to 20 degrees to core axes). However, given the stratigraphic controls on the zone, the drilling width is estimated to be 100 to 140% of true-width for stratabound mineralized zone.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <li>Maps and cross sections provided in the body of this report.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>drill hole collar locations and appropriate sectional views.</i>	
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All results received and compiled to date are reported in this release. Drilling is on-going with further results expected.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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 and potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>This report relates to drill data reported from this program.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>This report relates to a drill program that is designed to test the extension and explore for further zones to the Northwest High-Grade Silver Zone situated beneath the Bowdens Silver Deposit. Drilling is on-going with further results pending.</li> </ul>