



*Annual General Meeting*

*8 November 2019*

# Disclaimer

---

The material in this presentation contains certain forecasts and forward-looking information, including regarding possible or assumed future performance or potential growth of Silver Mines Limited (“SVL”). Such information is not a guarantee of future performance and involves unknown risks and uncertainties, as well as other factors, many of which are beyond the control of SVL. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

No representation or warranty, expressed or implied, is made or given by or on behalf of SVL, any of SVL’s directors, or any other person as to the accuracy or completeness or fairness of the information or opinions contained in this presentation and no responsibility or liability is accepted by any of them for such information or opinions or for any errors, omissions, misstatements, negligent or otherwise, or for any communication written or otherwise, contained or referred to in this presentation.

Accordingly, neither SVL nor any of the SVL directors, officers, employees, advisers, associated persons or subsidiary undertakings shall be liable for any direct, indirect or consequential loss or damage suffered by any person as a result of relying upon the statement or as a result of any admission in, or any document supplied with, this presentation or by any future communications in connection with such documents and any such liabilities are expressly disclaimed.

Nothing in this material should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

# Silver Mines Limited Introduction

---

## **BOWDENS SILVER A MAJOR ASSET FOR DEVELOPMENT**

Feasibility complete for 2.0 Mtpa development.

One of the largest undeveloped silver deposits globally.

New South Wales, Australia is a safe quality jurisdiction.

## **UNLOCKING A MAJOR MINERALISED SYSTEM THROUGH EXPLORATION SUCCESS**

Major Exploration Targets at Bowdens Silver and Barabolar:

Confirmed significant extensions to mineralisation close to mine.

Discovered new base-metal massive sulphide including gold.

Discovered porphyritic felsic intrusion under the current resource.

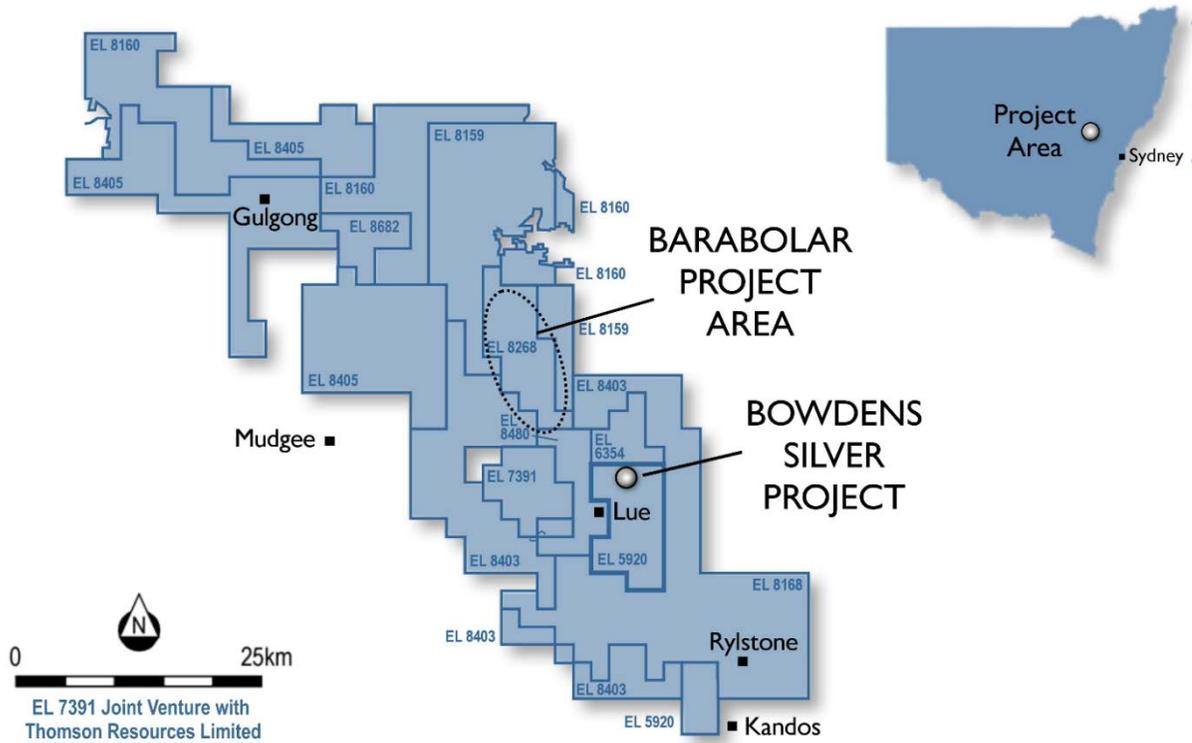
Discovered extensive mineralised skarn with copper/gold targets.

## **8000 METRES DRILLING PROGRAM COMMENCING**

# Silver Mines Limited Snapshot

<u>Capital Structure</u>		ASX:SVL		
Shares on Issue		867.5m	Options	
Current Share Price		A\$0.10	Sept 2021 @ \$0.06	118.1m
Undiluted Market Capitalisation		A\$86.7m	Aug 2021 @ \$0.10	8.5m
Cash (end September 2019)		A\$10.6m	3 year milestone @ \$0.20	5.0m
<u>Directors</u>		<u>Institutional Shareholders</u>		
Keith Perrett, Chairman		Sprott		Konwave
Anthony McClure, Managing Director		Regal		Brick Lane
Peter Langworthy, Non Executive Director				
Jonathan Battershill, Non Executive Director				
<u>Assets</u>				
Bowdens Silver	Mineral Resources	163 Moz Silver	275 Moz Silver Equivalent	
	Ore Reserve	66 Moz Silver	97 Moz Silver Equivalent	
Major Exploration Package Central New South Wales, Australia, Bowdens Silver Extensions and the Barabolar Project, the exploration focus		High order targets include precious metals epithermal, base metal VMS, Orogenic Gold, Intrusion Related Porphyry.		

# Quality Jurisdiction - New South Wales, Australia



- New South Wales, Australia a quality jurisdiction.
- Major minerals projects in the state include;
  - Cadia/Ridgeway, Newcrest (650,000oz Au, 65,000t Cu pa).
  - Cowal, Evolution (260,000oz Au pa).
  - Northparkes, CMOC (60,000t Cu, 50,000oz Au pa).
  - Plus coal mining exports (170 million tonnes pa).
- Bowdens Silver Project Classified as a State Significant Development.

# Bowdens Silver – A Major Asset

- 100% owned.
- Mineral Resource 275 Moz Ag Eq
- One of the largest undeveloped silver deposits in the world.
- Feasibility complete.
- EIS to be submitted shortly along with application for development approvals.
- Primary aspects of EIS now complete with positive outcomes across the board.

Gold : Silver Ratio Since 2000



- A high Gold : Silver ratio (now at 84:1) precedes a very positive silver market.

# Silver Uses

## PHOTOGRAPHY

*BURNS TREATMENT  
AND WOUND DRESSING*

Mobile Phones

Washing machines

Mirrors

## AERONAUTICAL AND SPACE TECHNOLOGY

**Solar panels**

*Switches*-light switches, microwaves, toys, telephones, ovens

& computers. If it's got an on/off switch it's probably got silver.

## BATTERIES

**Highest electrical and thermal conductivity of any element**

**Thermal Windows**

**CARS – more than 40 silver-tipped switches are found in cars.**

Air-conditioners

**Water purification – silver ions are replacing chlorine in water filtration in hospitals, schools and public pools.**

**Aircraft navigation equipment**

Refrigerators

## Dentistry

Jewellery

Pre-paid road toll passes

**Silver ions can kill up to 650 types of bacteria, algae and fungi**

**Nano Technology – silver is added to fabrics, appliances, carpets and air-purifiers killing harmful bacteria.**

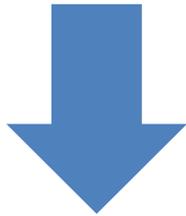
SILVER

Ag

# Bowdens Silver Feasibility Study

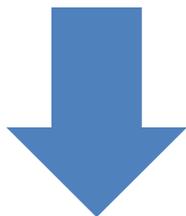
**September 2017**

*Mineral Resource Complete  
(275 Moz Ag Eq)*



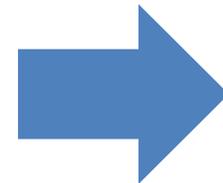
**May 2018**

*Ore Reserve Complete  
(97 Moz Ag Eq)*



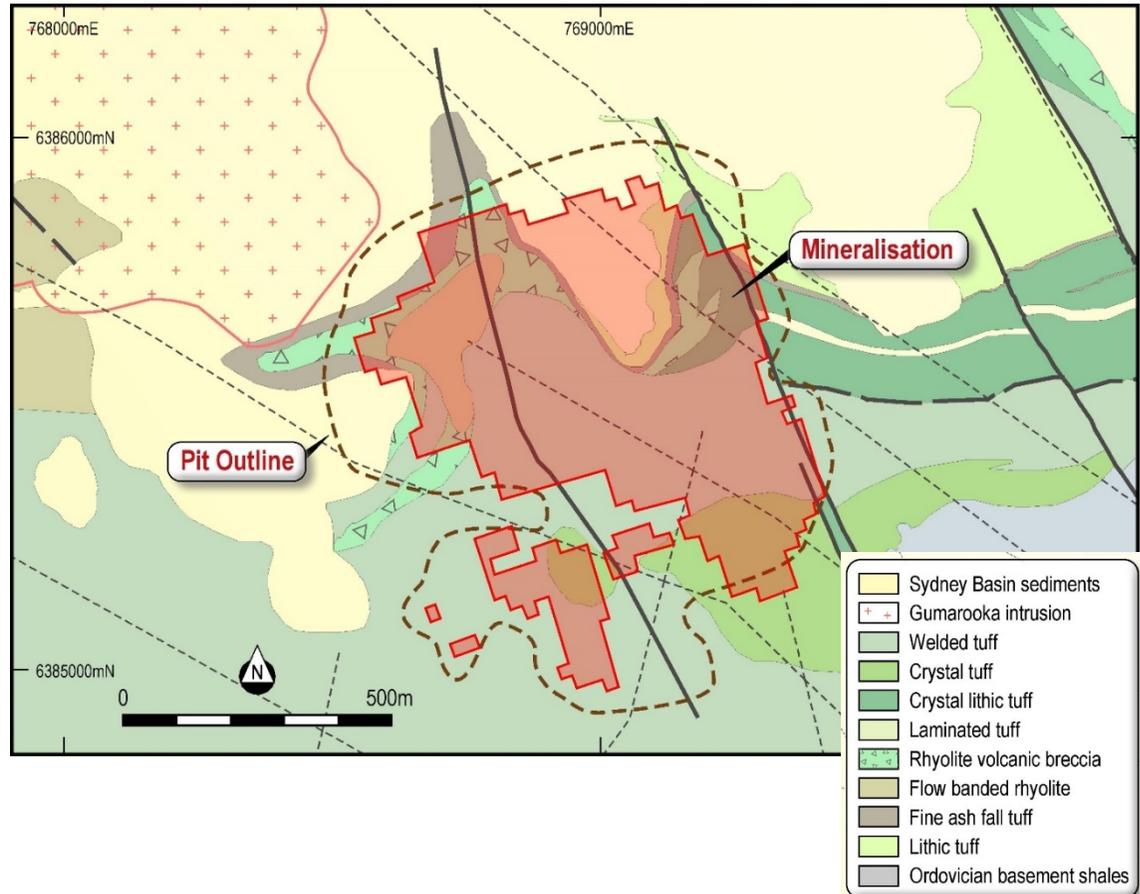
**June 2018**

*Feasibility Study Complete*



**2019/2020**

*EIS and Approvals*



# Bowdens Silver Feasibility Study

<b>Physical Metrics</b>	<b>Unit</b>	<b>Value</b>
Production Life	Years	15.5
Ore Mined	Mt	29.9
Waste Mined	Mt	48.2
W:O Strip Ratio	x	1.6
Ag Recovered in Concentrate	Moz	52.91
Zn Recovered in Concentrate	kt	108.0
Pb Recovered in Concentrate	kt	79.3
<b>Financial Metrics</b>	<b>AUD M</b>	<b>USD M</b>
Revenue	1,899.5	1,424.7
Operating Expenses	1,340.8	1,005.6
Operating Margin	558.7	419.0
<b>Capital Costs</b>	<b>AUD M</b>	<b>USD M</b>
Initial	246.0	184.5
LOM Sustaining	53.9	40.4
<b>Unit Costs (Silver Basis)</b>	<b>AUD/ounce</b>	<b>USD/ounce</b>
C1 Costs	15.47	11.60
All in Sustaining Cost (AISC)	17.25	12.94

# Environmental Impact Statement (EIS)

---

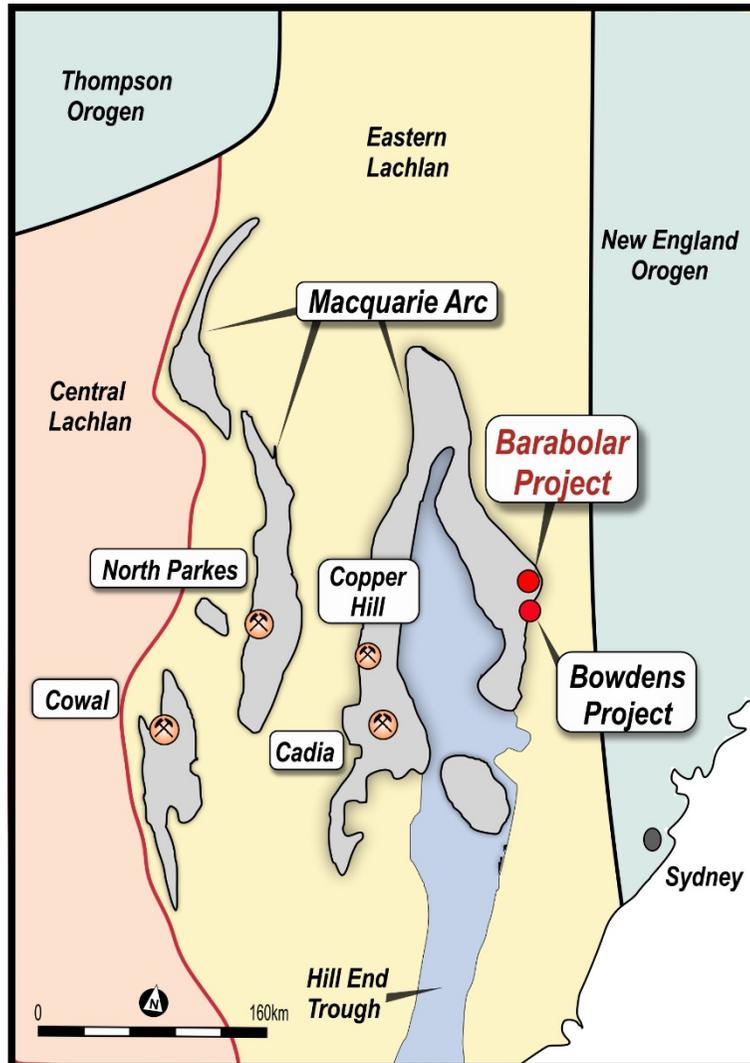
- Preliminary key components of the EIS confirm favourable outcomes.
- Minimal impacts on surface water and groundwater.
- A new water pipeline to be built providing water for processing sourced from nearby coalfields.
- Substantial local economic benefits for a high unemployment jurisdiction.
- Peak workforce 320 during construction, 230 during operations.
- Air quality and health parameters show no exceedances and are negligible during the life of the mine.
- Progressive rehabilitation plan for the life of the mine.
- Recent decisions in coal mining have little bearing on Bowdens.

# Bowdens Silver Exploration

## *A Major Silver System*



# Regional Geology

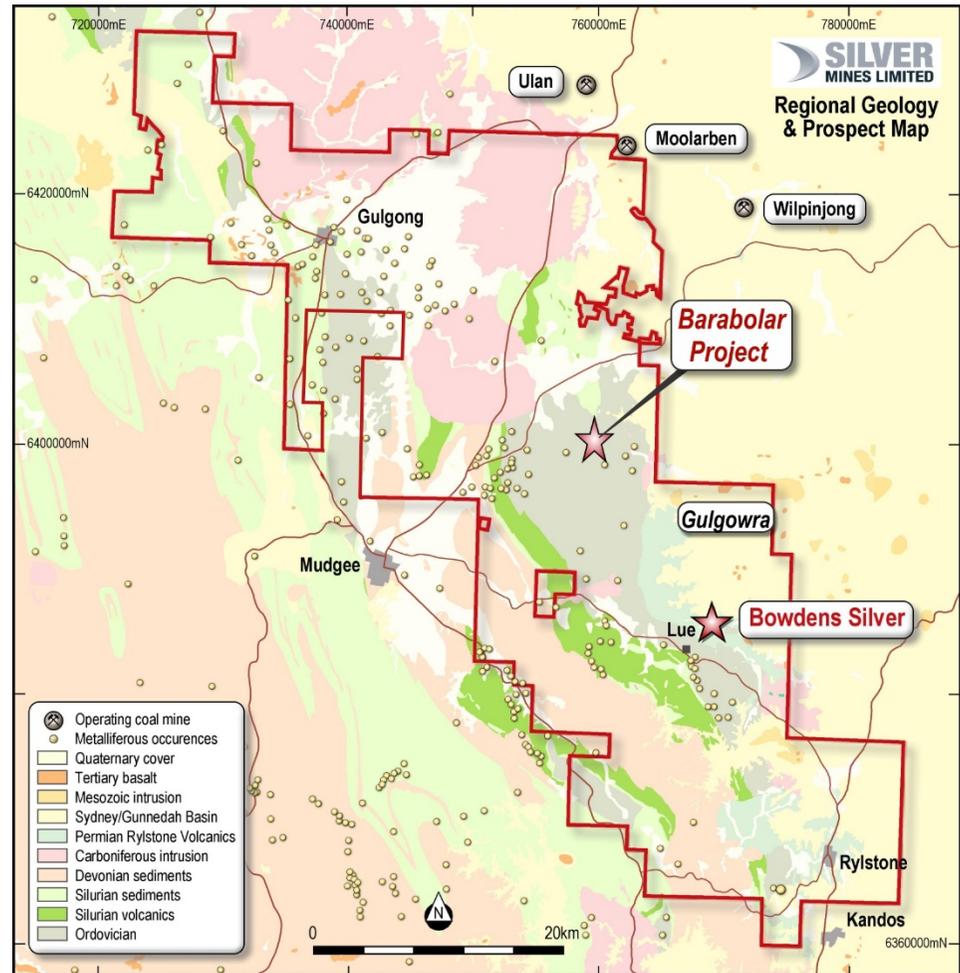


Basement Paleozoic geology, Central NSW

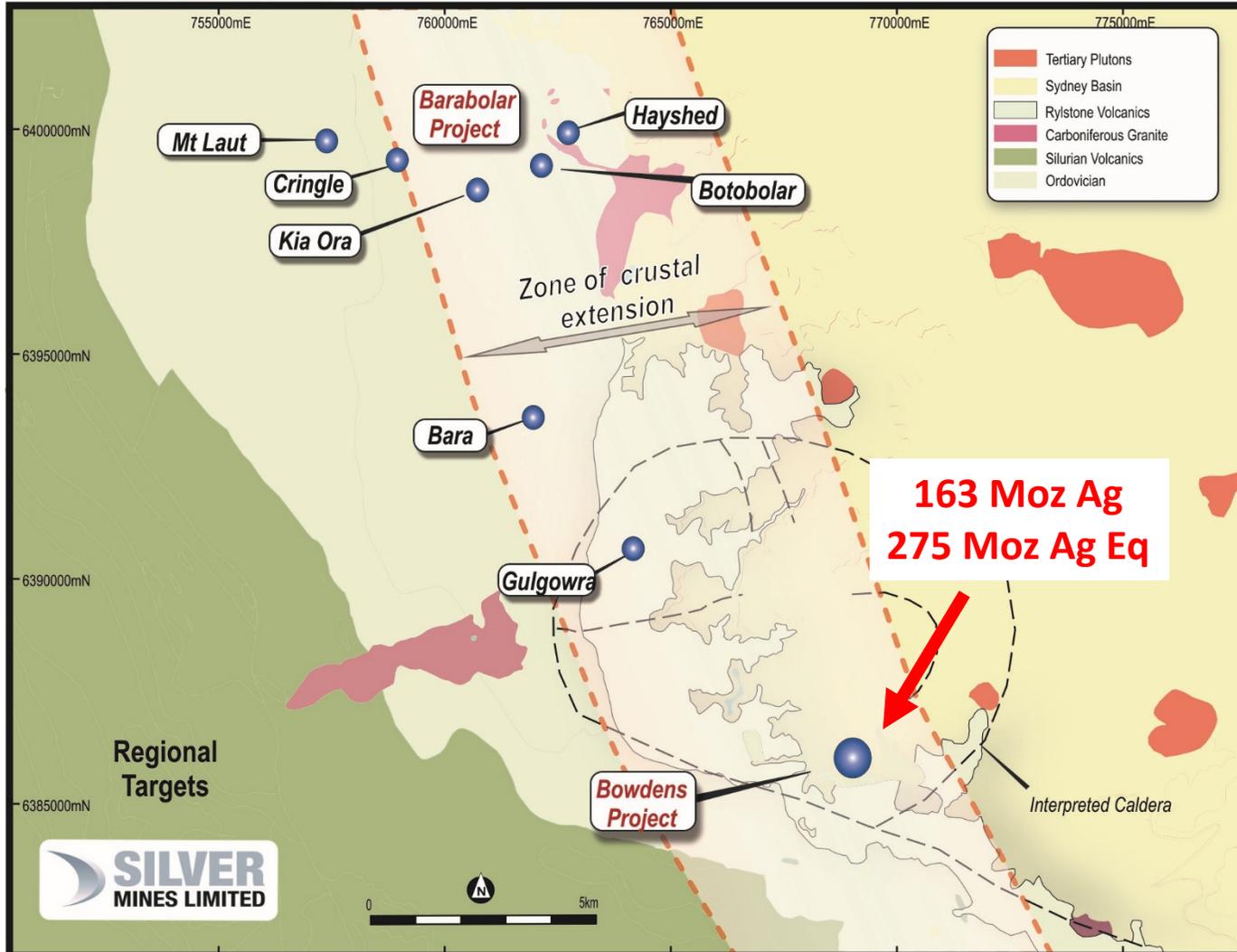
- The Ordovician Macquarie Arc/Lachlan Fold Belt of Eastern Australia contains preserved porphyry volcanic arc environments.
- Macquarie Arc of NSW contains world-class;
  - Cadia/Ridgeway,
  - Cowal,
  - Northparkes and others.
- The Bowdens portfolio demonstrates that the eastern limb of the Macquarie Arc has the potential for significant mineral systems.
- Substantial work by UNSW.

# Regional Geology

- Extensive tenement holding (2007 km<sup>2</sup> = 496,000 acres) controlled by Silver Mines.
- Northeast corner of Lachlan Fold Belt & Macquarie Arc.
- Wide range of prospective deposit types over different time periods (Ordovician, Siluro-Devonian, Carboniferous and Permian).
- Mineral deposit styles/potential include:
  - Cadia/Ridgeway style Porphyry (Cu-Au-Mo).
  - Epithermal (Au-Ag).
  - McPhillamy's style Shear hosted gold with base-metal association.
  - Woodlawn style Volcanogenic Massive Sulphide (VMS).
  - Bowdens Style epithermal (Ag-Zn-Pb).

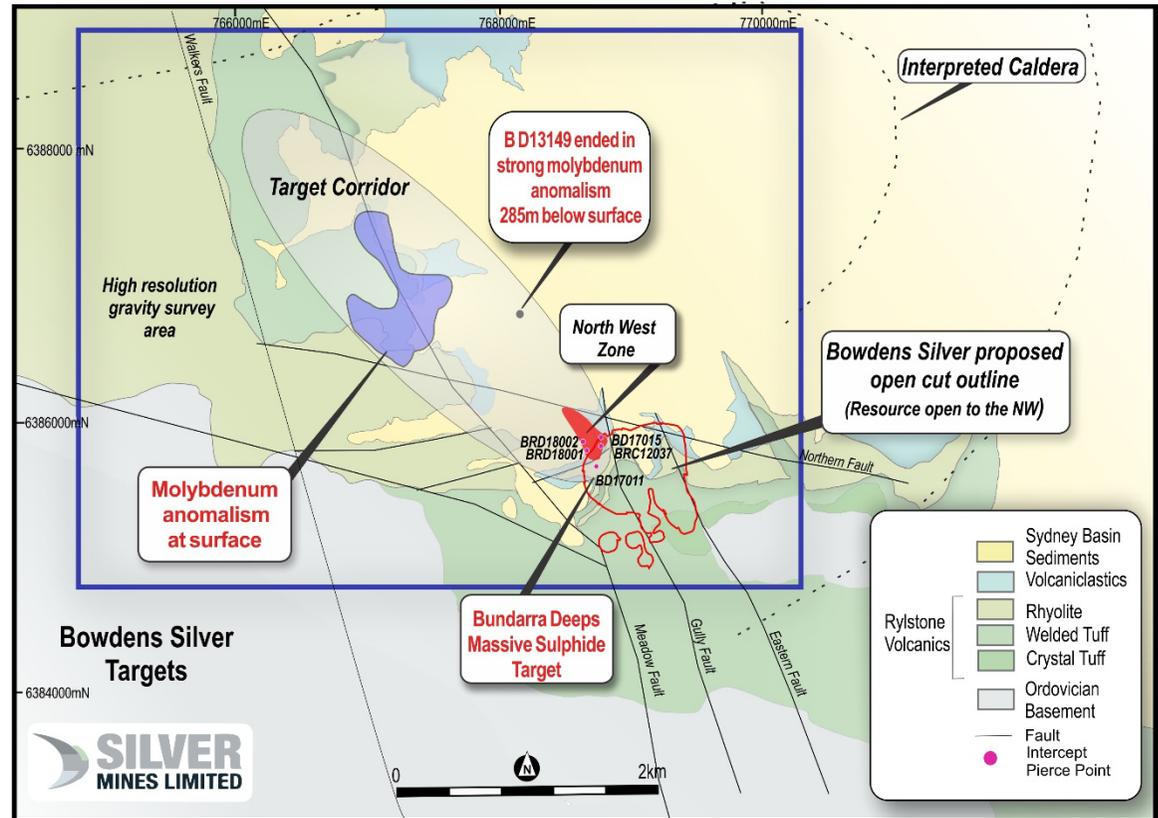


# Site Geology



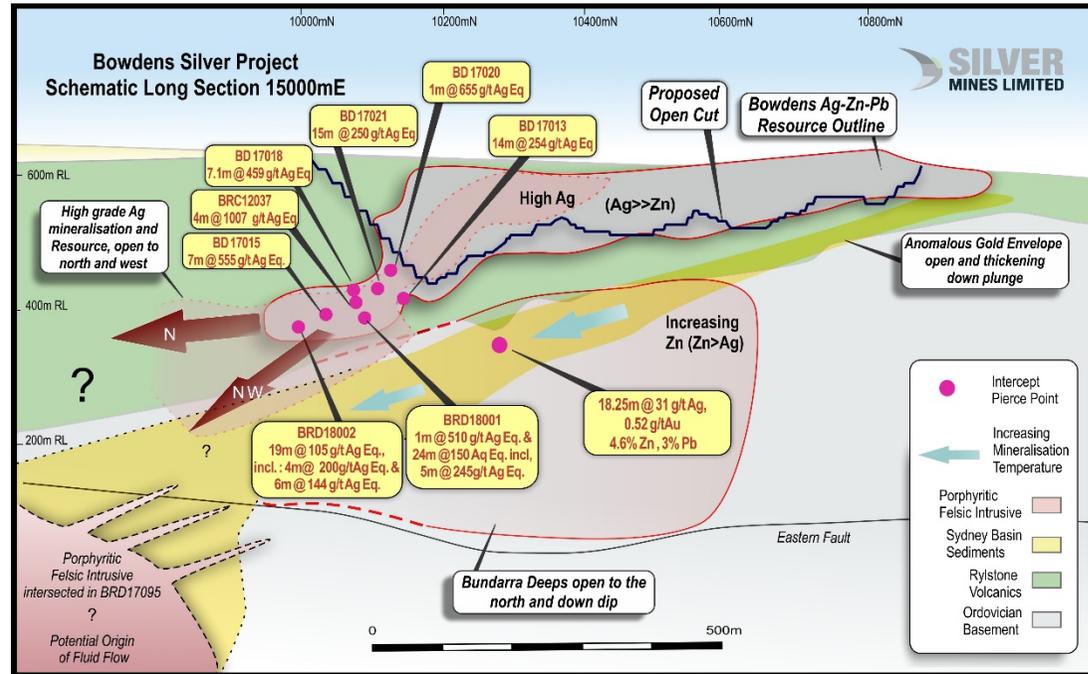
# Bowdens Silver Extensions

- Expanded exploration program commenced in September 2019 to assess along strike and depth extensions to the Bowdens Silver Deposit.
- Assess Bundarra Deeps where massive to semi-massive sulphide including gold has been discovered over +30m widths.
- Assess the discovery of porphyritic felsic intrusion associated with strong metal zonation consistent with porphyry associated gold-copper mineralisation.
- Assess the NW target corridor targeted with molybdenum anomalism, multivariate geochemistry, sulphur isotope work and geological modelling that indicates an intrusive source to the northwest of Bowdens.



# Bowdens Silver Extensions

- Assess the Northwest Zone that contains high-grade silver and base metal mineralisation between 10 and 30 metres thick currently defined over a strike length of 150 metres and open in several directions.
- Conducted high resolution geophysical gravity program covering 30km<sup>2</sup> – complete with interpretation being finalised.
- To target buried porphyry source and structural control in the NW target corridor.
- Drilling of up to 4000 metres commencing shortly (subject to approvals).



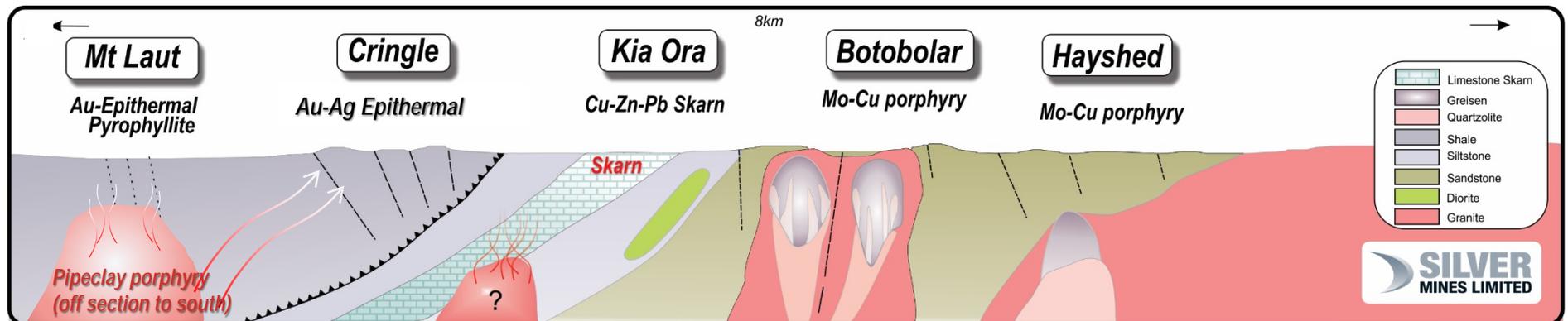
# Barabolar Project

## *Unlocking a Major Mineralised System*

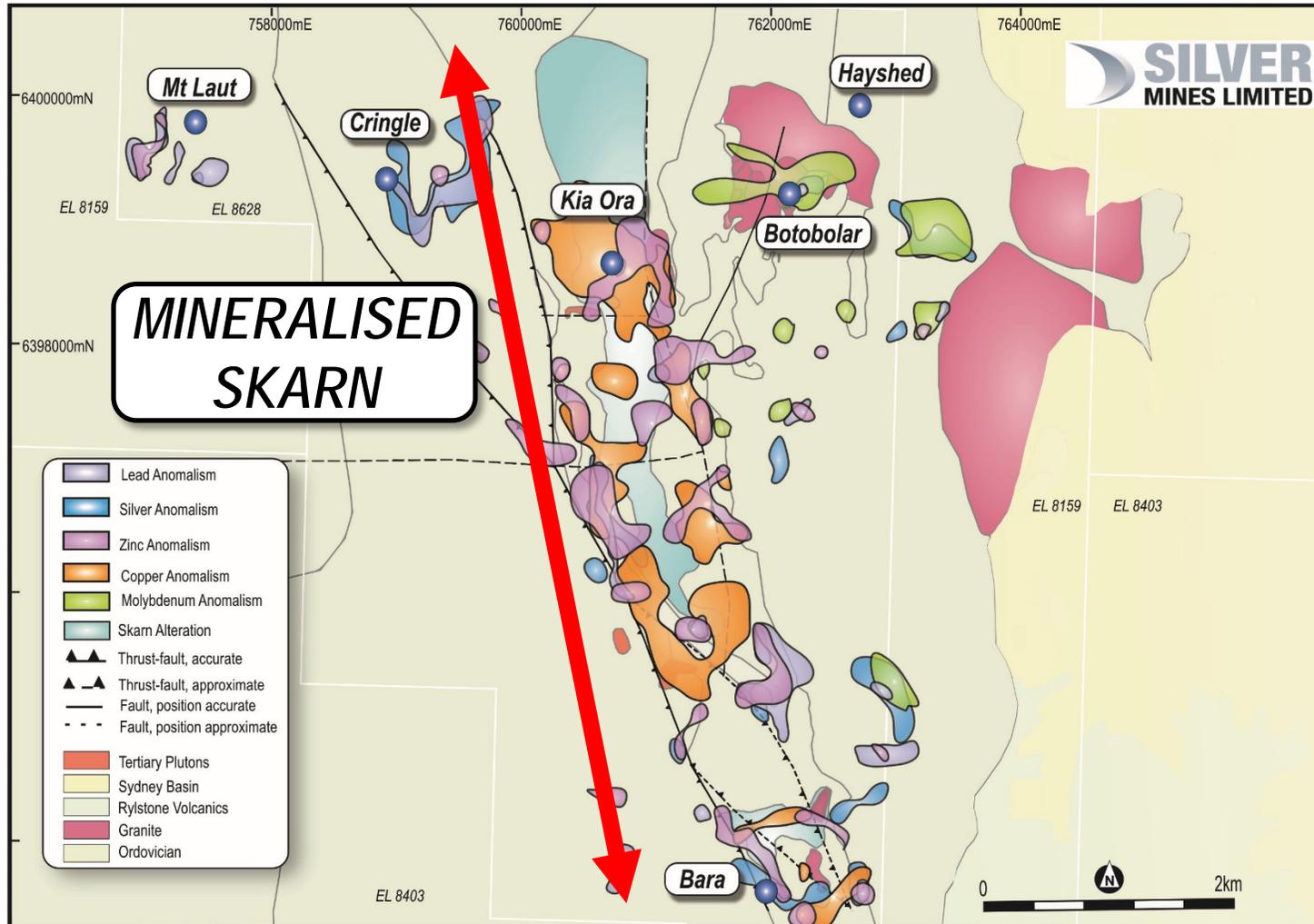


# Unlocking a Major Mineralised System

- Barabolar Project area located 10 kilometres northwest of Bowdens.
- 9000 x 2000 metre corridor of base-metal and precious metal soil anomalies.
- Mineralised skarn mapped over 5000 by 800 metres.
- Porphyry system type alteration assemblages.
- Several high order prospects:
  - Cringle Au-Ag epithermal.
  - Kia Ora Skarn (and proximal porphyry): Cu-Ag-Zn-Au.
  - Botobolar / Hayshed: abundant coarse molybdenite in associated felsic porphyry.

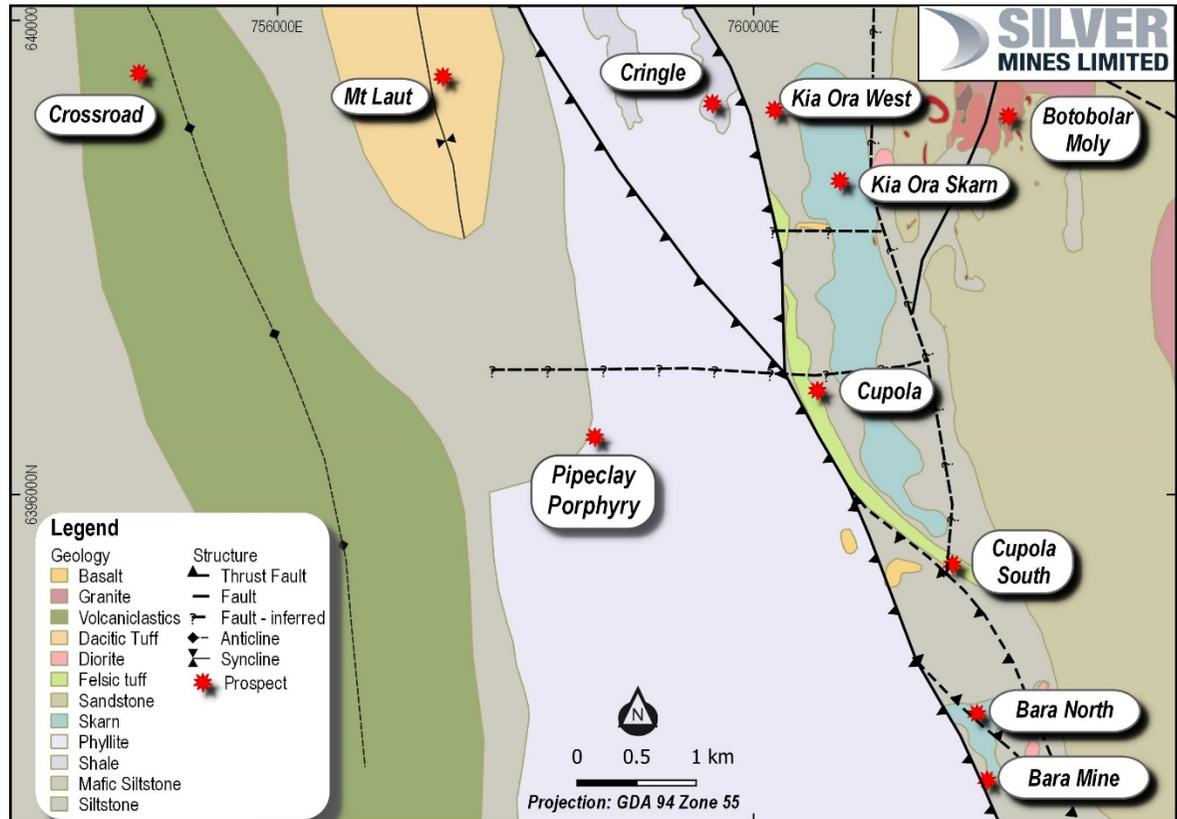


# Unlocking a Major Mineralised System



# Geophysics and Drilling

- Induced Polarisation (IP) program (~30 line kms) completed.
- Substantial gravity survey completed with interpretation being finalised.
- Deep drilling program (up to 4000 metres) commencing early 2020 (subject to approvals).



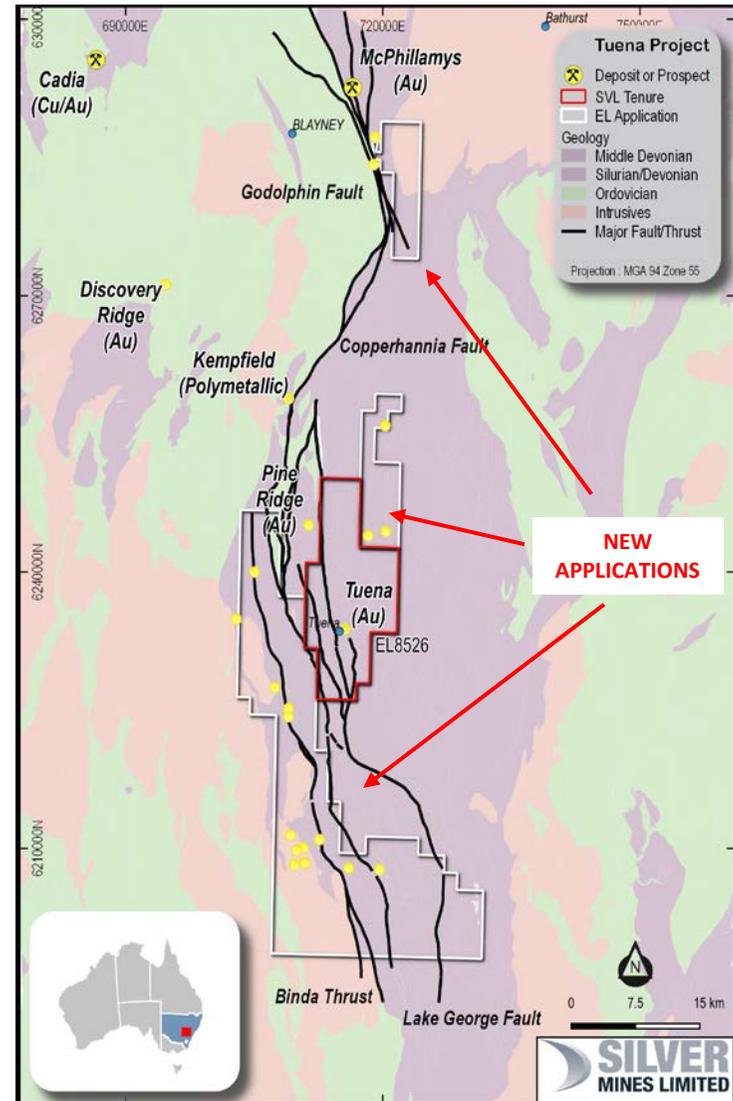
# Tuena

## *Unlocking a New Mineralised System*

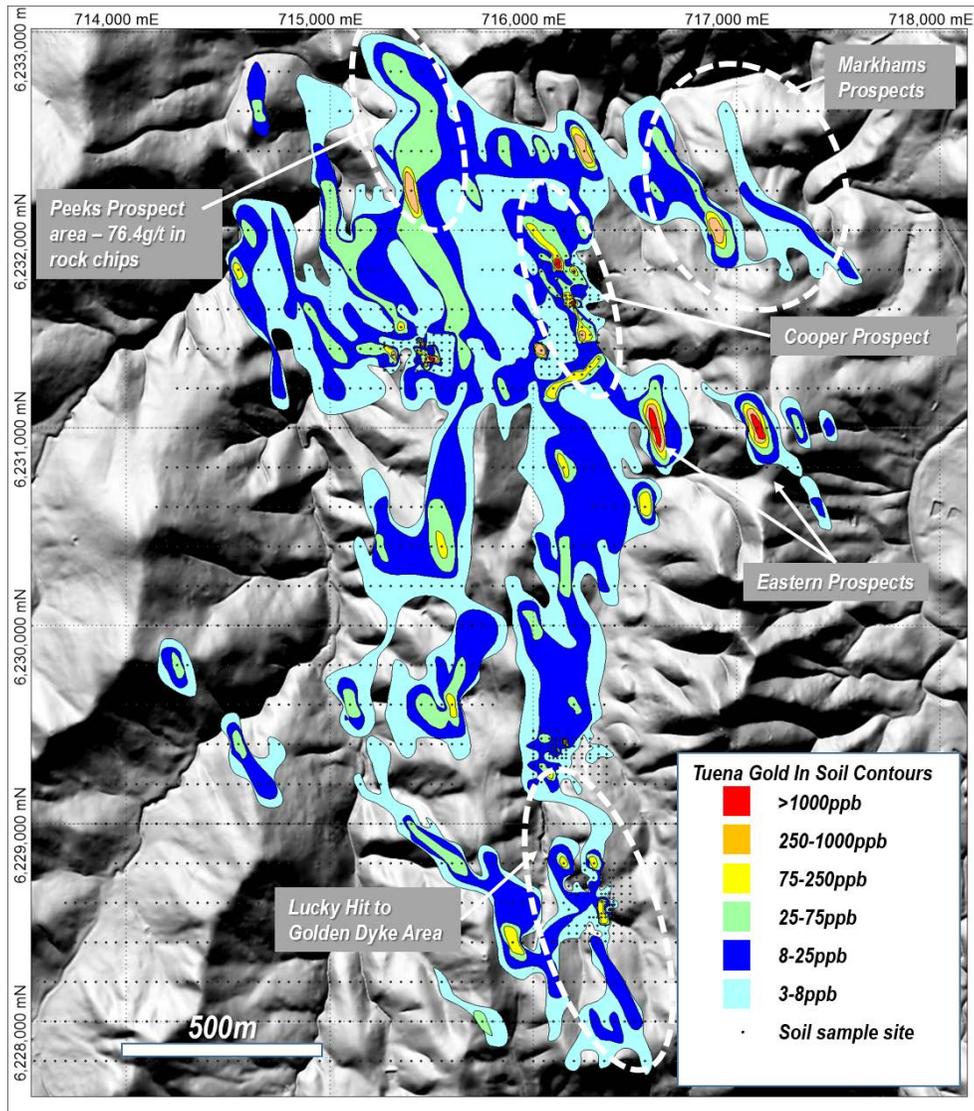


# Tuena

- Located south of Blayney in New South Wales.
- Historic goldfield with minimal exploration work in the modern era.
- Clear geological analogies to the McPhillamys Gold Project (2.0 Moz gold)
- Extensive regional soil sampling program complete and being expanded.
- Mineral system and old workings extend over at least 6 kilometres of strike.
- Reconnaissance mapping is identifying previously unrecorded historic workings and shear zones with substantial width.
- Airborne magnetics and radiometrics survey commencing November 2019.
- Tenement position expanded with 634 km<sup>2</sup> of new exploration license applications.

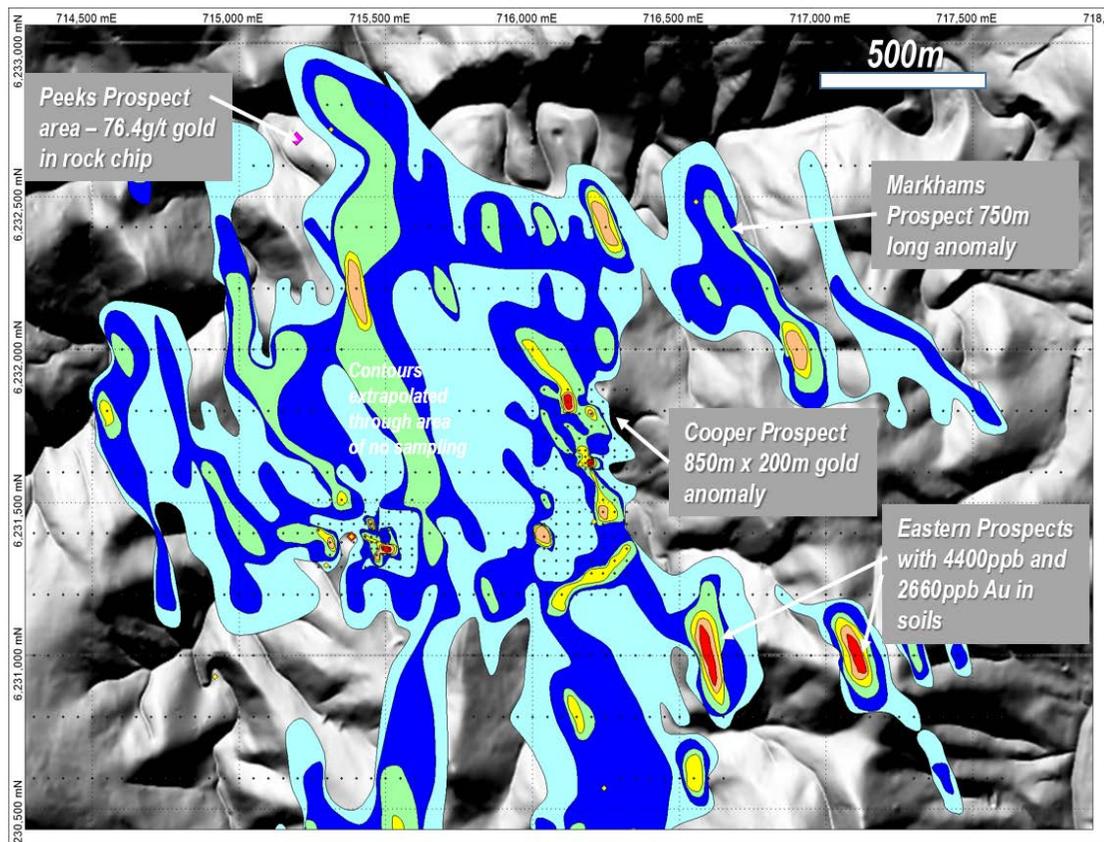


# Tuena



- Substantial gold in soil anomalism over a 5.4km by 1.5km corridor.
- Peeks Reef Prospect 900m x 200m soil anomaly >25ppb gold with individual soil assays up to 268ppb gold and rock chip assays up to 76.4g/t gold.
- Cooper & McKenzie Prospect with 850m x 200m soil anomaly > 25ppb with soil assays up to 1550ppb (1.55g/t) gold.

# Tuena

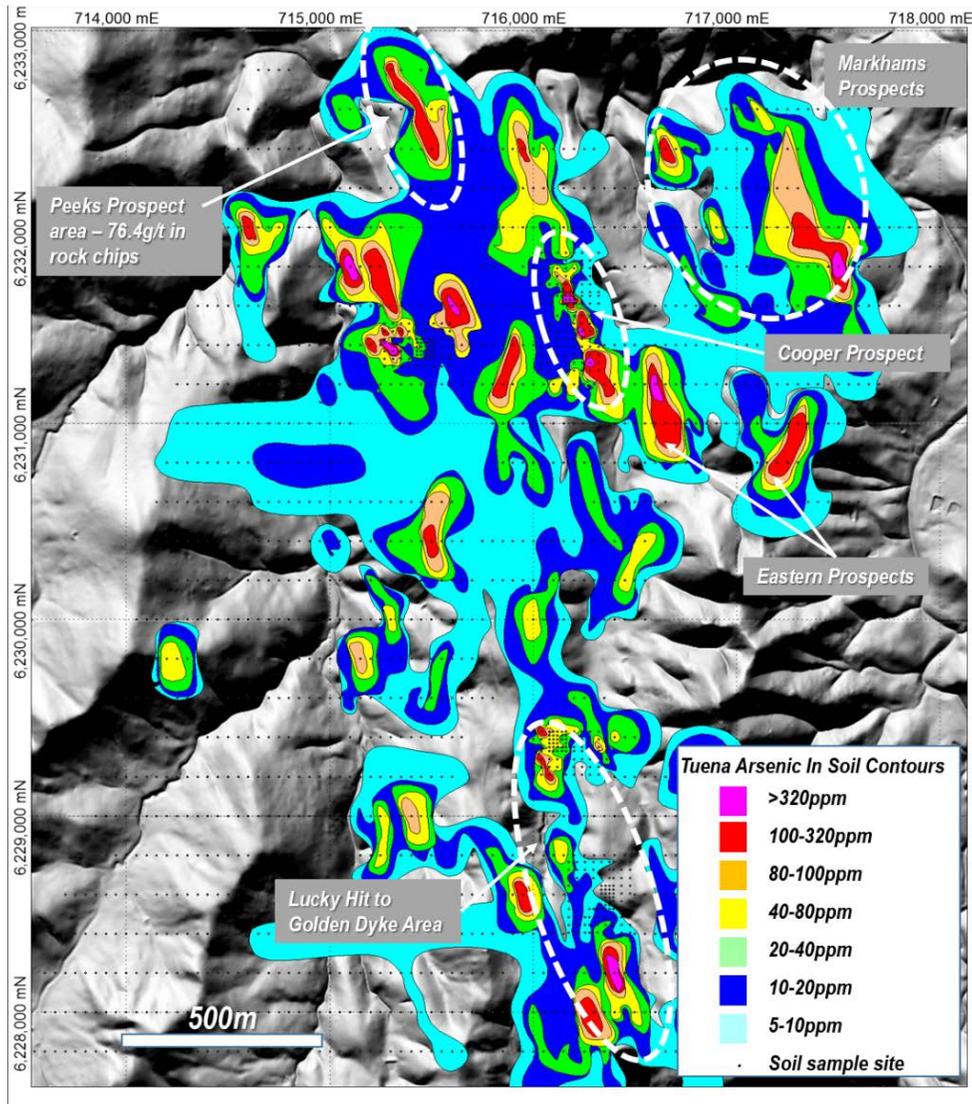


- Gold anomalism northern area.

### Tuena Gold In Soil Contours



# Tuena



- Substantial arsenic (a pathfinder element for gold) in soil anomalism.

# Looking Forward

---

- **Completion of Bowdens Silver Environmental Impact Statement 4<sup>th</sup> quarter 2019.**
- **Submission for Development Consent.**
- **Stronger Market for Precious Metals.**
- **Bowdens Silver new expanded exploration program**
  - 275 Moz silver Eq system open to north and at depth.
  - High grade silver zones and massive sulphide zones exploration program commenced Sept. 2019.
  - Gravity survey complete, up to 4000m deep drilling program commencing shortly (subject to approvals).
- **Barabolar is an outstanding exploration play**
  - 9000 X 2000 metres corridor of base metals and precious metals anomalism.
  - Porphyry system with extensive Cu-Mo-Zn-Ag-Au anomalism to be expanded to the west.
  - Program expanded with a gravity survey complete.
  - Up to 4000m deeper drilling program commencing early 2020 (subject to approvals).
- **Tuena Gold Project is an exciting new gold exploration play.**





# *Appendices*



# Appendix 1 – Bowdens Silver Resource (as at September 2017)

30 g/t Ag Eq Cut	Tonnes (Mt)	Silver Eq. (g/t)	Silver (g/t)	Zinc (%)	Lead (%)	Million Ounces Silver	Million Ounces Silver Eq.
Measured	76	72	45	0.37	0.25	111	175
Indicated	29	59	31	0.38	0.25	29	55
<b>Measured &amp; Indicated</b>	<b>105</b>	<b>68</b>	<b>41</b>	<b>0.37</b>	<b>0.25</b>	<b>140</b>	<b>230</b>
Inferred	23	60	31	0.40	0.28	23	45
<b>Total</b>	<b>128</b>	<b>67</b>	<b>40</b>	<b>0.38</b>	<b>0.26</b>	<b>163</b>	<b>275</b>

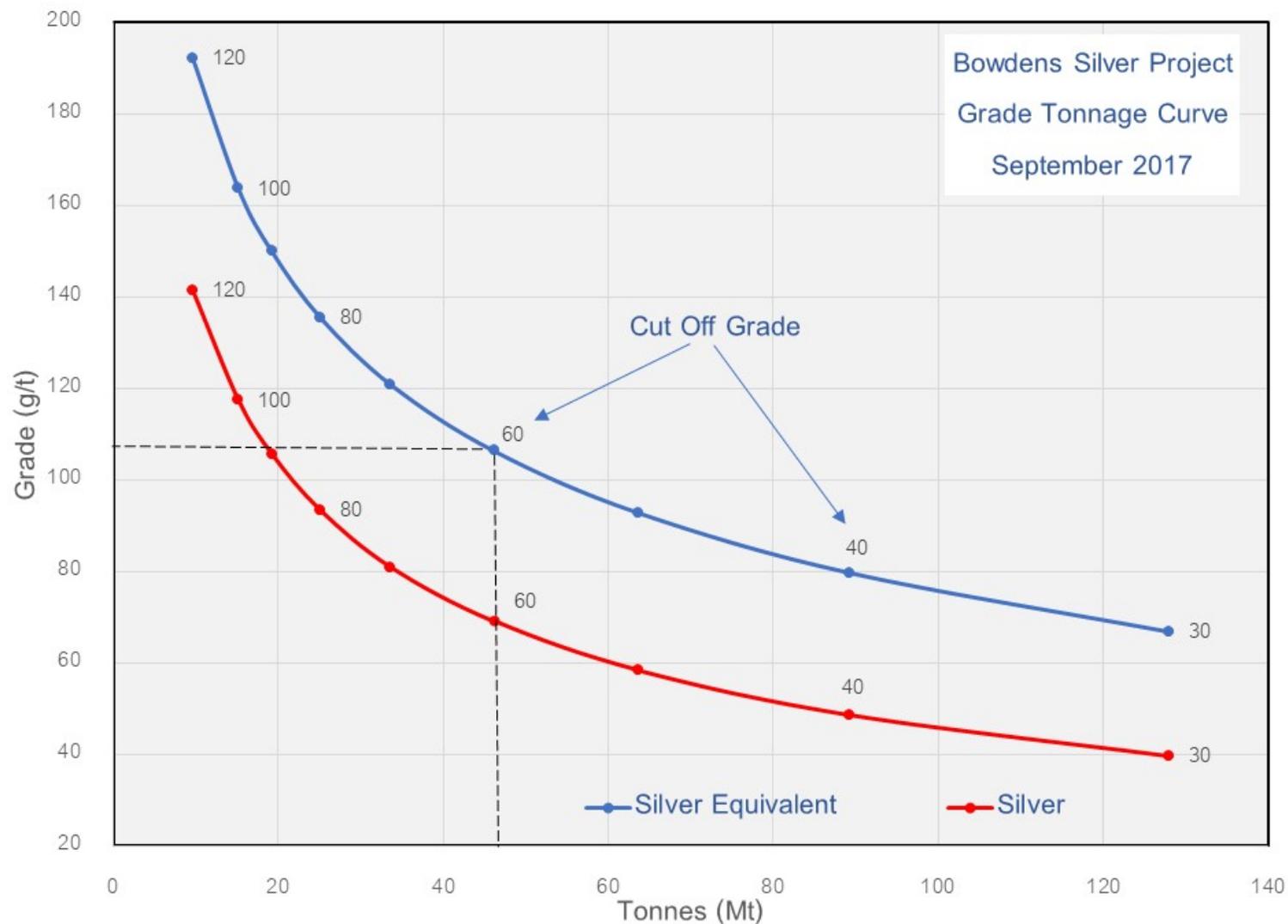
The Bowdens Mineral Resource Estimate has been compiled by H&S Consultants Pty Ltd using Multiple Indicator Kriging and the reporting is compliant with the 2012 JORC Code and Guidelines. For full disclosures refer to the Silver Mines Limited announcement of 19 September 2017.

1. Bowdens' silver equivalent:  $\text{Ag Eq (g/t)} = \text{Ag (g/t)} + 33.48 \times \text{Pb (\%)} + 49.61 \times \text{Zn (\%)}$  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.
2. Bowdens Silver Mineral Resource Estimate is reported to a 30g/t Ag Eq cut off and extends from surface and is trimmed to 300 metres RL which is approximately 320 metres below surface representing a potential volume for open-pit optimisation models.
3. In the Company's opinion, the silver, zinc and lead included in the metal equivalent calculations have a reasonable potential to be recovered and sold.
4. Variability of summation may occur due to rounding.

## Appendix 2 - Bowdens Silver Resource (as at September 2017)

Cut off g/t Ag Eq	Tonnes (Mt)	Silver Eq. (g/t)	Silver (g/t)	Zinc (%)	Lead (%)	Million Ounces Silver	Million Ounces Silver Eq.
0	397.2	30.7	17.6	0.18	0.12	225	392
10	261.7	43.7	25.2	0.26	0.17	212	368
20	185.2	54.6	31.7	0.32	0.21	189	325
<b>30</b>	<b>127.9</b>	<b>66.8</b>	<b>39.6</b>	<b>0.38</b>	<b>0.26</b>	<b>163</b>	<b>275</b>
40	89.2	79.7	48.6	0.43	0.29	139	229
50	63.6	92.8	58.4	0.47	0.33	119	190
<b>60</b>	<b>46.1</b>	<b>106.3</b>	<b>69.1</b>	<b>0.51</b>	<b>0.36</b>	<b>102</b>	<b>158</b>
70	33.7	120.8	80.9	0.54	0.39	87	131
<b>80</b>	<b>25.1</b>	<b>135.5</b>	<b>93.4</b>	<b>0.57</b>	<b>0.42</b>	<b>75</b>	<b>109</b>
90	19.2	149.9	105.6	0.59	0.45	65	93
<b>100</b>	<b>15.1</b>	<b>163.7</b>	<b>117.5</b>	<b>0.62</b>	<b>0.47</b>	<b>57</b>	<b>80</b>
120	9.6	192.3	141.4	0.67	0.53	44	59

# Bowdens Silver Resource



## Appendix 3 - Silver Mines Resource Inventory

Deposit name	Tonnes (Mt)	Silver Eq. (g/t)	Silver (g/t)	Silver (Moz)	Silver Eq. (Moz)	Status
<b>Bowdens Silver</b>	<b>128</b>	<b>67</b>	<b>40</b>	<b>163</b>	<b>275</b>	<b>100% owned</b>
Webbs <sup>1</sup>	1.5	345	245	11.7	16.5	100% owned
Conrad <sup>1</sup>	2.6	206	105.4	9.0	17.5	100% owned
<b>Total</b>				<b>184</b>	<b>309</b>	

1. For further information on the Webbs and Conrad Projects refer to the Silver Mines Limited website.

# Appendix 4 – Bowdens Silver Reserve (as at May 2018)

	Tonnes (Mt)	Silver Eq. (g/t)	Silver (g/t)	Zinc (%)	Lead (%)	Silver Eq. Million Ounces	Silver Million Ounces	Zinc Kilo- tonnes	Lead Kilo- tonnes
Proved	28.6	102.2	69.75	0.44	0.32	93.85	64.05	125.11	91.43
Probable	1.3	84.4	53.15	0.43	0.29	3.60	2.27	5.74	3.91
<b>Total</b>	<b>29.9</b>	<b>101.4</b>	<b>69.01</b>	<b>0.44</b>	<b>0.32</b>	<b>97.45</b>	<b>66.32</b>	<b>130.84</b>	<b>95.33</b>

The Bowdens Reserve has been compiled by AMC Consultants Pty Ltd and is based on the September 2017 Mineral Resource Estimate generated for Silver Mines by H & S Consultants Pty Ltd (see ASX announcement 19 September 2017). For full disclosures refer to the Silver Mines Limited announcement of 30 May 2018.

- Calculations have been rounded to the nearest 100,000 t, 0.1 g/t silver and 0.01% zinc and lead grades respectively. The Ore Reserve is reported by economic cut-off grade with appropriate consideration of modifying factors including costs, geotechnical considerations, mining and process recoveries and metal pricing.
- Bowdens' silver equivalent:  $\text{Ag Eq (g/t)} = \text{Ag (g/t)} + 33.48 * \text{Pb (\%)} + 49.61 * \text{Zn (\%)}$  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.

# Competent Persons Statements

---

## *Ore Reserve*

*The information in this report that relates to Ore Reserves within the Bowdens Silver Project is based on information compiled or reviewed by Mr Adrian Jones of AMC Consultants Pty Ltd who is a consultant to the Company. Mr Jones is a member of the 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 Jones consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.*

*Mr Jones visited the Bowdens mine site during April 2017 to review the operations, consider the conditions of the site, and assess the data collection methods and techniques used by site personnel.*

*The Ore Reserve has been prepared by Mr Adrian Jones, AMC Consultants Pty Ltd, after peer review of the mining section of the Feasibility Study. Other experts relied upon include H & S Consultants Pty Ltd, GR Engineering Services Limited, ATC Williams Pty Limited. and Jacobs Australia Pty Limited, for Mineral Resources, Metallurgy & Process Design and Tailing Storage Facility design. Work on environmental, marketing and logistics and the financial modelling were undertaken by other consultants on behalf of the Company and certified by representatives of Silver Mines.*

## *Mineral Resources*

*The information in this report that relates to Mineral Resources is based on work 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.*

## *Exploration and Drill Results*

*The information in this report that relates to mineral exploration drill results from Bowdens Silver is based on information compiled or reviewed by Mr Darren Holden who is an advisor to the company. Mr 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.*