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5 December 2019

Company Announcement Officer
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EXPLORATION UPDATE BOWDENS SILVER PROJECT

HIGHLIGHTS

- **Recent gravity data acquired at the Bowdens Silver Project provides targets for intrusive sources and potential analogues to the Bowdens silver deposit.**
- **An expanded exploration program is being designed to test;**
  - **A significant gravity low immediately west of the Bowdens deposit interpreted to be the source porphyry intrusion of mineralisation.**
  - **The gravity low is down dip from porphyritic felsic intrusions associated with strong metal zonation and the Bundara Deeps massive sulphide.**
  - **Extent of Northwest high-grade silver zone at Bowdens, which remains open to the north and west, also to be tested.**
- **Previously reported results from this zone include:**
  - **33.0 metres @ 215 g/t silver eq. (167 g/t silver, 0.29% zinc and 1.17% lead) from 235 metres including;**
    - **7.0 metres @ 555 g/t silver eq. (483 g/t silver, 0.75% zinc & 1.38% lead) from 235 metres;**
  - **7.1 metres @ 494 g/t silver eq. (391 g/t silver, 0.32% zinc & 1.86% lead) from 183.6 metres; and**
  - **4.0 metres @ 1010g/t silver eq. (935g/t silver, 0.14% zinc & 2.01% lead) from 196 metres.**
- **Gravity responses are of a similar size and magnitude to the Bowdens deposit.**
- **Diamond drill campaign of up to 4000 metres to commence in January 2020.**

Silver Mines Limited (ASX: SVL) (“Silver Mines” or “the Company”) is pleased to provide an update on exploration activities completed and planned over the Bowdens Silver Project and environs located near the town of Mudgee in New South Wales.

The Company recently completed a ground-based gravity geophysical survey over the Bowdens Silver regional project area including the highly prospective Rylstone Volcanics (refer to September 2019 Quarterly Report). The purpose of the survey was to assist in establishing regional structural controls on mineralised trends and to search for possible mineralised heat-sources, such as buried intrusive (porphyry) centres.

Final modelling has been provided by the Company’s geophysical consultants and integration of the models with the existing body of high-quality technical work has provided a number of compelling drill targets. The modelling process accounted for overlying Sydney basin cover that has hampered previous exploration efforts (refer to Figure 1).

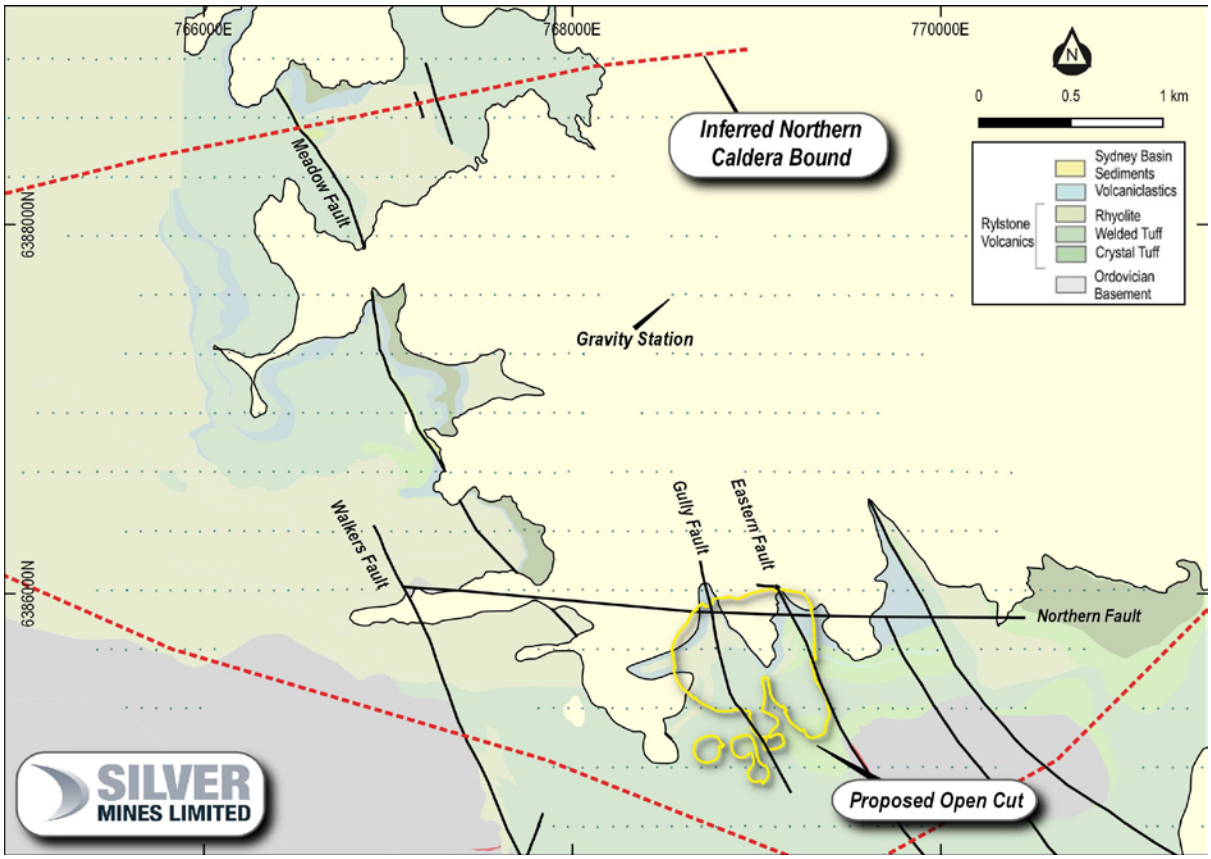

Figure 1: Geology of the Bowdens Silver Exploration Area.

The targets to be tested by upcoming drilling are both low and high gravity responses. The low responses are interpreted to be intrusive (porphyry or intrusion related gold [IRG] targets);

the high responses are interpreted to be potential analogues to the main Bowdens silver and base metal systems (refer to Figure 2).

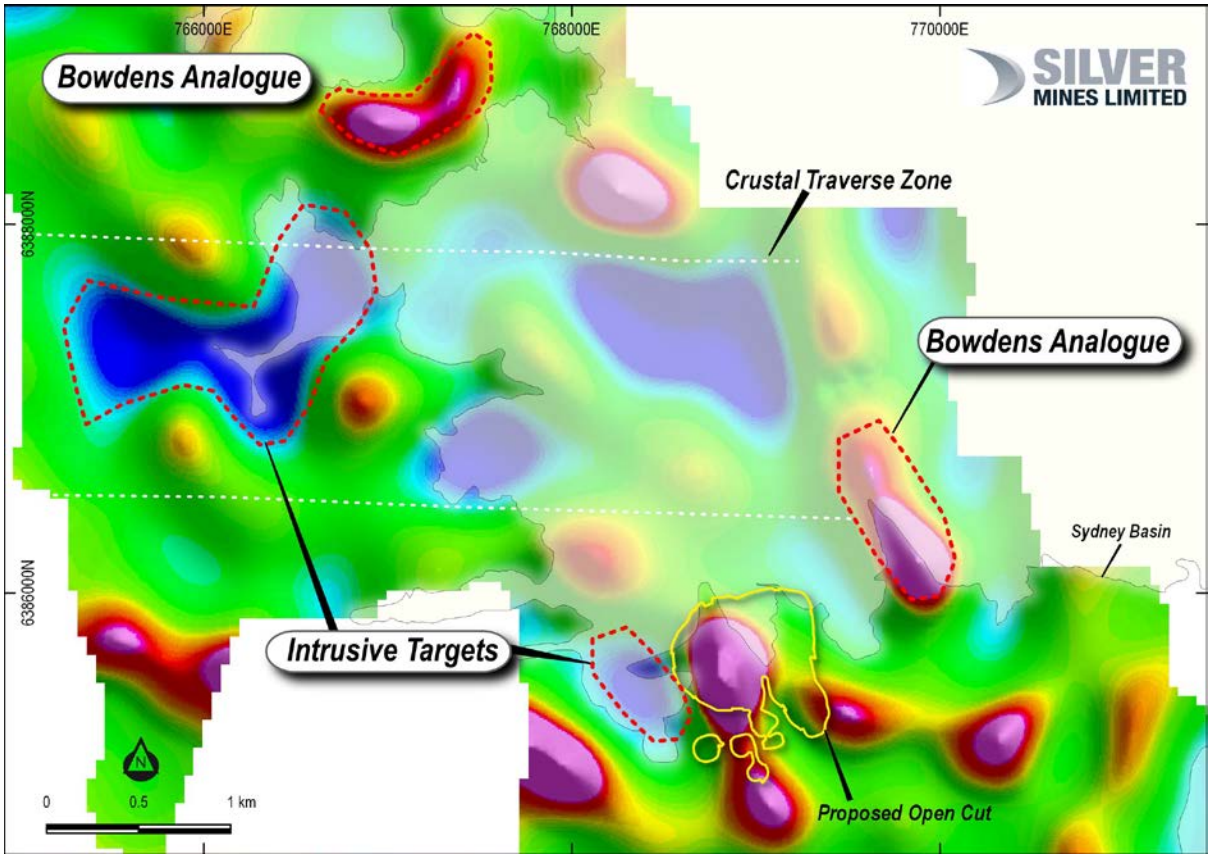

Figure 2: Slice through the 3D model of gravity data at 200 metres RL (~300 metres below surface) with priority targets and Permian cover sediments.

Interpretation of the gravity model suggests that the Rylstone Volcanics have formed above a crustal scale traverse fault zone (refer to Figure 2). This crustal scale fault system is likely to have allowed the extrusion of the voluminous Rylstone volcanic units from a central caldera or series of vents. The extensive gravity lows within this traverse zone are likely felsic intrusives with the potential to be the source of the Bowdens Silver Deposit.

Recent studies, including research and development by the Company and the University of New South Wales, identified three intrusive phases that are spatially related to mineralisation. Interpretation including geology, age dating and sulphur isotope analysis suggests that the intrusive source to mineralisation is located at depth and to the northwest and/or west of the current Bowdens Silver Deposit.

While the geometry of the main bulk-tonnage Bowdens Silver Deposit is well understood, the geological context and setting of this high order system is yet to be fully established. The Bowdens Silver Deposit remains the only deposit of significance discovered within the Permian Rylstone volcanics of New South Wales. Significantly, there are several structurally controlled high-grade zones located proximal to the deposit. The high-grade north-west extensions to the Bowdens Silver Deposit including drill results such as 7.0 metres averaging

555g/t silver equivalent, 7.1 metres averaging 494g/t silver equivalent and 4 metres averaging 1010g/t silver equivalent (refer release dated 31 July 2017 and 22 June 2018).

Table 1: Northwest Zone previous drill results

Hole	From (metres)	To (metres)	Interval (metres)	Silver (g/t)	Zinc (%)	Lead (%)	Silver Eq (g/t)
BRD18001	283	307	24.0	108	0.37	0.73	150
Incl.	283	288	5.0	216	0.37	0.32	245
	306	**307**	**1.0**	**377**	**0.3**	**3.53**	**510**
BRD18002	319	338	19.0	91	0.09	0.22	105
Incl.	320.4	326	5.6	111	0.23	0.52	145
	334	**338**	**4.0**	**198**	**0.05**	**0.02**	**201**
BD17018	179	190.7	11.7	270	0.22	1.18	316
Incl.	**183.6**	**190.7**	**7.1**	**391**	**0.32**	**1.86**	**494**
BD17015	235	268	33.0	167	0.29	1.17	215
Incl.	**235**	**242**	**7.0**	**483**	**0.75**	**1.38**	**555**
	239	**240**	**1.0**	**925**	**1.8**	**0.52**	**1011**
BRC12037	186	200	14.0	284	0.11	0.89	319
Incl.	**196**	**200**	**4.0**	**935**	**0.14**	**2.01**	**1010**
BD17020	193	211	18.0	74	0.81	0.68	136
Incl.	**204**	**205**	**1.0**	**596**	**0.62**	**1.18**	**655**
BD17013	128	171	43.0	110	0.36	0.86	157
Incl.	**151**	**165**	**14.0**	**203**	**0.55**	**0.99**	**254**

Bowdens' silver equivalent: 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, 82% zinc and 83% lead estimated from test work commissioned by Silver Mines Limited. (Refer to Company releases 22 June 2018, 7 June 2017 and 31 July 2017 for further information and JORC tables).

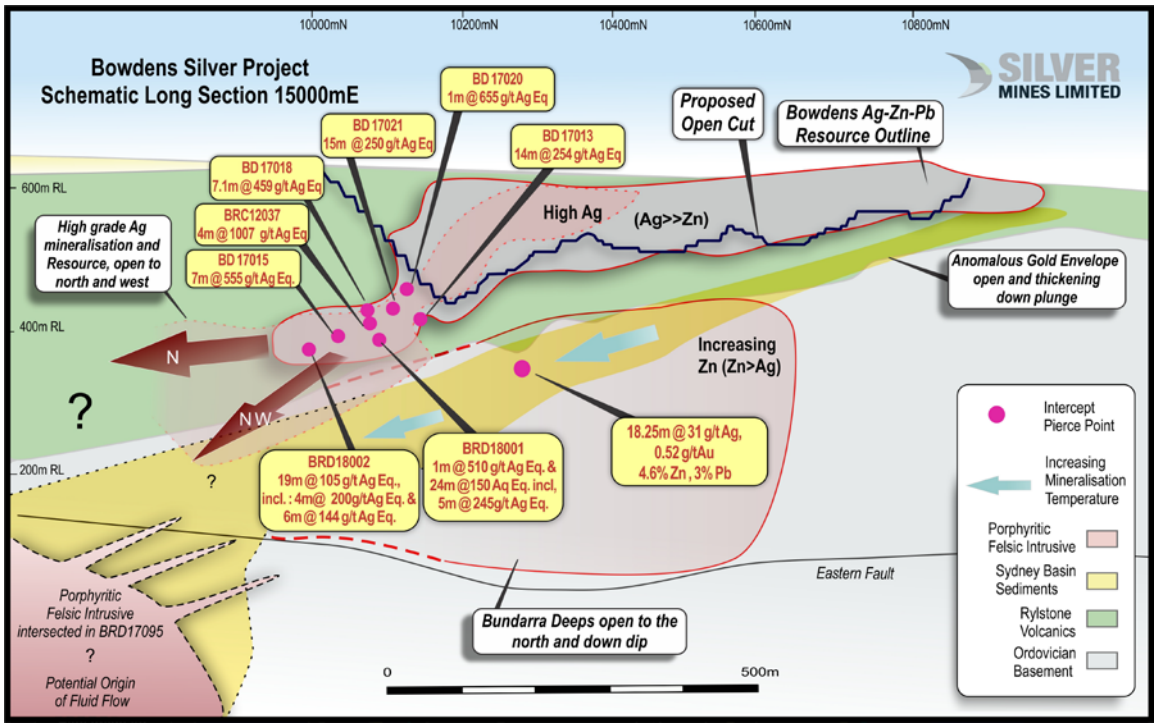

Figure 3: Schematic long-section Northwest Zone - a high-grade extension to Bowdens

In addition to the high-grade Northwest Zone, massive to semi-massive sulphide bodies have been intersected in the basement Ordovician rocks with drill results including 18.25 metres averaging 4.6% zinc, 3.0% lead, 31g/t silver, and 0.4g/t gold (refer to release dated 15 March 2017). The massive sulphide zone, known as the Bundarra Deeps, appear as flat lenses of mineralisation within the Ordovician stratigraphy that gently dip to the west. Both Bundarra Deeps and the Northwest Zone remain open to the west and present excellent high-grade drill targets.

The heat source that drove fluids and deposited such a large mineral system is yet to be identified, but is inferred to be a porphyry intrusion, potentially central to a caldera (an extinct collapsed volcano). Narrow porphyritic dykes have been intersected in drilling and molybdenum (a sign of high temperature fluids and a pathfinder to porphyry deposits) has been found to increase along faults in the northwest. Indeed, some 1.5km to the north of the Bowdens Silver Resource, geochemical anomalism is coincident with significant gravity lows interpreted as felsic intrusive bodies.

Silver Mines' research and development programs include both geological studies on the Rylstone Volcanics and the development of new geochemistry modelling techniques. The new geochemistry modelling techniques include a combination of multivariate geochemical analysis and Machine Learning models which integrate geochemical, geological, geophysical, and remote-sensing datasets. These techniques are intended to target mineral systems beneath cover.

Drilling

The Company has planned for a diamond drilling program of up to 4,000 metres beginning in January 2020 to test priority responses from the integration of the gravity data with the information gleaned from techniques developed under the Company's R&D programs. The drilling will test the gravity highs for analogues to the Bowdens Silver Deposit, as well as the gravity lows for porphyry and intrusive sources. Further to this, the extent of high-grade Northwest zone will be tested >200 metres down dip from current drilling to the west.

Exploration success in proximity to the Bowdens Silver Deposit may provide a positive advantage to the long-term success of the project.

About the Bowdens Silver Project

The Bowdens Silver Project is located in central New South Wales, approximately 26 kilometres east of Mudgee (Figure 4*)*. The consolidated project area comprises 2,007 km^2 (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.

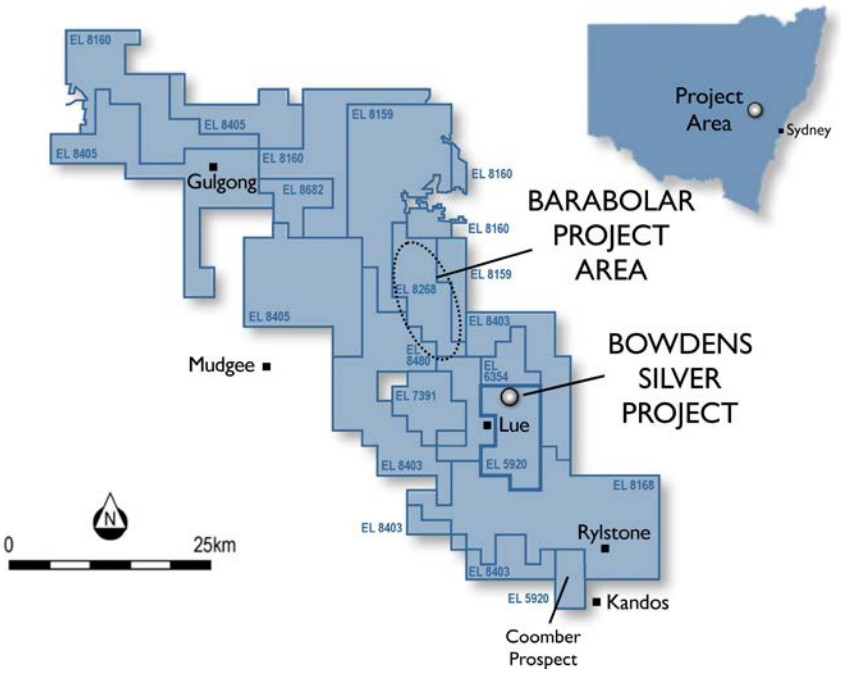

Figure 4. Silver Mines Limited tenement holdings in the Mudgee district.

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Competent Persons Statement

The information in this report that relates to mineral exploration from the Bowdens Project is based on information compiled by the Bowdens Silver team and reviewed by Dr 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). Mr Holden consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

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JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• The gravity survey was conducted on ground with 80 metre station spacing and 320 metre line spacing. Data was acquired using a Scintrex CG-5 autograv meter operated by Atlas Geophysics personnel.
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).*	• No Drilling, not applicable.
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*	• No Drilling, not applicable.

Criteria	JORC Code explanation	Commentary
	and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
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.*	• No Drilling, not applicable.
Sub-sampling 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 sub-sampling 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.*	• No Drilling, not applicable.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Data was processed at the end of each day by experienced personnel from Atlas Geophysics. A minimum of 3% repeats were acquired daily for quality control purposes. • The geophysical method utilised by Silver Mines is entirely appropriate to the style of mineralisation under consideration.
Verification of sampling	• *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*	• Gravity base stations were established to enable all position and height information obtained from the gravity survey to be tied to the Geocentric Datum of Australia (GDA2020), the Geodetic Reference

Criteria	JORC Code explanation	Commentary
and assaying	*verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	System 1980 (GRS80) and the Australian Height Datum (AHD).
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.*	• All data used in this report are in Map Grid of Australia (MGA) Zone 55.
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.*	• Gravity data points were spaced at 80 metre intervals along east west lines with 320 metre intervals between lines.
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 mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The gravity data was collected nearly perpendicular to the regional geological and structural trend of the region.
Sample security	• *The measures taken to ensure sample security.*	• All data was reviewed for quality and accuracy and stored daily by Atlas Geophysics. • Gravity data was transferred securely via email to Silver Mines and GeoDiscovery Group, where at Silver Mines it is stored on a local secure server and backed up daily.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• All data was quality assured by Atlas Geophysics, and again by GeoDiscovery Group. • No major issues with data quality have arisen during the survey.

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.* • *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 Bowdens Resource is located wholly within Exploration Licence No EL5920, held wholly by Silver Mines Limited and is located approximately 26km east of Mudgee, New South Wales. • The tenement is in good standing. • The project has a 2.0% Net Smelter Royalty which reduces to 1.0% after the payment of US$5 million over 100% of the EL5920. • The project has a 1.85% Gross Royalty over 100% of EL5920.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 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.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Bowdens Deposit is a low sulphidation epithermal base-metal and silver system hosted in Permian Volcanic rocks. • Mineralisation includes veins, shear veins and breccia zones within tuff and ignimbrite rocks. • 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 mineralized zones including some areas of stock-work veins.
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; and* 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*	• All information is included in Appendix 1 of this report.

Criteria	JORC Code explanation	Commentary
	the understanding of the report, the Competent Person should clearly explain why this is the case.	
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.*	• All previous information and results has been released in various reports.
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').*	• Mineralisation is both stratabound and vein hosted. The stratigraphy dips moderately to the north while the majority of mineralised veins dip west. Some individual veins are sub-parallel (~10 degrees to core axes). The drilling width is estimated to be 120% of true-width for stratabound mineralisation.
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.*	• Maps and cross-sections provided in the body of this report.
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 previous information and results has been released in various reports.
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 and potential deleterious or contaminating substances.*	• This report relates to gravity geophysical data, drilling is previously reported.
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).*	• This report relates to gravity data that is designed to aid in targeting for upcoming drilling.

Criteria	JORC Code explanation	Commentary
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	