



# The Webbs Silver Deposit

SMEDG Presentation October 2012

**David Hobby** EXPLORATION MANAGER

 **SILVER**  
MINES LIMITED

# DISCLAIMER

This presentation has been prepared by Silver Mines Pty Limited (Silver Mines or the Company) from currently available public domain information to provide background information to enable recipients to review the business activities of Silver Mines. It is not intended as an offer, invitation, solicitation or recommendation with respect to the purchase or sale of any securities. This presentation should not be relied upon as a representation of any matter that a potential investor should consider in evaluating Silver Mines. The Company and its respective affiliates or any of its directors, agents, officers or employees do not make any representation or warranty, express or implied, as to or endorsement of, the accuracy or completeness of any information, statements, representations or forecasts contained in this presentation, and they do not accept any liability for any statement made in, or omitted from, this presentation. Prospective investors should make their own independent evaluation of an investment in Silver Mines including, without limitation, seeking professional advice.

## **Competent person declaration (Mineral Resource Statement)**

The information in this document that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr Robin Rankin, who is a Member of The Australian Institute of Mining and Metallurgy (AusIMM) and registered as a Chartered Professional Geologist (CPGeo). Mr Rankin is Principal Consulting Geologist and has run the independent geological consultancy GeoRes Pty Ltd since 2006. He has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves' (The JORC Code). Mr Rankin consents to and has provided consent to the inclusion in this report of these matters based on the documentation in the form and in the context in which it appears.

## **Competent person declaration (Exploration Target)**

The information in this document that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr David Hobby, consulting geologist to Silver Mines, who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Hobby has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves' (The JORC Code). Mr Hobby consents to and has provided consent to the inclusion in this report of these matters based on the documentation in the form and in the context in which it appears.

## **Forward Looking Statement**

Certain statements made during or in connection with this document, including, and without limitation to those concerning current or historical exploration targets, upcoming exploration and the results of additional technical work and legal due diligence contain or comprise certain forward looking statements regarding Silver Mines' exploration operations and results. Although Silver Mines believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, testing results, success of business and operating initiatives, changes in the regulatory environment and other government actions and operational risk management. Investors are cautioned that forward looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein. Silver Mines undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of anticipated events.

# OUTLINE

- The Company
- The Market
- Projects
- Webbs Silver Project
- New England projects
- The Future
- Questions

# THE COMPANY

- Silver Mines Limited (ASX: SVL, PLUS: SVLP)
- 163 Million shares on issue = \$8.6 Million market cap
- Highly prospective silver projects in NSW, focused in New England region
- Webbs Silver Project has **11.75Moz at 245g/t Ag**
- Socially and environmentally committed

# THE MARKET - 5 year Silver Price

- Strong industrial growth in the developing world and investment demand, good for silver
- Annual average price in 2011: **A\$35.12\***
- Annual average price in 2009: **A\$14.67\***

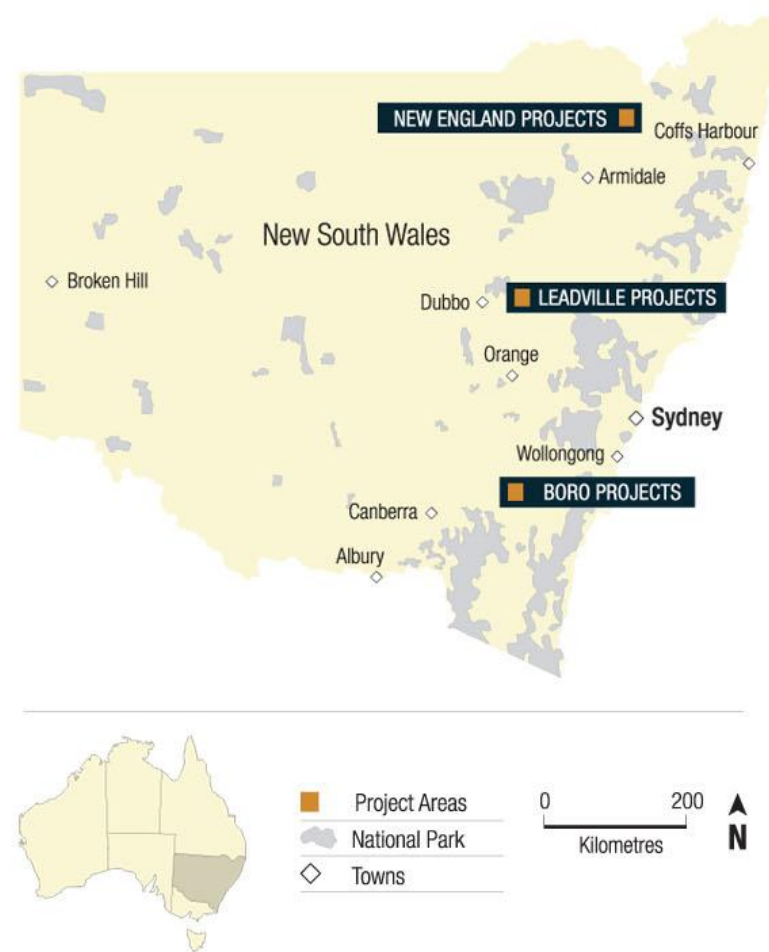
\* Source: The Silver Institute's World Silver Survey 2012



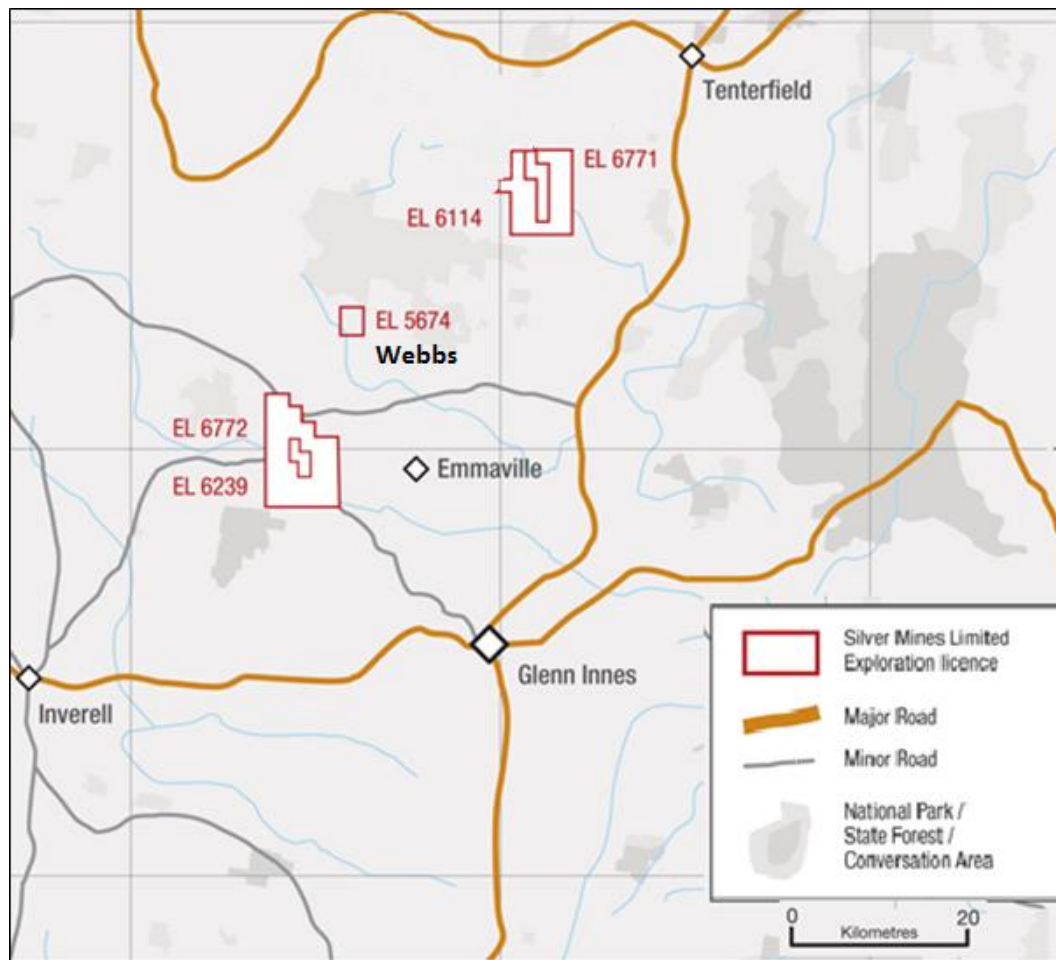
# SVL PROJECTS

Reference	Project Name	Company	Area (Km <sup>2</sup> )
<b>New England Projects</b>			
EL 5674	Webbs	SVL 100%	12
EL 7602	Webbs NW	SVL 100%	38
EL 6114	Pyres Creek	SVL 100%	18
EL 6771	Clive	SVL 100%	74
EL 6239	Webbs Consols	SVL 100%	12
<b>Other Projects</b>			
EL 7640	Boro	SVL 100%	44
EL 7928	Leadville	SVL 100%	274

- Projects contain hundreds of recorded silver and base metal occurrences and many prospects at various stages of evaluation



# PROJECTS – New England



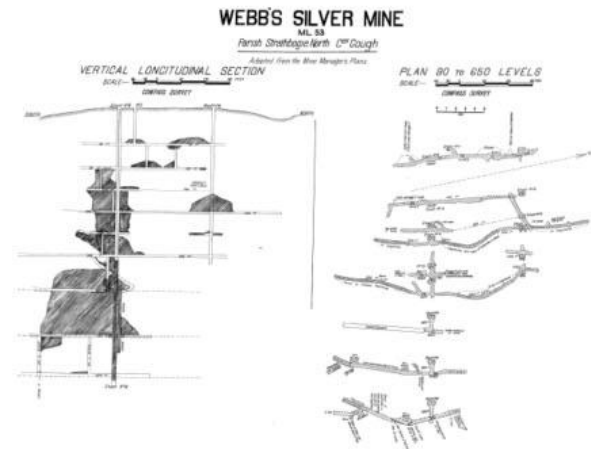
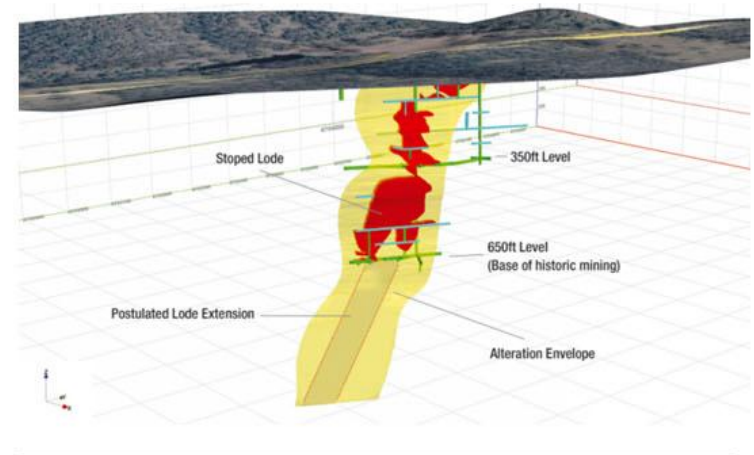
# WEBBS SILVER PROJECT

- Well located 50km north of Glen Innes
- Measured and Indicated resources of **969,000t at 269 g/t Ag** for 8.4Moz Ag
- Inferred resources of 3.4Moz at 201g/t Ag
- Exploration target within the range of 14 - 45Moz of Ag<sup>#</sup>
- Metallurgical results indicate >90% recovery to doré bars utilising the Albion Process™
- Excellent potential to grow high grade resources, 30,000m drilling program planned

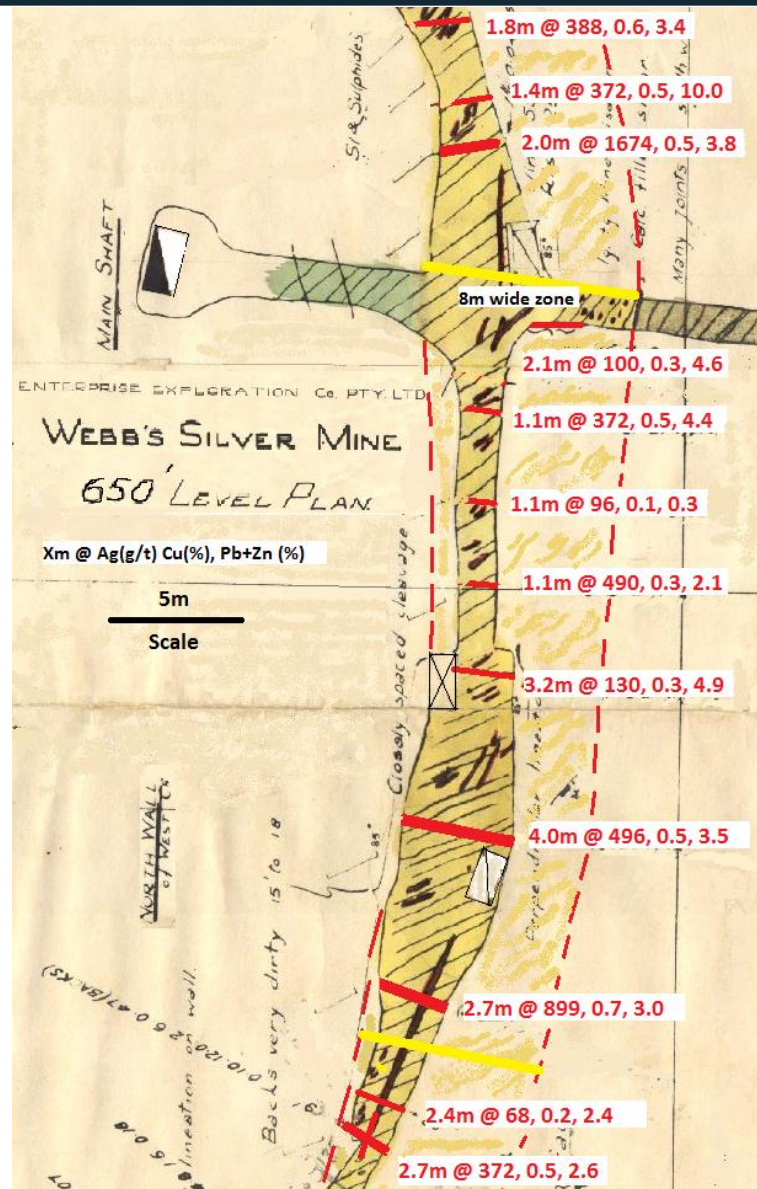
<sup>#</sup> The potential quantity and grade of the exploration target is conceptual in nature and there has been insufficient exploration to define Mineral Resources (aside from the resources included and reported) and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

# HISTORY OF WEBBS

- Mined in 1885-1901 and 1962-1965 and produced approx. 55,000t @ 700g/t Ag from the underground operation
- Previous work (1947-1970) includes 3,600m of drilling, surface – underground mapping and sampling, IP, EM and metallurgical test-work
- Work by Silver Mines since 2007 includes 28,400m of drilling, mapping and rock chip sampling IP, EM geophysics, metallurgical testwork, scoping level processing and open pit study



# WEBBS MAIN – 650' level



# REGIONAL GEOLOGY

- New England Orogen, a significant mineral province in Eastern Australia that hosts a variety of mineral deposits associated with granitic-porphyry intrusions, volcanics and surrounding rocks
- Webbs region is former large scale tin mining district, with some precious and base metals production

# WEBBS GEOLOGY

- Monotonous sequence of massive siltstone and 'rare' sandy interbeds
- Strike N-NNE, dip subvertical (west)
- Younging west
- Sequence unnamed but similar to Bodonga beds to north



# WEBBS MINERALISED GEOLOGY

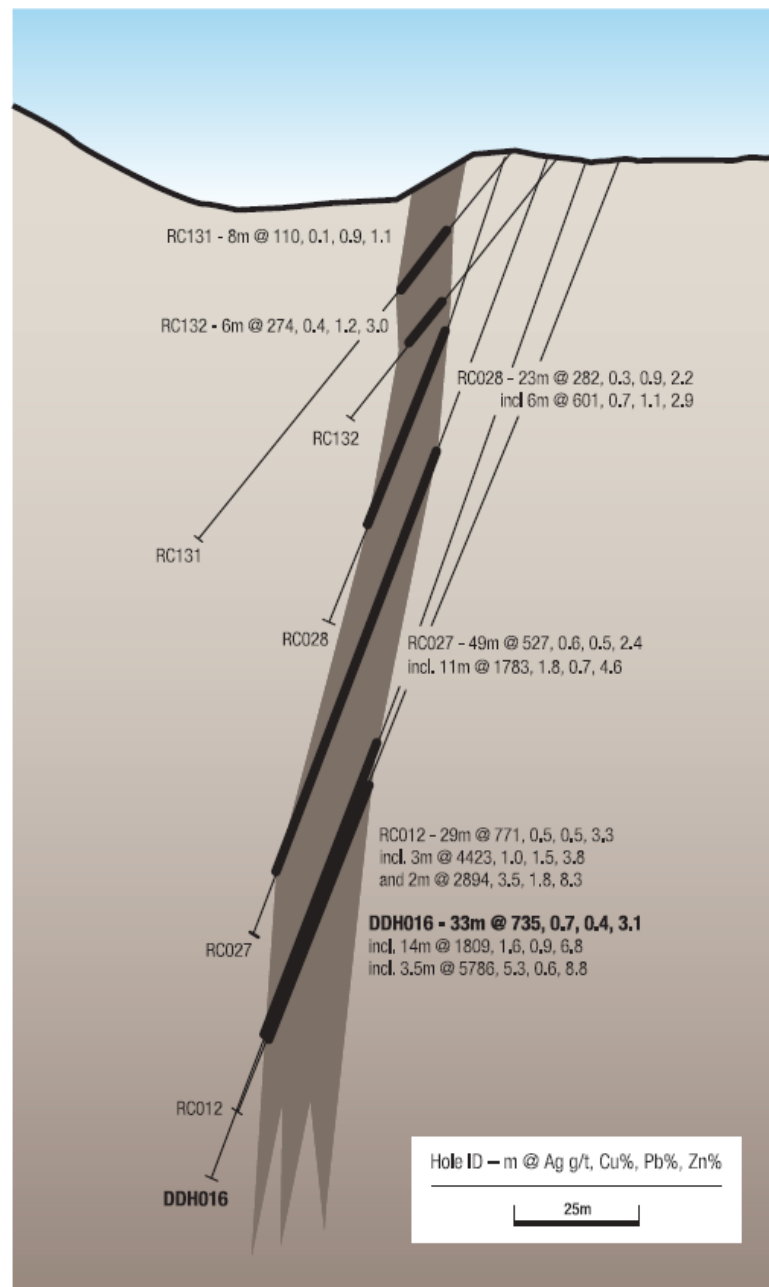
- Webbs is developed in plus 50m wide, over 2km long north trending zone
- Silver rich mineralisation hosted in steeply dipping lodes of quartz-sericite-carbonate-chlorite altered meta-siltstone up to 15m wide
- 'Ore' sulphides are silver rich tetrahedrite, sphalerite, galena and chalcopyrite
- Sulphides occur as fracture / breccia fill veins and local disseminations with accessory arsenopyrite and stannite



Outcrop - Webbs South lode: 7m true width @ 121g/t Ag

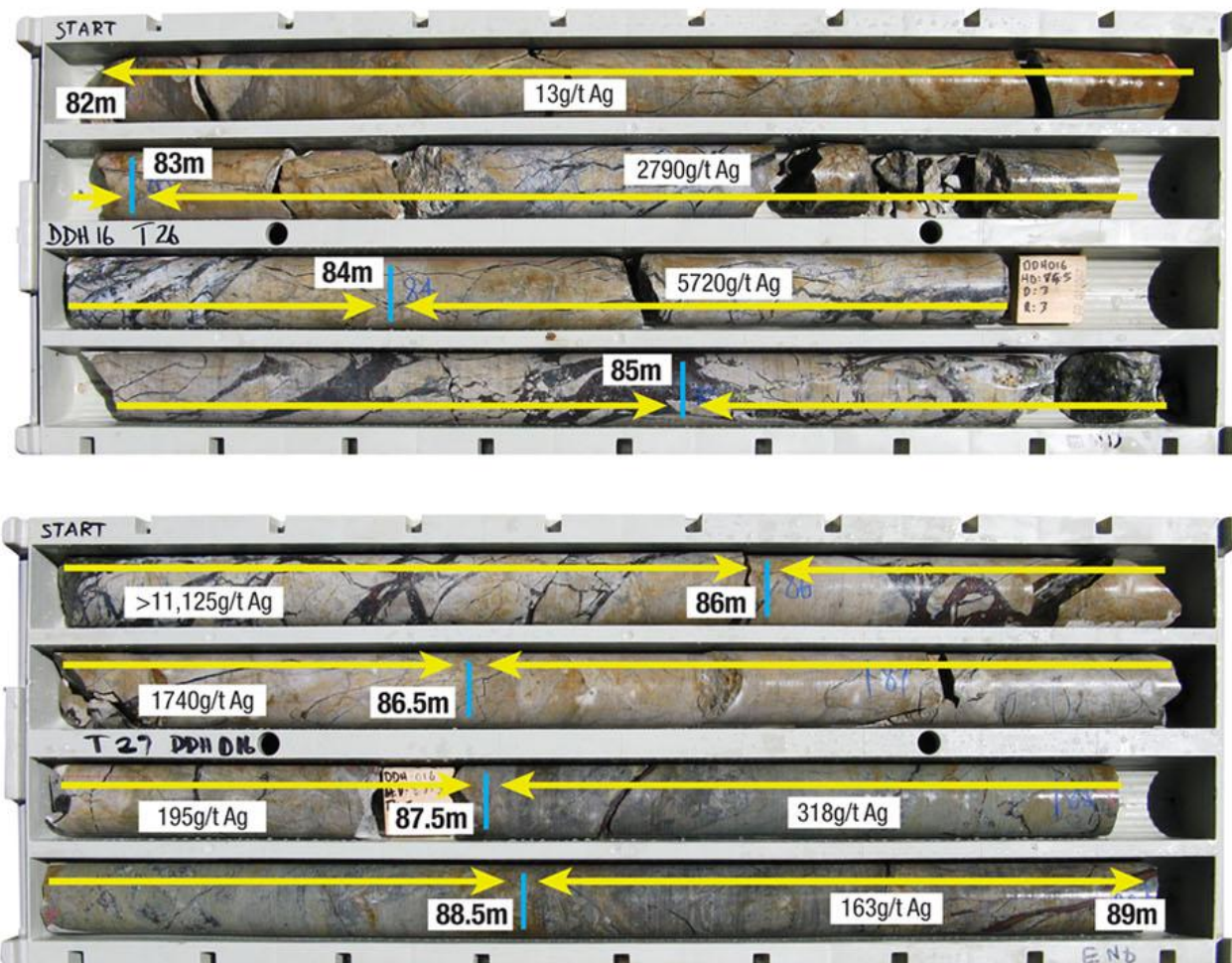
- Webbs South Lode
- Note grade and width increasing with depth
- More about DDH016

Cross Section 6751770N



# CORE HOLE DDH016 - Webbs South

- 83-97m down hole @ 1705g/t Ag incl. 83-86.5m @ 5802g/t Ag, 5.3% Cu and 8.8% Zn, (shown right)
- Note: 85-86m assayed 11,125 g/t or 1.11% Ag
- Fracturing and brx with sulphide infill



# SULPHIDE MINERALOGY

Mineral	% mineral in resource	% of total sulphides
Arsenopyrite	3.9	45
Sphalerite	2.6	32
Galena	0.9	11
Chalcopyrite	0.4	5
Tetrahedrite	0.7	7
Other	0.1	<1

## Others

- Cassiterite Cs  $\text{SnO}_2$
- Tennantite Tn  $(\text{Cu,Fe})_{12}\text{As}_4\text{S}_{13}$
- Native antimony Sb Sb
- Pyrargyrite Pg  $\text{Ag}_3\text{SbS}_3$
- Argentite At  $\text{Ag}_2\text{S}$
- Stibnite  $\text{Sb}_2\text{S}_3$
- Chalcocite Cc  $\text{Cu}_2\text{S}$
- Bismuthinite Bm  $\text{Bi}_2\text{S}_3$
- Native bismuth Bi Bi
- Two unidentified sulphosalts

## Microprobe - average wt% metal in sulphides

	Cu	Pb	Zn	Ag	As	Sb	Sn	Fe	S
Pyrite				0.03	0.01	0.01	0.02	46.8	53.1
Arsenopyrite	0.02	0.04	0.13	0.04	45.9	0.08		34.9	18.8
Sphalerite	0.13	0.02	57.3	0.04	0.01	0.01	0.02	8.18	33.3
Galena	0.05	86.1	0.10	0.09	0.01	0.13	0.04	0.01	13.5
Chalcopyrite	34.6	0.03	0.06	0.05		0.01	0.17	30.5	34.6
Tetrahedrite	35.7	0.01	2.08	3.60	0.72	28.0		4.90	25.0
Stannite	29.5	0.02	2.50	0.03			27.4	10.9	29.4

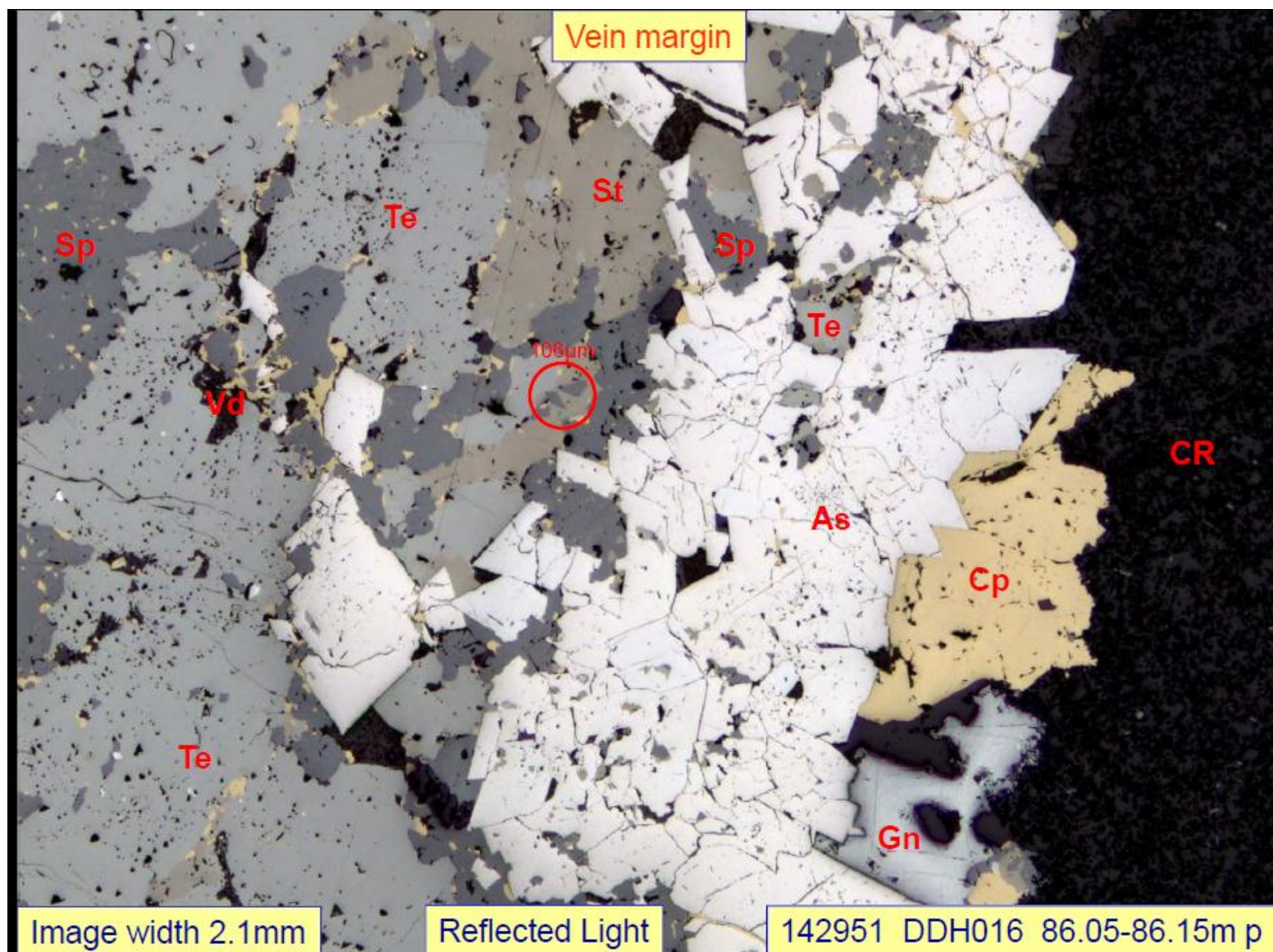
## Offcut Assay

5.36%Cu, 12.55%Zn, 0.09%Pb, 5610g/t Ag, 3.66%Sb, 1.58%As, 0.11%Sn, 5.87%Fe



## Sulphide Proportions

1.1% chalcopyrite, 64.3% sphalerite, 0% galena, 26.9% tetrahedrite, 0.2% stannite,  
7.5% arsenopyrite, 0% pyrite

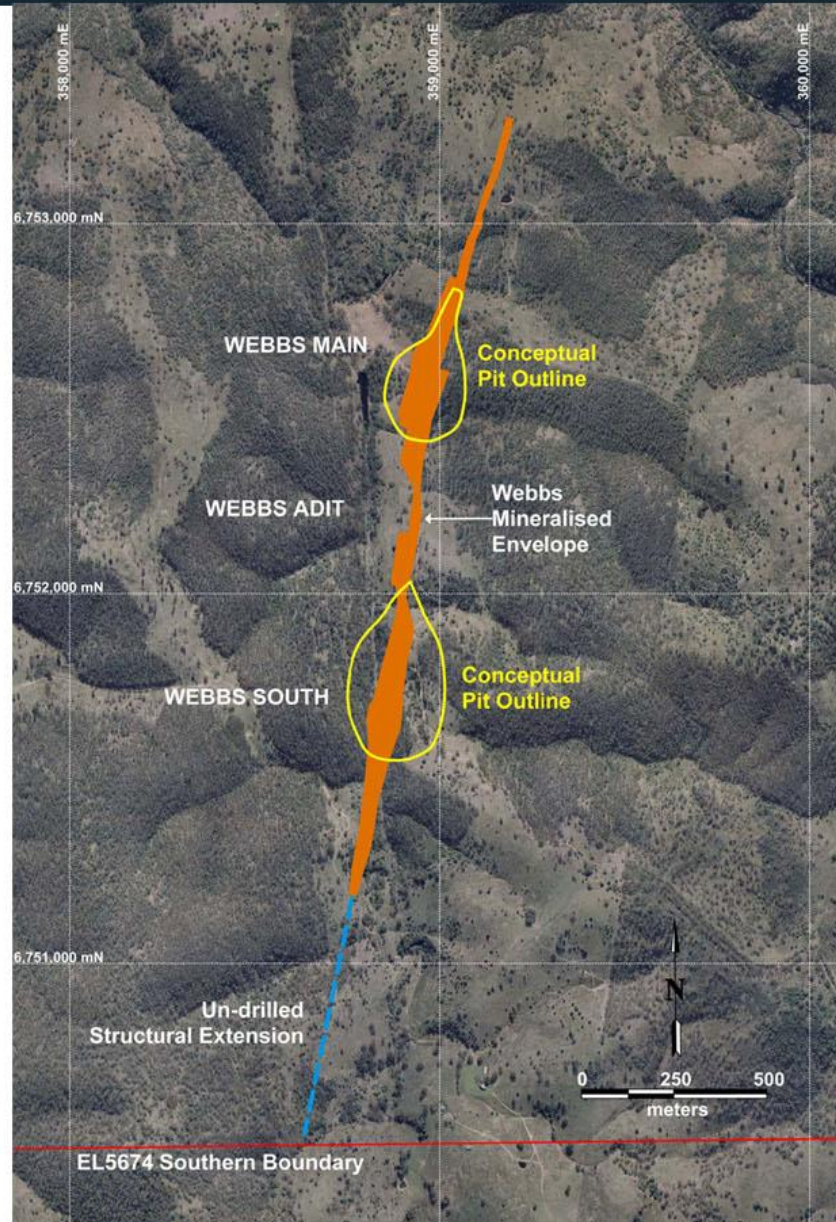


# SELECTED WEBBS DRILLING RESULTS

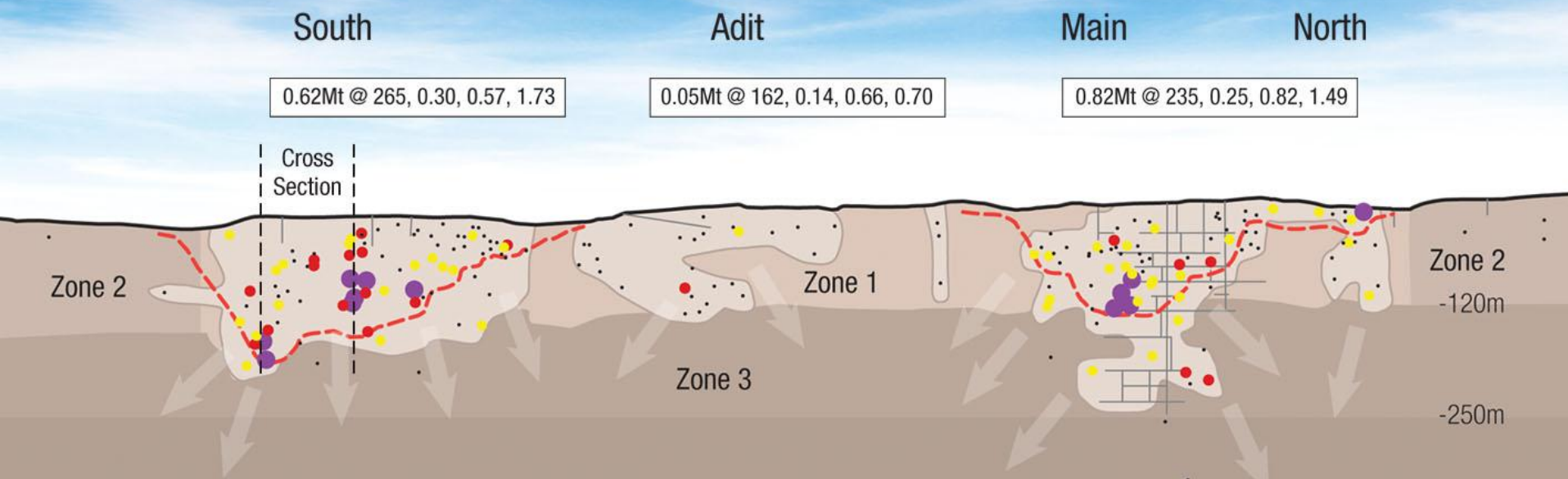
Selected intersections calculated using 50g/t Ag lower cut-off (with up to 3m downhole internal dilution @ <50g/t; no top cut-off).

Hole ID	From (m)	To (m)	Interval (m)	Ag g/t	Cu %	Pb %	Zn %	Est True Width	Ag EQ g/t	Au EQ g/t
RC076	146.0	171.0	25.0	1175	1.09	0.22	3.65	10.0	1347	23.3
RC027	32.0	84.0	52.0	500	0.52	0.52	2.31	15.6	603	10.4
DDH016	83.0	97.0	14.0	1705	0.58	0.70	4.73	3.9	1863	32.3
RC012	69.0	100.0	31.0	725	0.43	0.48	3.12	7.8	834	14.5
RC099	74.0	91.0	17.0	580	0.47	1.25	1.29	9.4	672	11.7
RC013	51.0	71.0	20.0	812	0.59	0.98	3.07	5.0	945	16.4
RC254	75.0	88.0	13.0	731	0.84	2.46	2.10	5.2	897	15.6
RC127	172.0	180.0	8.0	645	0.61	0.21	2.20	4.0	747	12.9
DDH017	169.8	183.0	13.2	506	0.41	0.12	4.53	4.6	637	11.0
RC219	87.0	95.0	8.0	665	0.70	0.43	2.01	3.5	774	13.4
RC209	9.0	18.0	9.0	495	0.49	0.94	0.87	4.5	574	10.0
DDH011	94.6	101.6	7.0	540	0.52	0.28	2.42	4.0	640	11.1
DDH019	40.7	48.0	7.3	536	0.40	2.05	3.44	3.7	684	11.9
RC214	39.0	54.0	15.0	256	0.21	0.30	1.78	7.5	317	5.5
RC057	95.0	100.0	5.0	763	0.70	0.47	3.74	2.3	909	15.8
RC097	24.0	28.0	4.0	763	1.35	2.82	2.24	2.2	984	17.0
RC098	86.0	98.0	12.0	496	0.66	2.68	2.12	3.4	652	11.3
RC028	19.0	43.0	24.0	273	0.28	0.87	2.13	6.0	359	6.2
DDH013	20.4	29.0	8.6	447	0.48	1.78	2.27	3.5	571	9.9
RC014	116.0	124.0	8.0	782	0.67	2.56	3.74	2.0	969	16.8
RC071	104.0	118.0	14.0	211	0.21	0.17	1.84	7.0	271	4.7
DDH022	30.0	47.4	17.4	191	0.18	0.45	1.42	7.0	245	4.3
RC250	170.0	180.0	10.0	327	0.52	0.03	2.53	4.0	425	7.4
RC135	50.0	61.0	11.0	414	0.30	0.30	2.00	2.3	487	8.4
RC112	48.0	58.0	10.0	300	0.46	1.35	1.14	3.0	391	6.8

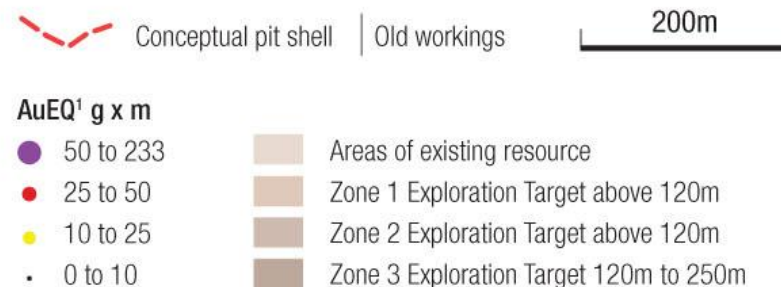
# WEBBS TREND



# WEBBS LONG SECTION - Looking West



- Note high grade deeper intersections (purple and red dots)
- Deposit completely open at depth
- 0.62Mt @ g/t Ag, % Cu, % Pb, % Zn



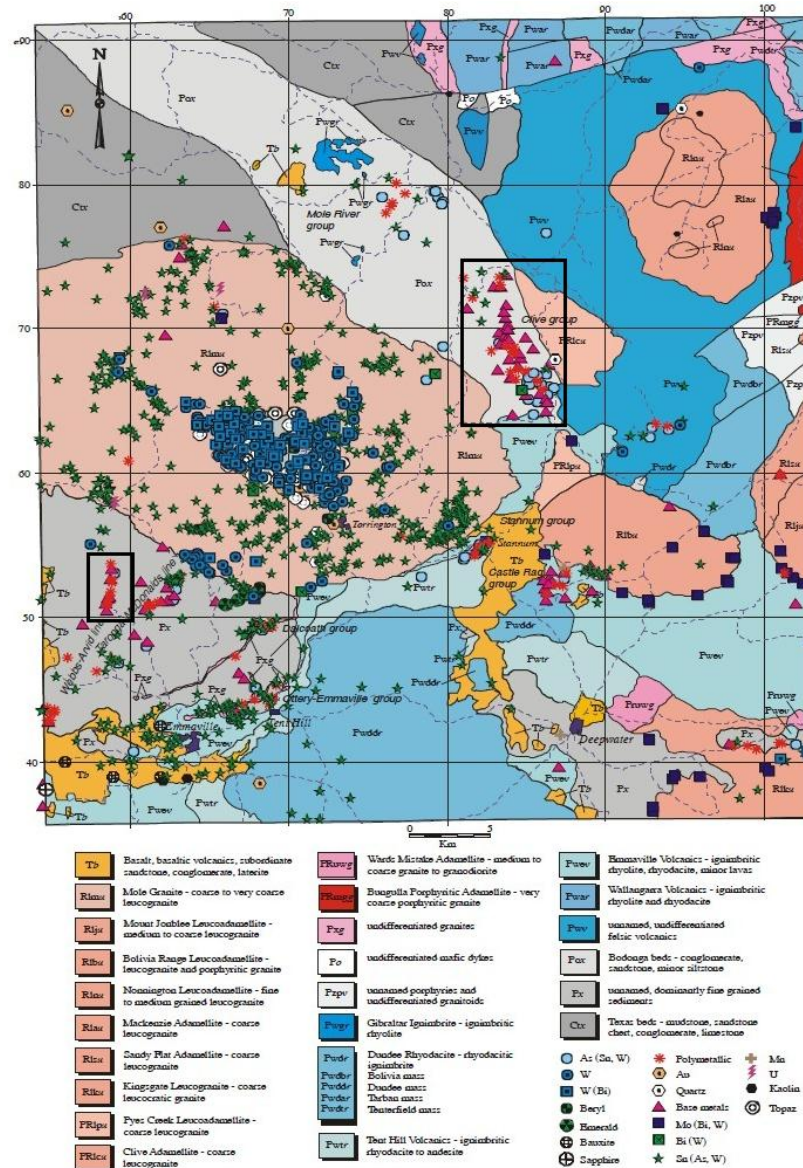
# WEBBS RESOURCE

## Current resource estimate for Webbs at 70g/t Ag cut-off

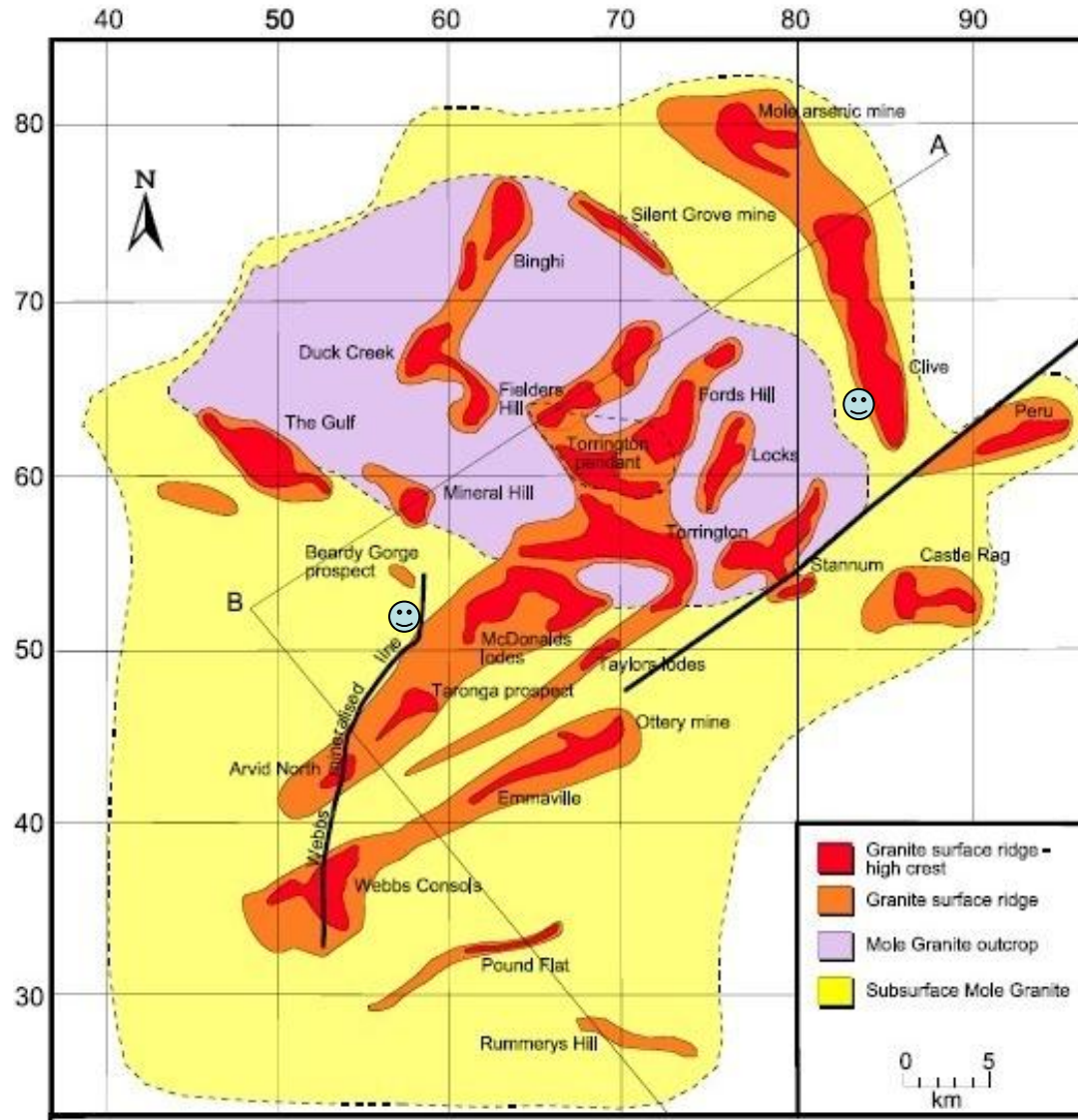
Resource Class	Tonnes	Ag (g/t)	Cu%	Pb%	Zn%	Ag (oz)
Measured	194,000	364	0.29	0.75	1.67	2,269,000
Indicated	775,000	245	0.26	0.70	1.49	6,102,000
<b>Total M and I</b>	<b>969,000</b>	<b>269</b>	<b>0.27</b>	<b>0.71</b>	<b>1.53</b>	<b>8,371,000</b>
Inferred	522,000	201	0.27	0.71	1.61	3,375,000
<b>Grand Total</b>	<b>1,490,000</b>	<b>245</b>	<b>0.27</b>	<b>0.71</b>	<b>1.56</b>	<b>11,746,000</b>

[illegible]

- The Mole Granite
- Zoned district scale province
- W-Bi-Sn-As-BM's-Ag
- Webbs classified as a structurally controlled, sediment hosted, felsic intrusion associated, silver rich polymetallic vein deposit.

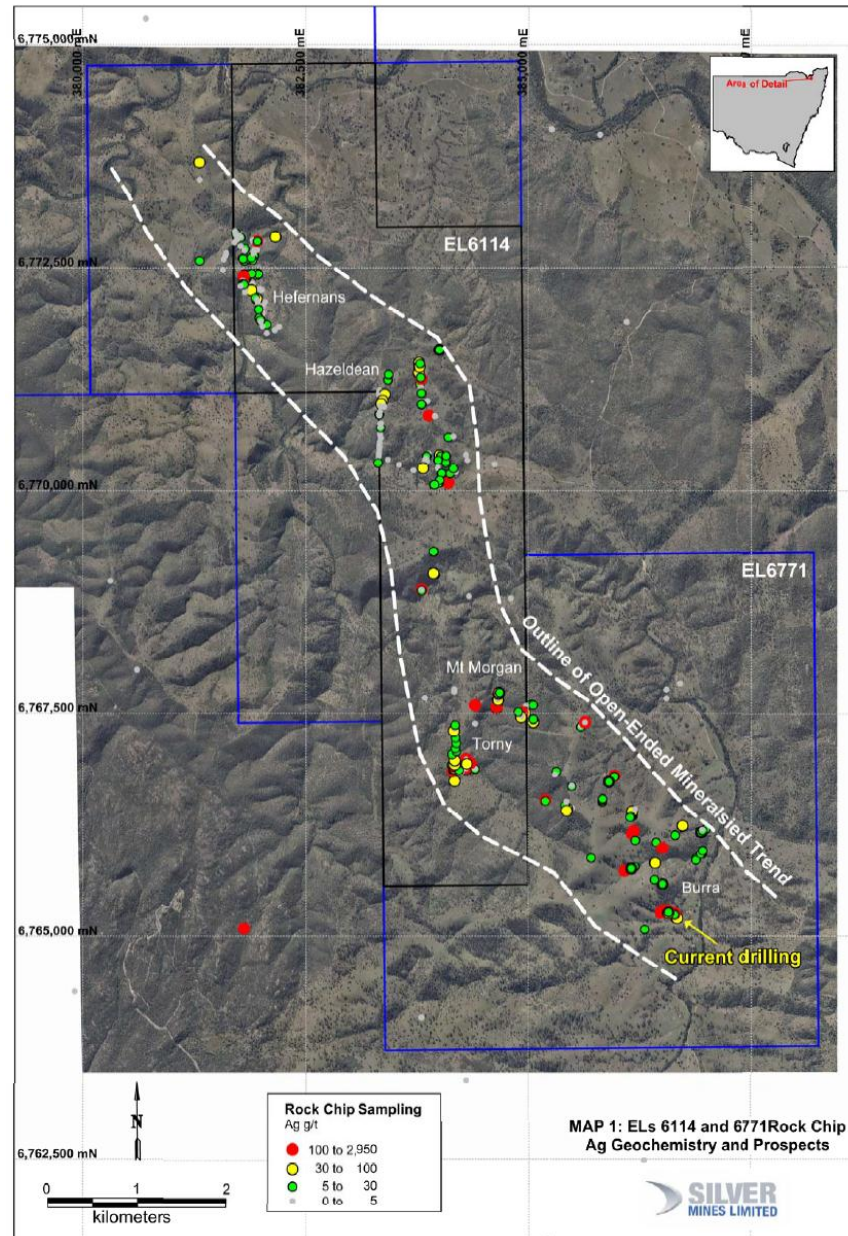


# MOLE GRANITE SHAPE/STRUCTURE



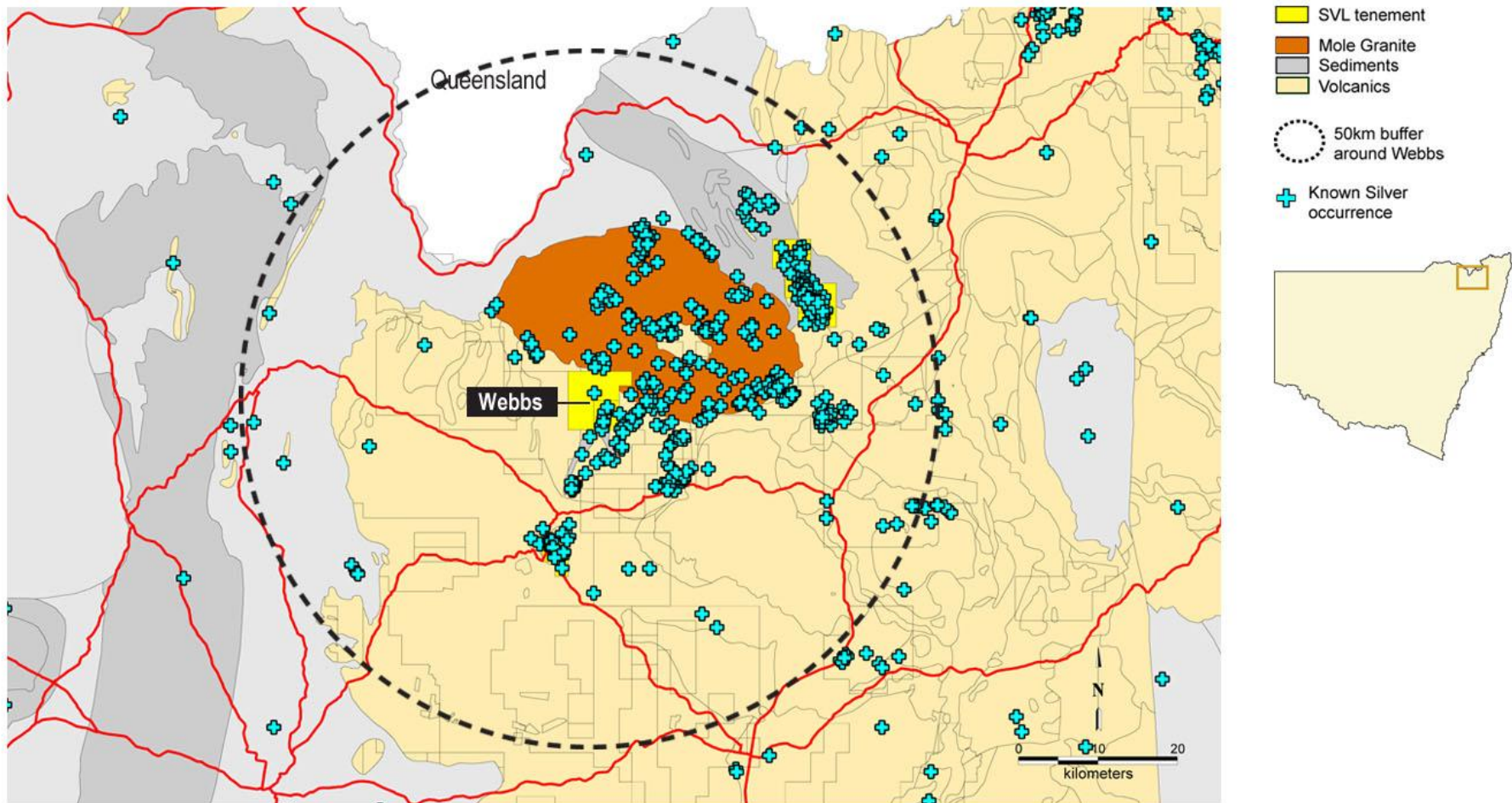
# CLIVE – MOLE RIVER PROJECTS

- Ag in rock chips
- 11km long and up to 2km wide
- Numerous old mines and prospects
- Drilling underway



# REGIONAL SILVER PROVINCE

## ■ Unlocking a new silver province



- Excellent results from metallurgical test work indicating >90% Ag recovery to doré
- SVL are testing a flow sheet incorporating the Albion Process™
- Flow sheet utilises conventional grinding and bulk flotation followed by ultra-fine grinding and atmospheric oxidation (the Albion Process™). Silver is then recovered by standard cyanidation and doré production
- Webbs mineralisation appears highly amenable to this process with favorable metrics developing for grinding, flotation and Albion kinetics
- Scoping Level CAPEX/OPEX estimates by end 2012

## Key Focus: further evaluation of SVL projects

- Additional drilling planned at Webbs to increase current resource
  - 5,000m of RC drilling is prepaid
  - 30,000m of drilling planned, 85% RC/15% DD
- Webbs project open pit scoping and conceptual underground studies planned, along with new resource estimate second half of 2013
- Further metallurgical test work to pre-feasibility level
- Drilling now underway on regional targets
- Evaluate other projects and new opportunities

# ACKNOWLEDGEMENTS

- Thanks to Silver Mines
- Thanks to all those past and present who have toiled away at Webbs and the New England generally

# THE END

- ANY QUESTIONS ?

# APPENDIX 1

AgEQ (equivalent) and AuEQ in this document are gross value equivalents utilising the following metal prices in \$A : Ag \$26.8/oz, Cu, \$7500/t, Pb \$1800/t, Zn \$1800/t and Au \$1540/oz.

These are calculated by gross \$ value of any Ag+Cu+Pb+Zn+Au in resources or drill intersections appearing throughout this document.

Readers should note the AgEQ and AuEQ are for the purpose of illustrating gross comparative values compared as a ratio to other metals in the resource or drill intersection.

The AuEQ g x m plot in the long section on Slide 14 is for the purpose of illustrating AuEQ grade of an intersection multiplied by true thickness, a method commonly used in the gold industry.

All EQ values expressed have not taken into account metallurgical recoveries, smelter or refining terms etc. In the case of Webbs the Ag value represents about 80% of the gross metal value based on prices used.

# APPENDIX 2 - Webbs Resource Estimate (selected cut-off's)

**Webbs Resource Estimate at 40g/t Ag cut**

Resource class	Tonnes	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (oz)
Measured	205,000	346	0.27	0.73	1.62	2,288,000
Indicated	936,000	212	0.23	0.65	1.35	6,390,000
Inferred	719,000	160	0.21	0.63	1.38	3,710,000
<b>Total</b>	<b>1,861,000</b>	<b>207</b>	<b>0.23</b>	<b>0.65</b>	<b>1.39</b>	<b>12,388,000</b>

**Webbs Resource Estimate at 70g/t Ag cut**

Resource class	Tonnes	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (oz)
Measured	194,000	364	0.29	0.75	1.67	2,269,000
Indicated	775,000	245	0.26	0.70	1.49	6,102,000
Inferred	522,000	201	0.27	0.71	1.61	3,375,000
<b>Total</b>	<b>1,490,000</b>	<b>245</b>	<b>0.27</b>	<b>0.71</b>	<b>1.56</b>	<b>11,746,000</b>

**Webbs Resource Estimate at 100g/t Ag cut**

Resource class	Tonnes	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (oz)
Measured	166,00	412	0.32	0.78	1.80	2,193,000
Indicated	628,000	283	0.30	0.74	1.63	5,710,000
Inferred	357,000	255	0.34	0.84	1.73	2,925,000
<b>Total</b>	<b>1,51,000</b>	<b>293</b>	<b>0.32</b>	<b>0.78</b>	<b>1.69</b>	<b>10,828,000</b>

**Webbs Resource Estimate at 200g/t Ag cut**

Resource class	Tonnes	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (oz)
Measured	101,000	584	0.44	0.86	2.20	1,888,000
Indicated	315,000	422	0.45	0.86	1.94	4,265,000
Inferred	137,000	440	0.60	1.10	2.08	1,937,000
<b>Total</b>	<b>552,000</b>	<b>456</b>	<b>0.49</b>	<b>0.92</b>	<b>2.02</b>	<b>8,090,000</b>