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#### **20 December 2024**

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

# BOWDENS SILVER PROJECT ORE RESERVES INCREASED TO 71.7Moz SILVER

#### **HIGHLIGHTS**

# **Ore Reserve Estimate**

- Ore Reserves ("Reserves") total 32.8 million tonnes at 68 g/t silver, 0.38% zinc and 0.29% lead for an increase of 10% to the ore tonnes relative to the 2018 estimate with a A\$30 per ton cut off.
- The contained silver in Reserves has increased by 7.5% to 71.7 million ounces and silver is now forecast to contribute more than 85% of the revenue in the mine plan, up from c.70% in the 2018 Ore Reserves estimate.
- Key changes to the Reserves have been derived from:
  - o Increased metallurgical recoveries from a simplified processing flowsheet; and,
  - An improved mine design with a smaller development footprint and reduced overall disturbance.
- The overall Resource to Reserve conversion of silver from the higher confidence Measured and Indicated categories has increased to 44% (up from 39%).
- The Reserves also contain 123.3 kilo-tonnes of zinc and 95.6 kilo-tonnes of lead.

# **Mineral Resource Estimate**

• The 2024 Mineral Resource Estimate ("MRE") cut at 30g/t AgEq<sup>1</sup> update reflects additional drilling (including a further 24,140 assays), updated geological domains, improved metallurgy and changes to metal pricing assumptions.

ABN: 45 107 452 942

<sup>&</sup>lt;sup>1</sup> Refer Notes on Resource Table 2 for AgEq calculations.



- The updated MRE underpins the increase to the Reserves as detailed above.
- The Measured and Indicated ("M&I") resources have seen the following key changes:
  - Overall tonnes reducing from 157Mt to 143Mt (down 8.9%)
  - o Silver grade increase from 33.6 g/t Ag to 35.7 g/t Ag (up 6.3%); and,
  - Contained silver marginally lower from 169.8Moz to 164Moz (down 3.4%)
  - M&I now accounts for 80% of tonnes and 92% of contained silver ounces
- A gold dominant portion at a 0.2g/t Au forms a subset to the overall Bowdens MRE, containing 19.4 million tonnes at 0.32 g/t Au for 201,570oz. Further work is required to better refine gold domains in future MRE's.

**Silver Mines Managing Director, Jo Battershill said:** "It is very pleasing to see the increase to the Bowdens Ore Reserve. Our focus has been to improve both the confidence in our understanding of the Bowdens deposit and increase our shareholder's exposure to silver.

With a Reserve estimate of almost 72Moz of silver, which is estimated to drive more than 85% of the project's forecast revenue, Silver Mines is well positioned to benefit from the strong uplift in industrial silver demand that has seen very large deficits build over the last several years. In addition, the historical linkage to the gold price continues to provide ongoing support to silver.

The release of the Mineral Resource and Ore Reserve Estimates and the results from the Optimisation Study demonstrate that the Bowdens Silver Project is one of the most advanced silver development projects on the ASX. When combined with the project's tier one jurisdiction, we believe Silver Mines represents a compelling opportunity within the global silver sector."



#### Introduction

Silver Mines Limited (ASX:SVL) ("Silver Mines" or "the Company") is pleased to announce the release of an updated MRE and Ore Reserve Estimate for the Bowdens Silver Deposit. The Bowdens Silver Project ("Project" or "BSP") is located 26 kilometres east of Mudgee in Central New South Wales.

The updated 2024 MRE reflects additional drilling, more accurate geological domaining, improved metallurgical recoveries from test work and updated metal pricing assumptions. The MRE has been updated by H&S Consultants in conjunction with the Company and work with Datarock, helping to improve estimation domain consistency and accuracy. Refer to JORC Table 1 Sections 1-3 in the Appendix for detail.

Accordingly, an updated Ore Reserve for the Bowdens Silver Deposit has also been completed. The Company in conjunction Resolve Mining Solutions, produced an Ore Reserve for the Bowdens Silver Project based on the M & I component of the 2024 MRE refer to Table 1 and Figure 1. This represents a snapshot of the current economically extractable Resources for a given set of cost and pricing assumptions and modifying factors in accordance with the 2012 JORC Code. Refer to JORC Table 1 Section 4 in the Appendix for specific detail.

# **Ore Reserve and Mineral Resource Estimates**

#### Ore Reserve

The Bowdens Silver Ore Reserve is estimated at 32.8 million tonnes at 68.0 g/t silver, 0.38% zinc and 0.29% lead for 71.7 million ounces of silver, 123.3 kilo-tonnes of zinc and 95.6 kilotonnes of lead in contained metal. The Ore Reserve Estimate is shown in Table 1.

Table 1 - December 2024 Ore Reserve\*

		Reserve	Grades	С	ontained Met	al	
Classification	Tonnes (Mt)	Ag (g/t)	Zn (%)	Pb (%)	Ag (Moz)	Zn (kt)	Pb (kt)
Proved	31.5	68.7	0.38	0.3	69.6	120.8	93.5
Probable	1.3	50.6	0.19	0.16	2.1	2.5	2
Total	32.8	68	0.38	0.29	71.7	123.3	95.6

#### \*Notes:

- 1. Ore Reserves are a subset of Mineral Resources.
- Ore Reserves conform with and use the JORC Code 2012 definitions.
   Ore Reserves are calculated using Silver, Lead and Zinc pricing of US\$29/oz, US\$1.05/lb and US\$1.35/lb respectively
- 4. Ore Reserves are calculated using a Net Smelter Return cut-off grade of 27g/t Ag under these
- 5. Tonnages are reported including mining dilution
- 6. All figures are rounded to reflect appropriate levels of confidence which may result in apparent errors of

The Ore Reserves were estimated from the MRE after consideration of the confidence levels of the resource categories and considering the relevant modifying factors.

No Mineral Resources classed as Inferred have been included in the Ore Reserve.



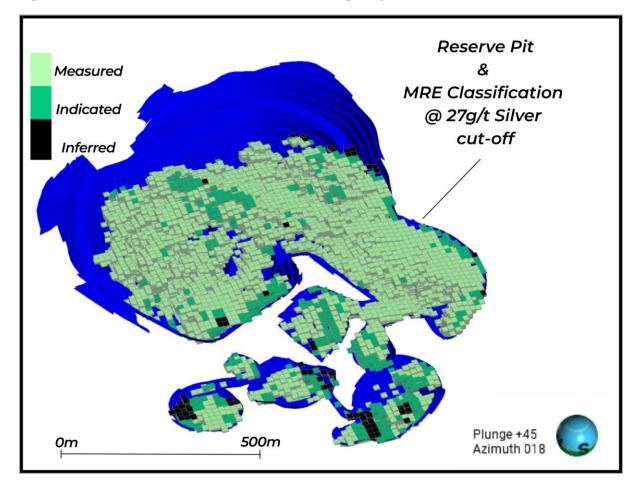


Figure 1 - Schematic of Ore Reserve within Pit Designs by Resource Classification

#### Ore Reserve – Other Material Information Summary

A summary of other material information pursuant to ASX Listing Rules 5.9.1 is provided below. The Ore Reserve is based on the MRE. The Assessment and Reporting Criteria in accordance with the 2012 JORC Code and Guidelines are presented in the Appendix to this announcement.

#### Material Assumptions from the Optimisation

The Ore Reserve estimate draws on updated data developed through the Optimisation Study, building on the 2018 Feasibility Study. Financial modelling aligned with the Optimisation indicates that the Ore Reserve is economically viable under consensus long-term metal prices. Revenue from Inferred material was not considered in the economic analysis.

#### Criteria Used for Classification

The Ore Reserves, derived from Measured and Indicated Mineral Resources under JORC 2012, are classified as Proved and Probable. The Competent Person confirms that these classifications accurately reflect the technical and economic assessments.



#### Mining Method

The proposed operation uses a conventional open-pit mining method, employing 200-ton excavator and 100-ton trucks to extract drilled and blasted ore and waste. The open pit and waste management designs are based on expected geotechnical, geochemical and climatic conditions.

# Processing Method

The processing of ore involves crushing and grinding to p80 at 106  $\mu$ m, then using bulk flotation with regrind, cleaner, and recleaner stages to produce a single concentrate containing silver, zinc and lead. Test programs were conducted on representative samples from across the orebody, and process methodology was optimised for expected market conditions. Processing costs were estimated by specialists and accurate to with  $\pm 15\%$  and include tailings storage.

#### Cut-off Grades

As the Bowdens Silver Deposit is polymetallic, a Net Smelter Return ("NSR") grade has been estimated. The NSR for the Ore Reserve was determined after open pit optimisations were completed and rejected material qualified.

With silver accounting for 86% of the revenue in the reserve estimate, the following provides an indication of the approximate silver cut-off grade without contributions from the base metal by-products.

In this case the calculated cut-off grade would be;

CoG=(mining cost + non mining cost + selling cost) / (recovery x revenue)

#### Where;

'mining cost' is assumed to be \$8/tonne

'non mining cost' is equal to \$29/tonne ore

'selling cost' is equal to \$182/tonne concentrate

'recovery' is the processing recovery (83%) and the payability (95%), and

'revenue' is the net revenue per tonne ore, less royalty and refining charges

Under these assumptions, the Bowdens reserve cut-off equates 27 g/t Ag.

Ore classification is determined using an NSR cut-off that accounts for all costs, recoveries, and financial factors. The NSR cut-off for defining ore and waste in the production plan is A\$30 per tonne

# Estimation Methodology

Mining operating costs, based on a comprehensive owner-mining model from first-principles estimates, were verified against equipment manufacturers' data and contractor quotes. All figures are in Australian dollars, with a 0.67 conversion rate applied for USD.



# Material Modifying Factors

Ore Reserves incorporate dilution, ore loss, and conversion from Measured and Indicated Resources after considering all technical, social, environmental, and financial factors. Mine planning uses standard industry practices, with costs and financials estimated by specialists and accurate within ±15%. The Reserve's economic viability is most sensitive to factors affecting revenue, including currency exchange rate, metallurgical recovery, and silver price.

Mining and Metallurgical Methods and Parameters and other modifying factors

Revenue factors, including head grade, long-term metal prices (Ag US\$29/oz, Pb US\$1.05/lb, Zn US\$1.35/lb), exchange rates, and treatment charges, were based on detailed mine plans and corporate economic assumptions. This analysis assumed 100% ore mining recovery from the diluted Resource model.

Silver is the principal commodity, with strong demand linked to renewable energy growth and tight supply. No offtake agreements currently exist. Marketing and smelting terms are based on information from relevant industry sources.

Economic modelling, using inputs from both internal and external specialists, indicates a positive NPV and confirms the project's economic viability. Sensitivity analysis shows the project is most responsive to changes in AUD:USD exchange rates.

The mine design minimises potential social impacts due to proximity to local communities.

All required permits and approvals are expected to be secured in line with project timelines, and no naturally occurring risks have been identified.



#### Mineral Resource Estimate

The Bowdens Silver Deposit MRE update was completed by H & S Consultants ("H&S") using Multiple Indicator Kriging ("MIK") for Silver and Gold and Ordinary Kriging ("OK") for other metals. Refer to JORC Table 1 Section 3 in the Appendix for full details of sampling and estimation parameters. The MRE for the Bowdens Silver Deposit as of December 2024 is shown in Table 2 and depicted in figures 2 and 3.

Table 2 - December 2024 Mineral Resource Estimate (30 g/t AgEq cut-off)\*

		Resource Grades						Contained Metal			
Resource Category	Mass (Mt)	Ag (g/t)	Zn (%)	Pb (%)	Au (g/t)	AgEq (g/t)	Ag (Moz)	Zn (kt)	Pb (kt)	Au (k oz)	AgEq (Moz)
Measured	100	42	0.37	0.27	0.03	65	135	368	265	109	207
Indicated	43	21	0.41	0.28	0.11	52	30	176	121	152	71
M & I	143	36	0.38	0.27	0.06	61	164	544	386	260	278
Inferred	36	14	0.42	0.32	0.14	48	16	152	115	166	55
Total	179	31	0.39	0.28	0.07	58	180	696	501	426	334
Differences may occur in totals due to rounding											

<sup>\*</sup>Notes

- 1. Bowdens Silver Mineral Resource Estimate reported to a 30g/t AgEq cut off extends from surface and is trimmed to above 300 metres RL, approximately 320 metres below surface, representing a potential target volume for future open-pit mining and expansion.
- 2. Bowdens' silver equivalent assumes prices of US\$27.50/oz silver, US\$2,950/t zinc, US\$2,350/t lead and US\$2,200/oz gold with metallurgical recoveries of 86.2% silver, 92.2% zinc, 84.7% lead and 80% gold estimated from test work commissioned by Silver Mines Limited. Silver equivalent formulae AgEq = Ag + Pb\*0.002612 + Zn\*0.003569 + Au\*74.25 with all metals stated in g/t. It should be noted metal prices used in the Ore Reserve differ due to different timing of the Ore Reserve reporting.
- 3. In the Company's opinion, the silver, zinc, lead and gold included in the metal equivalent calculations have a reasonable potential to be recovered and sold.
- 4. Stated Mineral Resources are partially inclusive of areas of the total Underground Mineral Resource Estimate at 150 g/t Silver Equivalent (AgEq) Cut-off Grade above 300mRL. See ASX announcement dated 5th September 2022.
- 5. Variability of summation may occur due to rounding.
- 6. Oxide and transitional material comprise 0.4% and 2.9% of the Resource tonnage, containing 1 Moz and 9 Moz AgEq respectively.

#### Cut-off Grades and Comparison with Previous Estimates

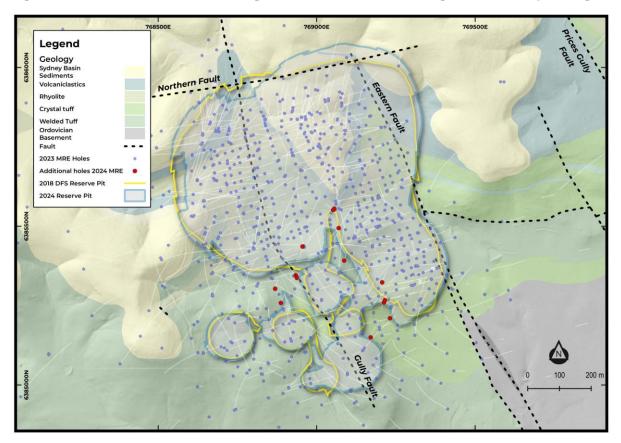
The Resource estimation techniques and parameters remain largely unchanged from the 2023 MRE. However, they differ in certain respects such as domaining and metal price assumptions, as well as including an additional 24,140 drilling assays, see Figure 2. Estimation domains were updated using photographic records of all diamond drill core and analysed using Vision Transformer (ViT) models combined with assays, largely independent of the underlying variables being estimated.

The combination of this textural information and multi-element geochemical data was key in defining hard domain boundaries for estimates of silver, zinc and lead mineralisation in the 2024 MRE.



The results of domaining the MRE estimates in such a manner has been verified to better reflect average sample grades at the domain boundaries rather than unbounded estimates.

Figure 2 - Location of additional drilling for the 2024 MRE, and changes in Reserve pit designs



H&S also comment that "A number of preliminary silver models, both OK and MIK, were produced for the Rylstone Volcanics, using hard and soft boundaries with different domain boundaries to ensure that the hard boundary models were not conditionally biased. This is a common problem with inappropriate hard boundaries, but there was no obvious evidence of conditional bias in the models using the mineralised fracture domain as a hard boundary. In fact, the differences between hard and soft boundary models were quite small, within the range of a few percent for tonnes, grade and metal content".



Figure 3 - Cross Section of the Mineral Resource showing AgEq within Reserve Pit

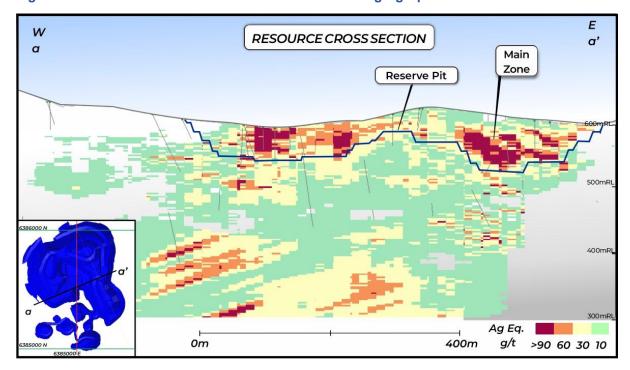
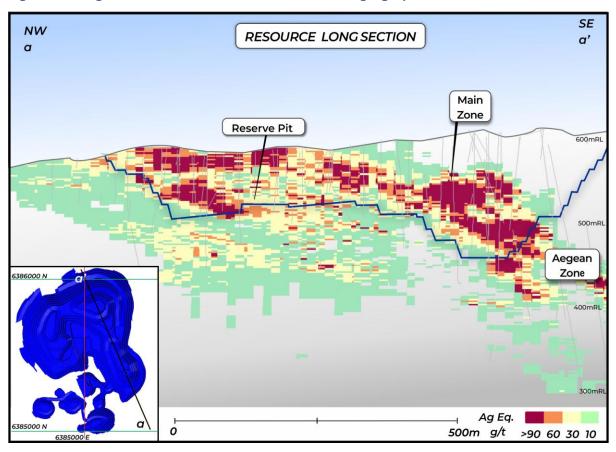


Figure 4 - Long Section of the Mineral Resource showing AgEq within Reserve Pit





900 200 176 770 180 800 151 160 700 138 140 125 600 114 120 💆 111 **Fonnage Mt** Average Grade 500 96.5 100 87.8 82.9 400 74.1 69.9 80 61.1 270 58.1 300 49.3 60 46.7 179 39.3 36.3 200 40 119 20.6 18.9 78.5 100 53 20 36.8 19.7 15.1 9.6 0 0 10 20 30 70 90 100 Ag Eq Cut off Grade - EqAg g/t Ag

Figure 5 – 2024 Mineral Resource Estimate Grade Tonnage Curve by AgEq

Table 3 - MRE grade tonnage data by AgEq cut-off

		Resourc	e Grades		Contained Metal		
Cut-off (AgEq)	Tonnes (Mt)	Ag (g/t)	Zn (%)	Pb (t)	Ag (Moz)	Zn (kt)	Pb (kt)
27.25 <sup>1</sup>	200	29	0.37	0.27	188.4	742	532.8
30	179	31.3	0.39	0.28	180.1	698.1	501.2
40	119	39.3	0.45	0.32	150.4	535.5	380.8
50	78	49.3	0.50	0.36	123.6	390.0	280.8
60	53	61.1	0.53	0.39	104.1	280.9	206.7
70	37	74.1	0.55	0.41	88.1	203.5	151.7
80	24	87.8	0.56	0.43	67.7	134.4	103.2
90	20	101	0.58	0.45	64.9	116.0	90.0

Notes: 1. Equivalent to 2023 MRE tonnage and grades for Ag, Pb and Zn.

In comparison to the 2023 MRE, changes to the 2024 MRE largely reflect updated assumptions to underlying pricing of silver and base metals. The silver price used to calculate the silver equivalent cut-off is some 27% higher than the 2023 MRE. The effect of a higher denominator in the AgEq calculations results in the lower conversion of base metals into the AgEq estimate.



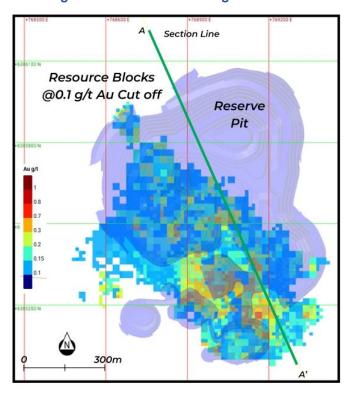
It is notable that when estimates are cut at 27.25 g/t AgEq (Table 3), comparable tonnages and grades to the 2023 MRE are reported for all metals – with the exception of gold, which shows a marked increase in grade. Gold estimates within the 2024 MRE is described in Table 4 and shown in Figure 5 and 6, as a sub-set of the 2024 MRE at a 0.2 g/t Au cut-off.

The current Ore Reserve is based on a processing flow sheet that optimises payability for silver, lead and zinc. As a result the gold portion of the MRE falls largely outside of the Ore Reserve see Figures 5 & 6. In the Company's opinion, the gold included in the MRE has a reasonable prospect to be recovered and sold.

Table 4 - Gold as a sub-set of the 2024 MRE at 0.2 g/t Au cut-off grade

		Resource Grades					Contained Metal				
Resource Category	Mass (Mt)	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	AgEq (g/t)	Au (koz)	Ag (Moz)	Zn (kt)	Pb (kt)	AgEq (Moz)
Measured	4.0	0.33	18.6	0.48	0.33	69	42.8	2.4	19.3	13.3	9
Indicated	7.2	0.33	12.8	0.46	0.32	62	75.8	3.0	32.9	23.2	14
Inferred	8.2	0.31	11.1	0.47	0.35	60	82.9	2.9	38.4	28.7	16
Total	19.4	0.32	13.3	0.47	0.34	63	201.6	8.3	90.6	65.2	39
Differences may occur in totals due to rounding											

Figure 6 - Blocks over a 0.1g/t Au Cut off





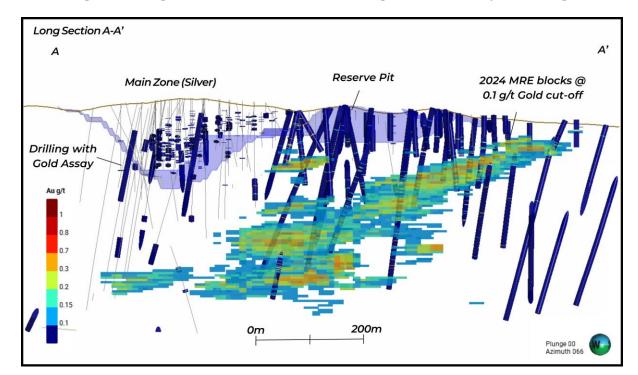


Figure 7 - Long Section of MRE with blocks > 0.1g/t Gold and assays in drilling.

## Further Work

Detailed optimisation of the Reserve in line with proposed activities in the live application for development consent process for the Project is to be completed.

Where drilling from 2024 provided additional gold assays there have been increases in the gold estimates, with grades increasing within the Rylstone Volcanics by 18.5% and in the Coomber Formation 5.5% relative to the 2023 MRE. This significant change in grade occurred from moderate amounts of additional assay and little to no change to estimation method or estimation domains. The Company anticipates better refined gold domains in future MRE's.

With respect to the Ore Reserve, the Company expects to carry out metallurgical drilling in preparation to deliver concentrate product for certification, potential regulatory requirements and determine ore variability using a pilot plant. This drilling is likely to contribute to the coverage of gold assay within the deposit in particular areas in the Ore Reserve Pit floor.

#### MRE – Other Material Information Summary

A summary of other material information pursuant to ASX Listing Rules 5.8.1 is provided below for the updated Bowdens Silver Mineral Resource estimate. The Assessment and Reporting Criteria is in accordance with the 2012 JORC Code and Guidelines.

## Geology and Geological Interpretation

The Bowdens Silver Project is situated on the north-eastern margin of the Lachlan Fold Belt. The deposit is on the southern edge of 7km wide volcanic caldera complex. The geology comprises of flat-lying mid-Carboniferous Rylstone Volcanics intruding into and erupted over Ordovician sequence of sediments called the Coomber Formation. The Rylstone Volcanics are partially overlain by a sequence of post-mineralisation marine sediments of the Sydney



Basin (Shoalhaven Group). The Rylstone Volcanics range from 10 to more than 700 metres thick. Near the deposit thickness typically range from 50 to 250 metres. The silver mineralisation is associated with sulphides of silver, iron, lead and zinc and resides in fine fractures and veins within both Rylstone and Coomber formations. The zinc dominant mineralisation primarily occurs in the Bundarra Zone as stacked, flat-lying to moderately dipping zones of veins, breccias and fracture-fill sulphides associated with zinc, iron, lead, silver and gold within siltstones, shales and sandstones of the Coomber Formation.

The gold-dominant mineralisation is associated with an increase in zinc, lead, and sulphur particularly across the Rylstone Volcanics and Coomber Formation basement contact, as well as within the Gully fault from which mineralisation at the contact was likely sourced. Gold occurs as irregular to partly formed grains about 5–50 µm in size. It fills fractures in early-stage iron lead and zinc sulphides and rims later-stage copper and lead sulphides. There are also small amounts of gold introduced late within quartz and carbonate veins.

## Sampling and Sub-Sampling Techniques

Mineral Resources were estimated from reverse circulation ("RC") and diamond core sampling by Silver Mines Limited (64%), Kingsgate Consolidated (10%), and Silver Standard, Golden Shamrock Mines and CRAE (26%). The resource database totals 549 generally vertical to inclined reverse circulation holes for a total of 67,424 metres and 305 inclined to vertical diamond core holes for a total 94,073 metres.

The majority of RC sampling was collected with either a riffle or cone splitter over 1 metre intervals. The majority of diamond core was sawn, either half or quarter cored. The minimum sample interval was 0.2 metres and the maximum sample interval was 5 metres, with the majority of samples 1.0m in length.

## **Drilling Techniques**

The drilling used for the Mineral Resource estimation includes diamond drilling with diameter of NQ (47.6mm), HQ3 (61.1mm) and with PQ3 (83mm) for the upper sections of holes. Reverse circulation drilling used face sampling hammers of 5.5 inches diameter (139.7mm). Core orientations were completed using REFLEX ACT tools.

#### Sample Analysis Method

For pre-Kingsgate Consolidated drilling, samples were pulverised to 85% passing 75 microns, split then analysed by acid digestion and AA or ICP determination. Since Kingsgate, samples have been analysed by a 4-acid digest with a multi-element ICP-AES determination. Gold determinations have been made via a combination of Neutron Activation Assay, photon assay and fire assay which show good replication between methods.

#### Estimation Methodology

Silver was initially estimated by recoverable Multiple Indicator Kriging ("MIK") into 25 x 25 x 5m panels. These estimates were then localised by discretising the metal distribution into subblocks with the dimensions of the selective mining unit (SMU) of 12.5 x 12.5 x 2.5m. The order of assigning the metal distribution to sub-blocks was based on an Ordinary Kriging ("OK") estimate for silver into the sub-blocks.



Gold was estimated by MIK, using the e-type or average block grade at the scale of the panels; this coarser resolution reflects the substantial under-assaying of gold compared to silver in the Rylstone Volcanics.

All other attributes were estimated by OK, including Pb, Zn, Cu, S, As, Sb, Cd, Mn, Fe and dry bulk density. OK is considered appropriate because the coefficients of variation (CV=SD/mean) are generally low to moderate, and the grades are reasonably well structured spatially. Recoverable MIK was chosen for Ag primarily because it allows better mining selectivity than OK and appropriate for estimation of mixed domains with higher variance.

MIK estimates were generated using the GS3M software package, while OK estimates were generated in the Datamine software package.

Each of the major stratigraphic units (Rylstone, Coomber, Shoalhaven) were estimated separately, with each unit sub-divided into domains based on changes in mineralisation orientation.

Samples were composited to nominal 2.0m intervals within each unit for data analysis and resource estimation.

#### Classification Criteria

The classification scheme is based on the estimation search pass for silver. This scheme is considered to take appropriate account of all relevant factors, including the relative confidence in tonnage and grade estimates, confidence in the continuity of geology and metal values, and the quality, quantity and distribution of the data.

The classification appropriately reflects the Competent Person's view of the deposit.

#### Specifically:

- Measured Resources are effectively based on a nominal drill hole spacing of 25x25m
- Indicated Resources are based on a spacing of 50x50m
- Inferred Resources are based on a spacing of 100x100m

#### Cut-off Grades

The cut-off grade is a silver equivalent (AgEq) value, based on grades and recoveries for silver, zinc, lead and gold as shown below.

Metal	Unit	Price (USD)	Recovery
Silver (Ag)	Ounce (oz)	\$27.50	86.2%
Zinc (Zn)	Tonne (t)	\$2,950	92.2%
Lead (Pb)	Tonne (t)	\$2,350	84.7%
Gold (Au)	Ounce (oz)	\$2200	80%



The equivalent silver formula is: AgEq (g/t) = AgEq =-Ag + Pb\*0.002612 + Zn\*0.003569 + Au\*74.25 with all metals stated in g/t.

The adopted cut-off grade of 30 g/t AgEq is considered likely to be economic for the mining method and scale of operation envisioned for Bowdens Silver.

Mining and Metallurgical Methods, Parameters and other modifying factors considered to date

The Company has engaged with GR Engineering Services Ltd to co-ordinate detailed flowsheet design criteria in conjunction with ongoing metallurgical work by KYSPYmet.

The Bowdens Silver Mineral Resource is reported as a potential future open-pit mining scenario. The MRE has been reported extending from surface to 300mRL which is approximately 320 metres below surface representing a potential volume for future open-pit optimisation models and expansion.

The recoverable MIK method implicitly incorporates internal mining dilution at the scale of the assumed SMU (selective mining unit). No specific assumptions were made about external mining dilution in the MRE.

Metallurgical test work to confirm the results of previous work has been conducted and further optimisation is ongoing across a range of grades and ore types. Other likely modifying factors pertaining to this Resource have been extensively assessed via an Environmental Impact Statement exhibited on the NSW government planning portal.



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

The Bowdens Silver Project is in central New South Wales, approximately 26 kilometres east of Mudgee (Figure 7). The consolidated project area comprises 2,115 km² (521,000 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 completed. The project boasts outstanding logistics for mine development.

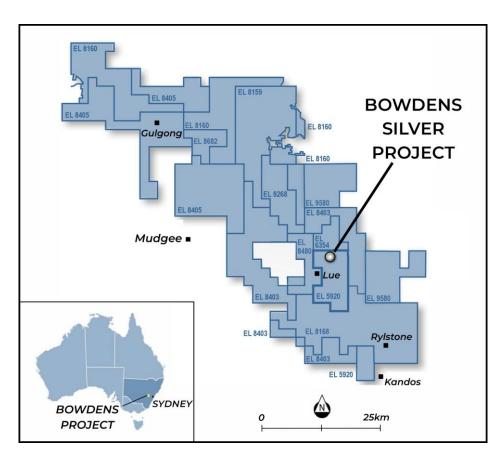


Figure 8 - Silver Mines Limited tenement holdings in the Mudgee district.

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

#### **Further information:**

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#### **Competent Persons Statement**

The information in this report that relates to Mineral Resources is based on and fairly represents information and supporting documentation compiled by Mr Arnold van der Heyden who is a Director of H & S Consultants Pty Ltd. Mr van der Heyden is a member and Chartered Professional (Geology) of the Australian 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 van der Heyden consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The information in this report that relates to Exploration Results that underpin the Mineral Resources and Ore Reserves for the Bowdens Silver Project is based on and fairly represents information and supporting information compiled by the Bowdens Silver team and reviewed by David Biggs who is an employee of the Company. Mr Biggs is a member of the Australasian Institute of Mining and Metallurgy (MAusIMM) 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 Biggs consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The information in this report that relates to Ore Reserves within the Bowdens Silver Project is based on and fairly represents information and supporting information compiled or reviewed by Mr Andrew Hutson, a Competent Person who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM) and a full-time employee of Resolve Mining Services. Mr Hutson has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code 2012. Mr Hutson has no economic, financial or pecuniary interest in the company and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The Ore Reserves underpinning the production targets were prepared by a Competent Person in accordance with the JORC Code.

#### **Forward-Looking Statements**

This announcement may contain certain forward-looking statements, guidance, forecasts, estimates, prospects, projections or statements in relation to future matters that may involve risks or uncertainties and may involve significant items of subjective judgement and assumptions of future events that may or may not eventuate ("Forward-Looking Statements"). Forward-Looking Statements can generally be identified by the use of forward-looking words such as "anticipate", "estimates", "will", "should", "could", "may", "expects", "plans", "forecast", "target" or similar expressions and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production and expected costs. Indications of, and guidance on future



earnings, cash flows, costs, financial position and performance are also Forward Looking Statements.

Persons reading this announcement are cautioned that such statements are only predictions, and that actual future results or performance may be materially different. Forward-Looking Statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change, without notice, as are statements about market and industry trends, which are based on interpretation of current market conditions. Forward-Looking Statements are provided as a general guide only and should not be relied on as a guarantee of future performance.

No representation or warranty, express or implied, is made by Silver Mines that any Forward-Looking Statement will be achieved or proved to be correct. Further, Silver Mines disclaims any intent or obligation to update or revise any Forward-Looking Statement whether as a result of new information, estimates or options, future events or results or otherwise, unless required to do so by law.



# **APPENDIX 1: JORC CODE**

# 2012 Edition – ANNEXURE 1

# **Section 1 Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> <li>Results from exploratory RAB and Aircore drilling were not included in the resource dataset.</li> <li>For pre-Kingsgate drilling, RC holes were generally sub-sampled by riffle splitting, or spear or grab sampling for rare wet samples and diamond core was halved with a diamond saw. Samples were analysed by several accredited commercial laboratories by either 3, 4 or aqua-regia acid digestion and AA or ICP determination. Quality control measures included use of standards, blanks, field duplicates and external laboratory checks by a variety of methods including neutron activation.</li> <li>For Kingsgate and Silver Mines drilling, RC holes were sub-sampled by cyclone mounted cone splitters and diamond core was either halved or quartered with a diamond saw to provide representative assay sub-samples. The samples were analysed for a suite of elements including silver, lead and zinc by multi-acid digest with ICPAES determination.</li> </ul>
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).	
Drill sample recovery	<ul> <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> <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> <li>Some zones (less than 10%) were broken core with occasional clay zones where some sample loss may have occurred. However, this is not considered to have materially affected the results.</li> <li>RC samples are weighed for each metre and assessed for recovery, contamination and</li> </ul>

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Criteria	JORC Code explanation	Commentary
Logging	<ul> <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> <li>RC chip samples are logged using lithology, alteration, veining and mineralisation.</li> <li>All core and chip trays are photographed using both wet and dry photography.</li> <li>In all cases the entire hole is logged by a geologist.</li> <li>Quantitative relogging of all Rylstone Volcanic diamond drill core was performed using a combination of geochemical features and depth registered core photography, allowing for quantitative determination of texture and chemistry to suitably distinguish geology and geotechnical features. These classes were verified and extended by a geologist over RC drilling chemistry were confirmed from proximal diamond drill holes.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <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> <li>of 0.3m.</li> <li>Pre-Kingsgate RC holes were sampled over one to two metre intervals with sub-samples generally collected by riffle splitting, or spear or grab sampling for rare wet samples. Unmineralised samples were composited over intervals of up to five metres for assaying. Diamond core was halved with a diamond saw with samples collected over intervals ranging from 0.2 to 5.0 metres and averaging 1.0 metre.</li> <li>Kingsgate's RC drilling was sampled over one metre intervals and sub-sampled by cyclone mounted cone splitters. The majority of these samples (97%) were dry with wet samples</li> </ul>
Quality of assay data and laboratory tests	<ul> <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> <li>analysis. No geophysical methods or hand-held XRF devices have been used for resource estimation.</li> <li>Samples from pre Kingsgate drilling were analysed by several accredited commercial laboratories by either 3, 4 or aqua-regia acid digestion and AA or ICP determination. Quality control measures included use of standards, blanks, field duplicates and external laboratory checks by a variety of methods including neutron activation assaying.</li> <li>Kingsgate's samples were analysed by ALS in Orange, NSW. After oven drying, and jaw</li> </ul>



Criteria	JORC Code explanation	Commentary
		for a suite of elements including silver, lead and zinc. Quality control measures included field duplicates, coarse blanks and reference standards.  Silver Mines samples were dispatched to ALS Global laboratories in Orange. At ALS the samples were pulverised to nominally 85% passing 75 microns with subsequent 4 acid digest and 33 multi-element analysis completed at ALS Brisbane using method ME-ICP61 and 4 acid digest and 38 multi-element analysis at SGS Townsville using method DIG41Q.  Site Standards are inserted every 20 samples to check quality control and laboratory standards and blanks every 25 samples to further check results.
Verification of sampling and assaying	<ul> <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> <li>Significant intersections calculated by site-geologists and verified by an independent geological consultant.</li> <li>Several independent authors reviewed pre-Silver Mines sampling data during preparation of previous resource estimates.</li> <li>Both Silver Mines and Kingsgate's sampling, logging and survey data were electronically merged into a central database directly from original source files using Logchief field software and imported into an SQL database in accordance with database protocols and manuals. Data was viewed and interpreted using Leapfrog and Micromine software.</li> <li>Grade cutting was applied to the assay data for resource estimation where assay populations coefficient of variation (CV) were unsuitably high for OK Kriging.</li> </ul>
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> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Accredited surveyors using high accuracy RTK surveys accurately surveyed all resource drill hole collars.</li> <li>Pre-Kingsgate holes were down-hole surveyed by single shot cameras. Kingsgate's drilling was surveyed by either Reflex EZ-shot or Eastman camera. Silver Mines drilling was surveyed by a Reflex EZ-shot electronic camera at 30m intervals down hole.</li> <li>The terrain includes steep hills and ridges and with a LIDAR topographical model of 0.3 metre accuracy.</li> <li>All collars recorded in MGA94 zone 55.</li> </ul>
Data spacing and distribution	<ul> <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> <li>This drilling is designed as both infill and extensional to the overall mineral resource envelope. The nominal drill hole spacing is 50m (northing) by 50m (easting).</li> <li>Hole spacing varies from around 50 by 50 m and locally closer parts of the higher grade ore zones to more than 100 by 100 m in peripheral areas.</li> <li>The majority of holes were either orientated near vertically or northerly traversing mineralisation and easterly across regional structures.</li> <li>The data spacing and distribution establishes geological and grade continuity adequately for the current resource estimates.</li> </ul>
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> <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> <li>Drill orientation was designed to intersect the projection of breccia zones and zones of veins within an overall mineralized envelope.</li> <li>An interpretation of the mineralization has indicated that no sampling bias has been introduced.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>All samples bagged on site under the supervision of two senior geologists with sample bags tied with cable ties before being driven by site personnel to the independent laboratory or</li> </ul>



Criteria	JORC Code explanation	Commentary
		sample pickup by the independent laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>Pre-Kingsgate sampling techniques and data have been reviewed previously by renowned external geological consultants and most recently by Silver Mines geoscience staff.</li> <li>Kingsgate sampling techniques and data have been reviewed by several external geological consultants including MPR and AMC.</li> <li>Silver Mines sampling techniques and data have been independently reviewed by a number of external geological consultants including AMC, GeoSpy and H&amp;S.</li> </ul>

# **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	<ul> <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> <li>The Bowdens Resource is located wholly within Exploration Licence No EL5920, 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 the EL5920.</li> <li>The project has a 0.85% Gross Royalty over 100% of EL5920.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Bowdens project was previously managed by Kingsgate Consolidated, Silver Standard Ltd, Golden Shamrock Mines and CRAE. The new results under this table draw on work from the previous owners. Work carried out by these parties has been assessed and verified to be of a high standard with rigorous QAQC, and assay verification programs across multiple laboratories. Similarly spatial and accuracy of collars has been verified to be accurate and compiled in an orderly and verifiable database.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Bowdens Deposit is a low to intermediate sulphidation epithermal base-metal and silver system hosted in Carboniferous aged Volcanic rocks and Ordovician aged sediments.</li> <li>Mineralisation includes veins, breccias and fracture fill veins within tuff and ignimbrite rocks, and semi massive veins, breccias and fracture fill in siltstone, shale and sandstone.</li> <li>Mineralisation is overall shallowly dipping (~15 degrees to the north) with high-grade zones preferentially following a volcanic intrusion. There are several vein orientations within the broader mineralized zones including some areas of stock-work veins.</li> </ul>
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:     easting and northing of the drill hole collar;     elevation or RL (Reduced Level elevation above sea level in metres) of the drill hole collar;     dip and azimuth of the hole;	Not applicable as there are no exploration results reported as part of this statement.



Criteria	JORC Code explanation	Commentary
	<ul> <li>down hole length and interception depth; and</li> <li>hole length.</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>	
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> <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>	This release is in relation to a Mineral Resource Estimate with no exploration results being reported.
Relationship between mineralisation widths and intercept lengths	<ul> <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> <li>Mineralisation is both stratabound and vein hosted. The stratigraphy dips moderately to the north in the Aegean and Northwest zones, while the majority of mineralised veins dip west. In Bundarra the mineralization is also stratabound and vein hosted dipping moderately to the Southwest.</li> <li>Most holes have been drilled angled -60° to -80° to the north and east with occasional angled vertically.</li> </ul>
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.	Not applicable as there are no exploration results reported as part of this statement.
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.	<ul> <li>The Bowdens diamond holes were also utilised for bulk density measurements. Geotechnical logging has determined suitable ground conditions for mining.</li> <li>Bulk sample sites have verified material estimates to be accurate.</li> <li>Extensive metallurgical test work and flowsheet optimisation has been undertaken across all ore types and grade ranges. Results typically demonstrate excellent recoveries.</li> <li>Checks for deleterious or other penalty elements (such as Cadmium of Mercury and Fluorine) have been assayed for in a routine manner and determined to be acceptable from metallurgical product results. Other penalty, elements including Arsenic have been appropriately estimated.</li> </ul>
Further work	<ul> <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</li> </ul>	Further drilling prior to exploitation are intended to produce: metallurgical product samples, geotechnical, geo-metallurgical models and prove grade control materials classification methods and increased density of gold assays near and beneath existing pits.



Criteria	JORC Code explanation	Commentary
	the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Large district scale step out drilling at Bara Creek is underway and further targets to the West and surrounds of the deposit remain highly prospective for potential deposit analogues. Albeit near most proximal extensions have been tested but doesn't preclude their existence.

# **Section 3 Estimation and Reporting of Mineral Resources**

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

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	All geological data is stored electronically with limited automatic validation prior to upload into the secure DataShed database, managed in the on-site office by Geological staff. The master drill hole database is located on an SQL server, which is backed up on a daily basis.  Basic checks were performed prior to this resource estimate to ensure data consistency, including checks for FROM - TO interval errors, missing or duplicate collar surveys, excessive down hole deviation, and extreme or unusual assay values.  All data errors/issues were reported to the Geological staff to be corrected or flagged as omitted but retained for audit in the primary DataShed database if repeat measurements could not be made.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	The Competent Person has visited the Bowdens project site on two occasions: for 2 days in late January 2022 and over a 2 week period in late July and early August 2017. During these visits, core samples and outcrops were examined, and discussion were held with SVL personnel about the geology and mineralisation of the deposit. The Competent Person concludes that data collection and management were being performed in a professional manner.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	SVL has developed a comprehensive geological interpretation of the Bowdens deposit based on geological logging, detailed petrography and chemical assays. In 2024 all diamond drill core photography within the Rylstone was analysed quantitatively separately and in conjunction with geochemical features. This work confirmed and further refined existing interpretations of unit contacts. SVL personnel have a good understanding of the geology of the Bowdens deposit, and this is reflected in the wireframe models they prepared, which form a solid framework for Mineral Resource estimation.  SVL had previously interpreted a series of thin higher-grade mineralised horizons or lenses in the Rylstone Volcanics and the underlying Coomber Formation, which have an average intersection length of 2.90m in the Rylstone and 6.25m in the Coomber. The Rylstone Mineralised Horizons (RMHs) are typically silver-rich, while the Bundarra lenses in the Coomber Formation are primarily base metal (lead-zinc) dominant. The seven RMHs are thought to represent paleo-boiling horizons and can be quite discontinuous with numerous gaps and embayments. The six Bundarra lenses cut across stratigraphy and appear reasonably



Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.  Samples were composited to nominal 2.0m intervals within each unit for data analy resource estimation, reflecting the scale of open pit mining envisioned by SVL.  The resource model uses a parent block size of 25x25x5m, while drill hole spacing is not extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	ominally the hole
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.  The open-pit Mineral Resources at Bowdens have an approximate extent of:  1,050m east-west, 1,250m north-south, From surface to 340m below surface.	
	each stratigraphic unit.  The continuity of geology at Bowdens is controlled by stratigraphy and faulting. Continuity of geology at Bowdens is controlled by stratigraphy and faulting. Continuity and has a weak stratigraphic control and is primarily controlled by local fracturing; faulting permeability appear to act as broad control on localising mineralisation.	
	Geology guides and controls Mineral Resource estimation by using the local orientation higher-grade horizons or lenses to guide the overall orientation of the lower-grade mineral and divide the deposit into a number of different orientation domains. The eastern mineralisation is effectively truncated by the Eastern Fault, which forms a separate domain and the state of the second or s	alisation edge of
	There is some scope for alternative geological interpretations of the deposit, principall correlation of intersections that comprise the different mineralised horizons or lenses. W could affect estimates locally, it appears unlikely to have a significant impact on the Mineral Resource estimate.	hile this
	Surfaces for base of complete oxidation and top of fresh rock were also interpreted, be geological logging and assays. Only a small proportion of mineralisation occurs wi relatively thin oxide zone, and there is no obvious evidence of depletion or enrichment due to oxidation.	thin the
	Thin higher-grade mineralised horizons or lenses were used to guide the overall orient the lower-grade mineralisation locally and divide the deposit into a number of different orient domains. The Rylstone Volcanics are divided into five separate domains, while the C Formation is split into three domains. The eastern edge of mineralisation is controlled constrained by the Eastern Fault, which forms a separate domain in each stratigraphic to	entation Coomber but not
	continuous spatially. The higher-grade lenses have variable orientation, with dominant di of 12°>330° for the RMHs and 15°>180° for the Bundarra lenses. Additionally, SVL promineralised fracture domain, which defines the boundary of the Ag,Pb and Zn propagation mineral system. This domain was derived in conjunction with DataRock Pty Ltd from imagery and geochemistry, largely independent of silver assays. This domain was interested as a hard mineralisation boundary within the Rylstone Volcanics for estimates Pb, Zn, Sb and Cd. For other estimates of Au Mn, As, Cu, Sb, Fe and S it was treated as boundary.	ovided a on in the om core ended to so of Ag,



- The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.
- The assumptions made regarding recovery of by-products.
- Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).
- In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
- Any assumptions behind modelling of selective mining units.
- Any assumptions about correlation between variables.
- Description of how the geological interpretation was used to control the resource estimates.
- Discussion of basis for using or not using grade cutting or capping.
- The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

blocks of 12.5 x 12.5 x 2.5m were used for ordinary kriging (OK) estimates, which is half the parent block dimensions in each direction and is considered appropriate.

The resource model uses the GDA94 (Geocentric Datum of Australia) grid, zone 56.

Silver was initially estimated by recoverable MIK into  $25 \times 25 \times 5.0$ m panels. These estimates were then localised by discretising the metal distribution into sub-blocks with the dimensions of the selective mining unit (SMU) of  $12.5 \times 12.5 \times 2.5$ m. The order of assigning the metal distribution to sub-blocks was based on an (OK) estimate for silver into the sub-blocks.

Gold was estimated by MIK, using the e-type or average block grade at the scale of the panels; this coarser resolution reflects the substantial under-assaying of gold compared to silver in the Rylstone Volcanics.

All other attributes were estimated by OK, including Pb, Zn, Cu, S, As, Sb, Cd, Mn, Fe and dry bulk density. OK is considered appropriate because the coefficients of variation (CV=SD/mean) are generally low to moderate, and the grades are reasonably well structured spatially. Recoverable MIK was chosen for Ag primarily because it allows better mining selectivity than OK.

MIK estimates were generated using GS3 software, while OK estimates were produced in Datamine software.

Each of the major stratigraphic units (Rylstone, Coomber, Shoalhaven) were estimated separately, with each unit sub-divided into domains based on changes in mineralisation orientation.

A four pass search strategy was used for the OK grade estimates:

- 1. 35x35x12.5m search, 16-32 samples, minimum of 4 octants informed
- 2. 52.5x52.5x12.5m search, 16-32 samples, minimum of 4 octants informed
- 3. 105x105x25m search, 16-32 samples, minimum of 4 octants informed
- 4. 105x105x25m search, 8-32 samples, minimum of 2 octants informed

An additional larger pass was used for some elements with fewer assays to ensure estimates in all blocks that had an estimated silver value.

The MIK estimates used 16-48 samples; search radii and octant constraints were identical to the OK estimates.

The oxide zone was estimated using a dynamic search parallel to topography.

The maximum extrapolation distance will be somewhat less than the maximum search radius due to the octants constraints requiring at least 2 drill holes. Maximum extrapolation distance is around 90m.

It is assumed that an Ag-Pb-Zn sulphide concentrate will be produced. All elements have been estimated independently for each domain.

No assumptions were made regarding the correlation of variables during estimation because each element was estimated independently. Some elements do show moderate to strong



			correlation in the drill he that this correlation will			variogram model	s effectively guarantees
			A number of potentially	deleterious eler	ments have beer	n estimated, inclu	iding As, Sb and S.
				er elements; few			samples, using a similar ng the wider distribution
			major stratigraphic bo	undaries, which	were used as h	ard boundaries	through the use of the during estimation. The mineralisation parallel
			No grade cutting was applied to any of the grade estimates because none of the grade distributions are strongly skewed. Sensitivity analysis on Ag estimates indicated that grade cutting has minimal impact on the grade estimates.				
			The new model was validated in a number of ways – visual comparison of block and drill hole grades, statistical analysis, examination of grade-tonnage data, and comparison with previous models. All the validation checks indicate that the grade estimates are reasonable when compared to the composite grades, allowing for data clustering.				
			new model has higher as the old model. Diffe	tonnage and me rences are mostl more assays for	etal content, but s y attributed the s or silver. This in	similar grades at substantial quanti dicates that the	ious 2017 version. The the same cut-off grade ty of new drilling: ~18% new Mineral Resource
			The deposit remains u	nmined so there	is no reconciliati	on data.	
Moisture	•	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimate of the density samples				en determined for some ven drying.
Cut-off parameters	•	The basis of the adopted cut-off grade(s) or quality parameters applied.	The cut-off grade is an equivalent Ag (EqAg) value, based on grades and recoveries for Ag, Pb, Zn and Au as shown below. The equivalent silver formula is: EqAg = Ag + Pb*0.002612 + Zn*0.003569 + Au*74.25 (all units g/t)				
				Metal	Price/Unit	Recovery	
				Ag	US\$ 27.5/oz	86.2%	
				Pb	US\$ 2,350/t	84.7%	



			Zn	US\$ 2,950/t	92.2%	
			Au	US\$ 2,200/oz	80%	
		scale of operation envi for underlying price vol	sioned for Bowd atility.	ens, based on p	reliminary mining	the mining method and studies and accounting
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It may not always be possible to make assumptions regarding mining methods and parameters when estimating Mineral Resources. Where no assumptions have been made, this should be reported.</li> </ul>		nethod implicitly	incorporates in	ternal mining dilu	tion at the scale of the g dilution in the Mineral
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources. Where no assumptions have been made, this should be reported.		treated by con	ventional froth	flotation to prod	work. It is assumed that luce a bulk Ag-Pb-Zn
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	built and licensed facili	ties. rocess residue o	disposal will be		place on site in purpose
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	on selected core interv	als for nominal 1 in 254 drill hole	l 0cm samples. T es. There are al	he Bowdens data so a number of	(Archimedes principle) abase contains 7,076 of density measurements arsion method results.
		and moisture content.		, 0	Ū	o determine dry weight
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> </ul>		Pass 3 = Inferre	d. Pass 4 is not o	classified as part	g; Pass 1 = Measured, of the Mineral Resource



	Whether the result appropriately reflects the Competent Person's view of the deposit.	This scheme is considered to take appropriate account of all relevant factors, including the relative confidence in tonnage and grade estimates, confidence in the continuity of geology and metal values, and the quality, quantity and distribution of the data.  The classification appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	This Mineral Resource Estimate has been reviewed by SVL and HSC personnel and no material issues were identified.
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	be in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the estimator's experience with a number of similar deposits elsewhere. The main factor that affects the relative accuracy and confidence of the Mineral Resource estimate is drill hole spacing, because there are no strong geological controls on the primary mineralisation.  The estimates are local, in the sense that they are localised to model blocks of a size considered appropriate for local grade estimation. The tonnages relevant to technical and economic analysis are those classified as Measured and Indicated Mineral Resources.

# **Section 4 Estimation and Reporting of Ore Reserves**

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul> <li>The Mineral Resource estimate that this reserve is based upon has been compiled by H&amp;S Consultants Pty Ltd, using data supplied by Bowdens Silver.</li> <li>The models produced incorporated all mineralisation in the Bowden deposit that has been generated prior to July 2024.</li> <li>Silver and Gold were estimated by recoverable multiple indicator kriging (MIK) into 25 x 25 x 5.0m panels. These estimates were then localised by discretising the metal distribution into sub-blocks with the dimensions of the selective mining unit (SMU) of 12.5 x 12.5 x 2.5m. All other attributes were estimated by OK into sub-blocks, including Pb, Zn, S, Cu, As, Cd, Sb, Mn, Fe and dry bulk density.</li> <li>The Mineral Resources reported are inclusive of the Ore Reserves.</li> </ul>
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Andrew Hutson of Resolve Mining Services Plus (Competent Person) visited the site between 3 <sup>rd</sup> and 4 <sup>th</sup> July 2024.



Criteria	JORC Code explanation	Commentary
	If no site visits have been undertaken indicate why this is the case.	The site visit included viewing all areas selected for development including the mining and processing areas plus the waste dump and tailings storage locations. Additionally, meetings were undertaken with technical staff and management.
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul> <li>The Ore Reserve estimate was based on the Optimised Feasibility Study (ODFS) for the Project on data built from the approvals processes and updated from the 2018 Definitive Feasibility Study (DFS).</li> <li>Financial modelling completed to support this Ore Reserve estimate is based on the ODFS and this modelling shows that the Ore Reserve is economically viable at metal prices supported by consensus long term price scenarios.</li> <li>It should be noted the economic analysis does not include revenue from the Inferred resource.</li> </ul>
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	Ore cut-off values are based on NSR values where the reporting NSR is defined as the net value A\$ value per tonne of ore after consideration of all costs (mining, process, general and administration, product delivery), metallurgical recoveries, sustaining capital, concentrate metal payabilities and treatment charges, transport costs and royalties.  The NSR out off applied for the definition of ore and wester within the production plan is A\$20t.
Mining factors or		The NSR cut-off applied for the definition of ore and waste within the production plan is A\$30/t.
assumptions	<ul> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> </ul>	<ul> <li>The MIK modelling process accounts for any internal dilution within the orebody. No provision for edge dilution has been applied to the MIK modelling, and 100% mining recovery is applied.</li> <li>The mined tonnage and diluted grade is based on the block model size, with excavator based open pit mining, and equipment size appropriate minimum mining widths applied.</li> <li>Pit optimisations utilising the Lerchs-Grossmann algorithm with industry standard software were undertaken. This optimisation utilised the Mineral Resource model together with cost, revenue, and geotechnical inputs.</li> </ul>
	<ul> <li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<ul> <li>The resultant pit shells were used to develop detailed pit designs with due consideration of geotechnical, geometric, and access constraints. These pit designs were used as the basis for production scheduling and economic evaluation.</li> <li>The mining method is conventional open pit whereby excavation, loading and hauling will be executed by 200t excavators matched to 100t trucks after drilling and blasting the majority of the ore and waste.</li> <li>Mine roads are designed to be suitable for the largest equipment travelling along routes typically 25m wide for dual lane traffic.</li> <li>The geotechnical parameters have been applied based on geotechnical studies.</li> <li>During the above process, Inferred Mineral Resources were excluded from mine schedules and economic valuations utilised to validate the economic viability of the Ore Reserves.</li> </ul>
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	• Conventional crush and grind to p80 106µm followed by bulk flotation with regrind, cleaner and recleaner stages producing a single concentrate. Grinding and flotation testwork has



Criteria	JORC Code explanation	Commentary
	Whether the metallurgical process is well-tested technology or novel in nature.	market conditions.
	<ul> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree</li> </ul>	<ul> <li>Deleterious elements have been estimated and factored into revenue calculations.</li> <li>Two bulk samples sites have been blasted and 12 tons of material subject to pulverization and detailed chemical characterizations this work agrees with other assays from drilling.</li> </ul>
	<ul> <li>to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	prepared for regulatory approval.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	infrastructure is situated. All other infrastructure and resources are in existence or have been
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>Mining operating costs have been developed utilising an owner-mining model and generated from first-principles. Equipment manufacturers supplied the underlying cost information which was verified by mining contractor estimates.</li> <li>All costs and prices have been based in Australian dollars. Where a USD conversion is required, a factor of 0.70 has been applied.</li> </ul>
Revenue factors	<ul> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	Detailed feed grades were derived from the mine plan. Financial assumptions, including metal prices, exchange rates and NSR elements, treatment costs and transport, freight, and insurance costs were derived from Bowden corporate financial and economic assumptions. These economic assumptions are generally derived from relevant industry references such as analyst forecasts and industry commercial terms for similar products.



Criteria	JORC Code explanation	Commentary
		Assumed 100% ore mining recovery of the diluted Resource Model.
		Revenue assumptions are based on long-term metal pricings of:
		o Silver = US\$29.00/oz
		○ Lead = US\$1.05/lb
		o Zinc = US\$1.35/lb
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> </ul>	Silver is the primary commodity of the project and has experience ongoing demand increases associated with the growth of renewable energy industries. Demand is currently exceeding supply and is expected to continue to do so for the near future.
	<ul> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> </ul>	No offtake agreements have been entered into. Marketing and smelting terms have been estimated from information provided by relevant entities.
	Price and volume forecasts and the basis for these forecasts.	
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	An overarching financial model of the Bowdens project, prepared by Silver Mines, using mining inputs prepared by Resolve, and other inputs consistent with the Ore Reserve estimate, indicates the project is economically viable with a positive NPV.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	Sensitivity of the Bowdens Project to changes in the key drivers of silver price, mining cost, processing cost and geotechnical pit slope were carried out, and showed the project NPV to be most sensitive to significant changes in sales price.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Silver Mines continues to negotiate a range of commitments with private landowners through the Land Access Agreement process and also through acquisition of freehold property.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	It is expected all necessary approvals and licenses will be forthcoming when applied for progressively over the next phase of the project.
	Any identified material naturally occurring risks.	
	The status of material legal agreements and marketing arrangements.	
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	Ore Reserves reported here are classified as both Proved and Probable as they are derived from Measured and Indicated Mineral Resources in accordance with the JORC Code (2012).



Criteria	JORC Code explanation	Commentary
	Whether the result appropriately reflects the Competent Person's view of the deposit.  The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	The Competent Person is satisfied that the stated Ore Reserve classification reflects the outcome of technical and economic studies.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	External audits of Ore Reserve Estimate have not been undertaken.      The Mineral Reserve estimate, mine design, scheduling, and mining cost model has been subject to internal peer review processes by Resolve Mining Solutions. No material flaws have been identified.
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantity the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>Reporting of the project Ore Reserve considers;</li> <li>the Mineral Resources compliant with the JORC Code 2012 Edition,</li> <li>the conversion of these resources into an Ore Reserves, and</li> <li>the costed mining plan capable of delivering ore from a mine production schedule</li> <li>Dilution of the Mineral Resource model and an allowance for ore loss was included in the Ore Reserve estimate. All the Mineral Resources intersected by the open pit mine designs classified as Measured and Indicated Resource has been converted to Proved and Probable Ore Reserves after consideration of all mining, metallurgical, social, environmental, statutory and financial aspects of the Project.</li> <li>The mine planning and scheduling assumptions are based on current industry practice, which are seen as globally correct at this level of study.</li> <li>The project team has estimated the cost estimates and financial evaluation with specialist consultants and team members, which are considered sufficient to support this level of study. The accuracy of the cost estimate is +/-15%.</li> <li>Ore Reserve is most sensitive to unfavourable changes in factors that influence revenue. These include mining dilution and ore loss, processing recovery, and silver price. Processing recovery has been based upon included feed grades and metallurgical testwork. Mining dilution and ore loss have been tested to within industry benchmarks for global values.</li> </ul>