COOLABAH METALS

BROKEN HILL MINES

DRILLING RESULTS

ASX Release 31 March 2025

Exceptional Silver-Lead-Zinc Intercepts from Historical Drilling at the Pinnacles Mine

Multiple, very high-grade, shallow silver-lead-zinc drilling intercepts at Pinnacles demonstrate open pit potential alongside underground development options

Drilling Highlights[1]:

- **8.9m @ 920g/t Ag, 12.2% Pb and 1.3% Zn (36.3% ZnEq) from 11m - PN311**
  - Incl. 5.9m @ 1,350 g/t Ag, 17.4% Pb, 1.9% Zn (52.8% ZnEq) from 14m
- **8.2m @ 763g/t Ag, 13.4% Pb and 1.7% Zn (33.1% ZnEq) from 18m - PN310**
  - Incl. 3.0m @ 1,245 g/t Ag, 24.1% Pb, 0.5% Zn (53.5% ZnEq) from 18m
- **11.8m @ 476g/t Ag, 7.4% Pb and 0.7% Zn (19.5% ZnEq) from 3m - PN314**
  - Incl. 0.5m @ 2,380 g/t Ag, 27.3% Pb, 0.3% Zn (87.6% ZnEq) from 14m
  - Incl. 1.0m @ 1,675 g/t Ag, 25.0% Pb, 0.2% Zn (65.9% ZnEq) from 10m
- **19.4m @ 443g/t Ag, 8.3% Pb and 0.7% Zn (19.3% ZnEq) from 95m - PN306**
  - Incl. 13.0m @ 558 g/t Ag, 10.3% Pb, 0.4% Zn (23.7% ZnEq) from 98m
- **4.0m @ 536g/t Ag, 9.9% Pb and 2.0% Zn (24.5% ZnEq) from 60m - PN302**
- **5.0m @ 79g/t Ag, 2.3% Pb and 18.6% Zn (22.6% ZnEq) from 17m - PN313**
- **5.0m @ 54g/t Ag, 1.6% Pb and 18.6% Zn (21.3% ZnEq) from 18m - PN313-A**
- **5.2m @ 278g/t Ag, 5.4% Pb and 1.6% Zn (13.4% ZnEq) from 200m - PN325**
- **12.0m @ 36g/t Ag, 0.7% Pb and 10.0% Zn (11.5% ZnEq) from 233m - PN325**
- **6.0m @ 37g/t Ag, 1.0% Pb and 9.2% Zn (11.1% ZnEq) from 30m - PN311**
- **10.9m @ 29g/t Ag, 0.7% Pb and 9.0% Zn (10.4% ZnEq) from 21m - PN314**
- **>1,100m of further (unassayed) historical drill core to be processed and interpreted**
- **Follow up drilling program planned – targeting shallow open pit resources**

[1] *Zinc Equivalent reported with Mineral Resources & drillhole intercepts using the equation. ZnEq% = Zn% + (Pb% x 0.754) + (Ag g/t x 0.028). Metal price & (recovery) assumptions: Zn - US$2,650/t (88.4%); Pb - US$2,000/t (88.3%); Ag – US$27/Oz (75.0%). Recovery assumption details as released in the Coolabah Metals Limited (to be renamed Broken Hill Mines Limited) Recompliance Prospectus on 10 February 2025. All elements in the calculation have a reasonable potential to be recovered and sold.*

Coolabah Metals Limited (**Coolabah** or the **Company**, to be renamed Broken Hill Mines Limited, ASX: BHM) is pleased to share assay results received from 27 previously drilled diamond holes from the Pinnacles Ag-Pb-Zn Mine (**Pinnacles**). The core had been drilled over the preceding two years and recently processed by the Company.

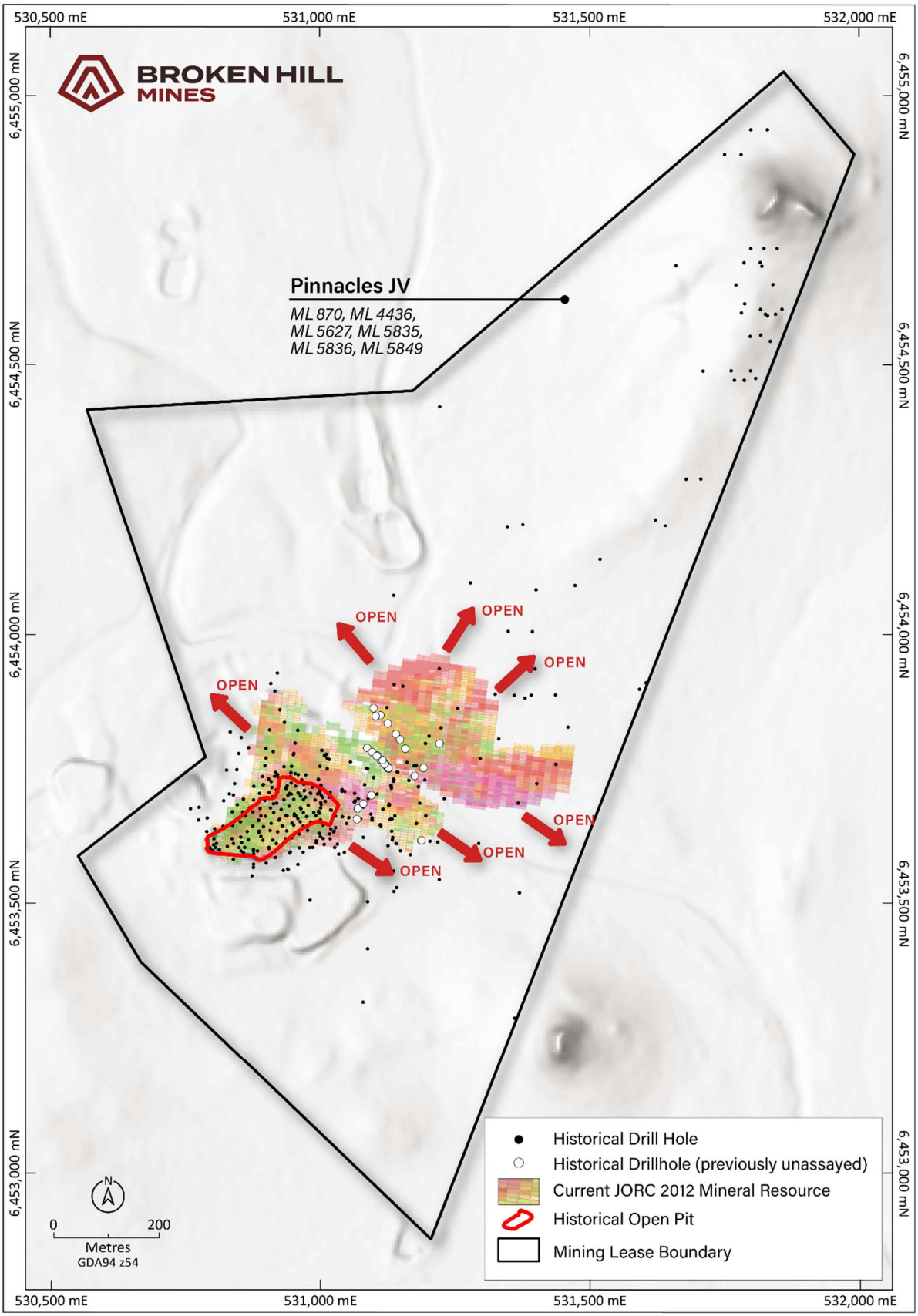

*Figure 1 - Plan view outlining the Pinnacles Mining Leases and existing Mineral Resource Estimate (**MRE**) with drillhole collars*

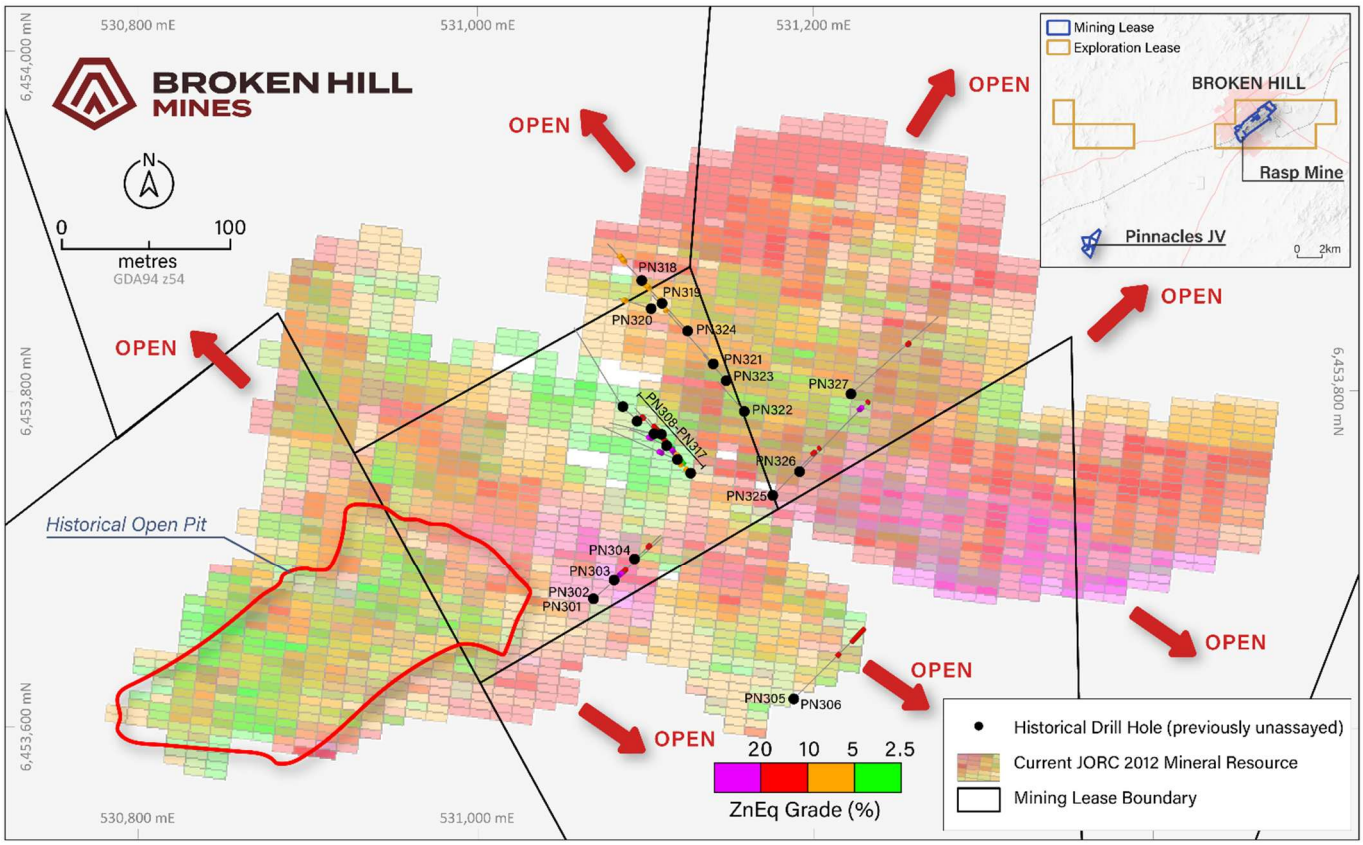

Figure 2 – Pinnacles Mine plan view. Drillhole intercepts overlayed on 2024 MRE blocks coloured by ZnEq%. 27 drillholes reported in this announcement labelled.

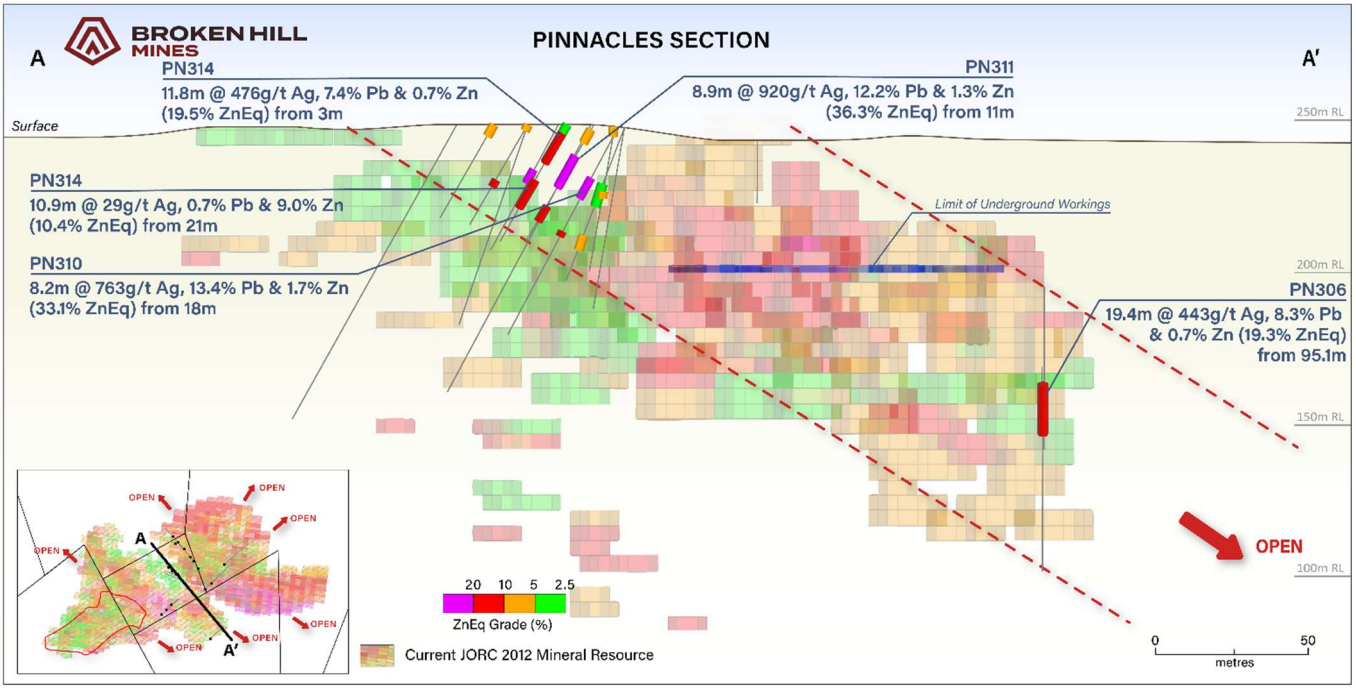

Figure 3 - Pinnacles Section view including shallow results adding to the existing MRE. Displaying new drilling intercepts only, 4.0% cutoff and 2m internal dilution. Other historic drillholes are represented in the JORC 2012 MRE Block Model colored by grade ZnEq%.

Coolabah Chairperson Stephen Woodham, stated:

> *"Release of these drilling results is a significant milestone for Broken Hill Mines, as it is understood to be the first ever ASX press release of drilling results from the Pinnacles Mine after 70 years of private ownership.*
>
> *These outstanding high-grade results reinforce our excitement in relation to the Pinnacles Mine potential. To have metal grades of this caliber near surface, on granted Mining Leases adjacent to an historic open pit, highlights the near-term potential for open pit operations that we are investigating, alongside the significant underground resource.*
>
> *These exceptional initial results also demonstrate the magnitude of the untapped potential of the Pinnacles Mine to provide long term ore feed to Broken Hill Mines' operating Rasp Mine processing plant just ~15km away."*

The majority of drilling intercepts reported are within the sulphide zone of the Pinnacles ore body, with weathering generally limited to a maximum depth of 20m. The small fraction of ore within the weathered zone at Pinnacles has historically been directly shipped to smelters.

Multiple drill holes sit outside of the existing JORC 2012 MRE, which illustrates the potential to significantly expand on the current Resource which stands at:

6.0Mt at 10.9% ZnEq (133g/t Ag, 3.3% Pb, 4.7% Zn & 0.5g/t Au), which includes the high-grade Perseverance Deposit of 3.5Mt at 12.3% ZnEq (166g/t Ag, 4.1% Pb, 4.5% Zn & 0.5g/t Au).[2]

Mineralisation at the Pinnacles Mine includes two parallel lodes, consisting of:

- a silver rich lead lode; and
- an underlying zinc rich lode with copper and gold occurrences.

The two lodes are spatially related but distinct from each other and generally separated by 5m - 10m. Each lode is folded in a 'sine wave' pattern, with significant thickening at each fold.

The mineralisation is open in multiple directions including the known lodes that plunge to the south-east. Due to the degree of structural complexity relative to drilling density to date, the true width of the mineralisation for the historical intercepts reported is not yet known.

Next Steps:

Coolabah is aware of >1,100m further historical (unassayed) drill core at Pinnacles and is in the process of undertaking geological logging and customary QA/QC processes prior to preparing samples for assay. The Company intends on submitting samples for assay immediately on completion of its planned public listing.

The Company is planning a targeted infill drilling program at Pinnacles, targeting further delineation of shallow ore potentially amendable to near term open pit operations.

The Company will keep the market informed of material developments with regards to Pinnacles drilling and historical assay results as they become available.

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[2] *See the Coolabah Metals Limited (to be renamed Broken Hill Mines Limited) Recompliance Prospectus released 10 February 2025. The Company confirms that it is not aware of new information or data that affects the information disclosed in the Prospectus relating to the MRE, and that the material assumptions and technical parameters underpinning the MRE continue to apply.*

Pinnacles Mine Overview & History:

Background

The Pinnacles Ag-Pb-Zn Mine is a stratiform silver rich Broken Hill Type sulphide deposit which lies approximately 15km south-west of the main Broken Hill Lode (**Rasp Mine**). The Pinnacles Deposit was discovered in the 1880s and has been mined intermittently from underground and open cut, more recent drilling by the owner resulted in discovery of the high-grade Perseverance lode adding significantly to the high-grade resource.

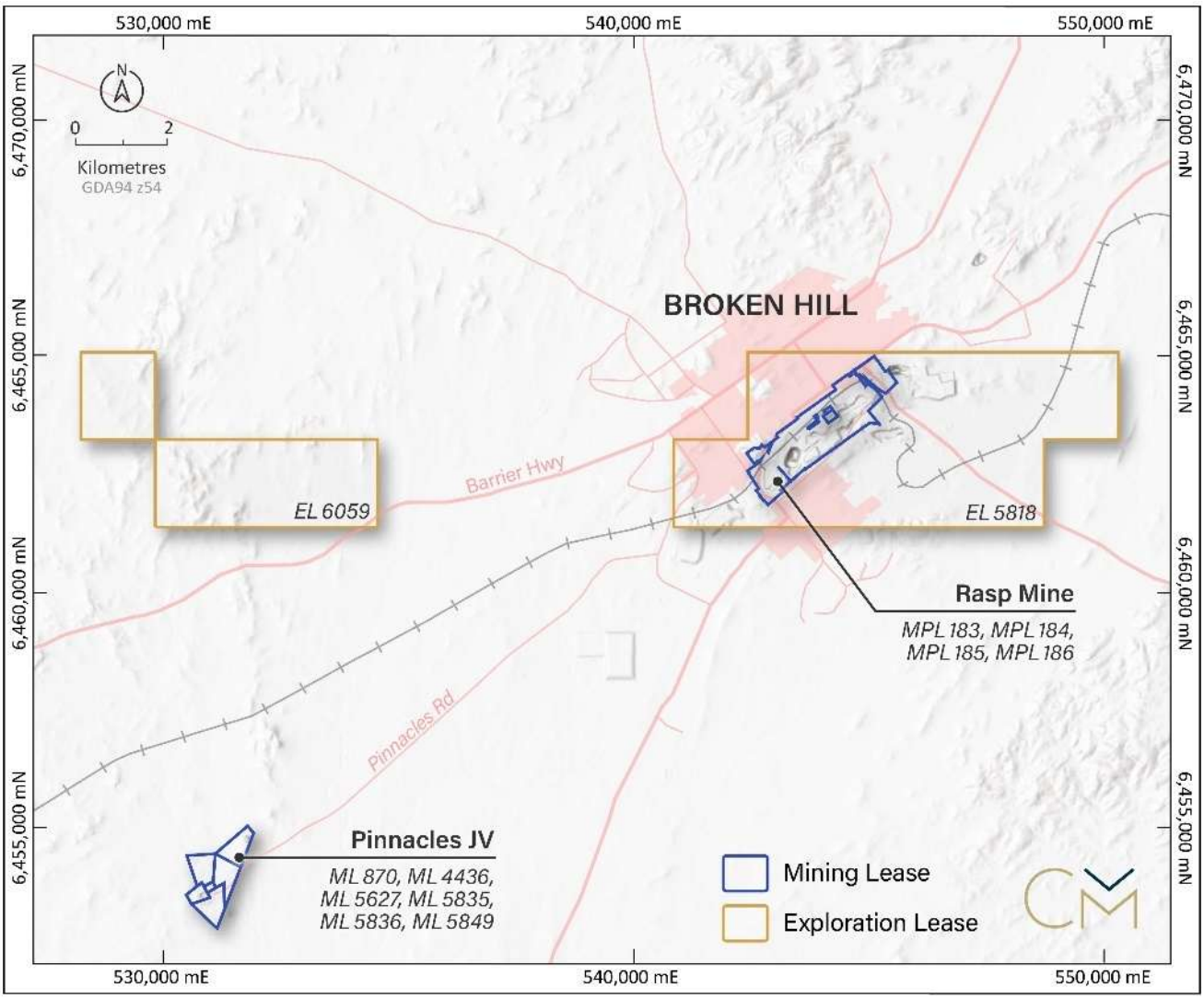

Figure 4 - Location of the Pinnacles Mine and Rasp Mine

Mineral Resource & Exploration Target

An MRE of 6.0Mt at 10.9% ZnEq (133g/t Ag, 3.3% Pb, 4.7% Zn & 0.5g/t Au) was reported for the Pinnacles Mine in accordance with the JORC Code in June 2024. In addition, Pinnacles has a current Exploration Target reported in accordance with JORC 2012 of approximately 6.0 - 15.0Mt at 40 - 125g/t Ag, 3.0 - 6.0% Pb, 2.0 - 4.0% Zn.

Investors are cautioned that the potential quantity and grade of Exploration Targets are conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Exploration Target is derived from historical drilling which enabled extrapolation of the mineralised domains beyond the limits of the Inferred Resource.

The Company intends to commence near mine exploration shortly which will focus on extending the near surface mineralisation along with the down dip and along strike extensions of the known deposit with the view to convert the Exploration Target into a Mineral Resource.

Historical Pinnacles Operations

Mining and processing at the Pinnacles Mine have been undertaken intermittently since 1884. Most recently mining of oxidised and fresh ore from the Edwards Pit began in 2007 through to 2022 when it was placed on care and maintenance. Mining was conducted using traditional small scale open pit drill and blast method (to a depth of approximately 40m) at a rate of about 10,000t per month in oxide ore and 2,000-3,000t per month in fresh ore. Historical underground mining has been completed at the Consols and Fisher/Pinnacles lodes.

During the course of recent mining oxide ore from the Consols lode was direct shipped to the Port Pirie smelter for use as flux. Fresh ore was processed on site in a flotation plant to produce both silver-lead and zinc concentrates which were sold to different smelters in Australia and overseas. These historical operations, together with supporting metallurgical test work show that the ore recovery is typically 88% lead and 75% silver (to the lead concentrate), and 88% zinc to the zinc concentrate.

Pinnacles Operating Joint Venture

Coolabah has entered into a transaction to acquire 100% of the issued capital of Broken Hill Mines Pty Ltd (**BHM**). BHM in turn holds a binding joint venture agreement (**HOA**) for mining operations at the Pinnacles Mine in NSW.

Under the terms of the HOA , BHM is the exclusive operator of the Pinnacles Mine, with mined ore to be transported and processed at BHM's Rasp Mine processing plant, located approximately 15km away.

Profits from operations at the Pinnacles Mine are shared approximately 70% BHM / 30% Pinnacles via an agreed net smelter return calculation with applicable deductions.

-Ends-

The Board of Directors of Coolabah Metals Limited authorised the release of this announcement.

Further information:

Steve Woodham - Chairperson

steve@coolabahmetals.com.au

Competent Persons Statement:

The information in this document that relates to exploration results is based on information compiled by David Ward BSc, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AUSIMM), (Member 228604). David Ward is a Director and shareholder of Coolabah Metals Ltd. David Ward has over 25 years of experience in metallic minerals mining, exploration and development and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaking to qualify as a 'Competent Person' as defined under the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ward consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The Exploration Targets for the Pinnacles Mine contained in this announcement are based on, and fairly represents, information compiled by Mr David Larsen who is a Member of The Australian Institute of Geoscientists (MAIG) and who has sufficient experience 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 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Larsen is an Independent Consultant and he consents to the inclusion in the announcement of the Exploration Targets in the form and context in which they appear.

The Mineral Resource estimate for the Pinnacles Mine contained in this announcement is based on, and fairly represents, information compiled by Mr Simon Tear who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience 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 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Tear is a Director of H&S Consultants Pty Ltd and he consents to the inclusion in the report of the Mineral Resource estimate in the form and context in which they appear.

Forward-Looking Statement:

This document may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of the Company. Actual values, results or events may be materially different to those expressed or implied in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements.

Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law, the Company does not undertake any obligation to update or revise any information or any of the forward-looking statements in this document or any changes in events, conditions, or circumstances on which any such forward looking statement is based.

Cautionary Statement:

Any visual estimates described in this announcement are a guide only and should never be considered a proxy or substitute for laboratory analysis. Only subsequent laboratory geochemical assay can be used to determine grade of mineralisation.

The Company will update shareholders when laboratory results become available.

HOLE_ID	FROM	TO	Interval	Ag_g/t	Pb%	Zn%	ZnEq%
OB1	No significant intercepts						
PN301	118	119	2	39	0.7	6.3	7.9
PN302	63	64	4	536	9.9	2.0	24.5
PN302	75	76	5	41	0.6	5.2	6.8
PN302	104	105	3	31	0.6	14.2	15.5
PN303	54	55	3	62	0.5	3.1	5.2
PN304	22	23.6	5.7	259	4.2	0.9	11.3
PN305	103.87	104.87	3	393	7.4	0.6	17.2
PN306	114.14	114.52	19.4	443	8.3	0.7	19.3
PN307	No significant intercepts						
PN308	No significant intercepts						
PN309	2	3	3	138	2.1	1.0	6.5
PN309	22	23	2	15	0.4	4.3	5.1
PN310	24.71	26.15	8.15	763	13.4	1.7	33.1
PN310	39	40	2	46	1.3	10.6	12.9
PN311	5	6	5	141	4.5	0.6	8.0
PN311	19	19.88	8.88	920	12.2	1.3	36.3
PN311	35	36	6	37	1.0	9.2	11.1
PN312	26	27	8	100	1.6	0.8	4.8
PN312	41	42	5	29	0.7	8.0	9.3
PN313	21.23	22	5	79	2.3	18.6	22.6
PN313-A	22	23	5	54	1.6	18.6	21.3
PN314	14.34	14.84	11.84	476	7.4	0.7	19.5
PN314	30.63	31.93	10.93	29	0.7	9.0	10.4
PN315	22.5	23.51	2.51	28	0.7	14.2	15.6
PN316	0	4	4	135	2.1	1.0	6.4
PN317	No significant intercepts						
PN318	35	36	3	23	0.6	6.9	8.0
PN318	42	43.45	3.45	31	0.8	4.1	5.6
PN319	32	33	2	18	0.7	7.7	8.7
PN319	39	40	2	26	0.7	5.3	6.6
PN320	31	32	4	17	0.6	7.4	8.3
PN321	83	84	2	24	0.8	6.3	7.5
PN322	136	137	4.36	20	0.5	6.7	7.6
PN323	No significant intercepts						
PN324	72	73	3	20	0.6	8.4	9.4
PN325	204	204.6	5.15	278	5.4	1.6	13.4
PN325	244	245	12	36	0.7	10.0	11.5
PN326	198.82	199.2	7.13	493	8.0	3.0	23.0
PN327	174.2	174.65	3.15	375	9.0	2.0	19.2

Table 1 – Significant Intercepts. All assays 4.0% ZnEq cutoff with maximum internal dilution of 2m

Hole_ID	Depth	Easting	Northing	RL	Dip	Azimuth
OB1	166.8	531,068	6,453,657	250	-90	8.5
PN301	144.8	531,069	6,453,677	252	-83	45.5
PN302	161	531,069	6,453,677	252	-70	49.95
PN303	98.5	531,079	6,453,686	252	-66	45.5
PN304	23.6	531,095	6,453,702	251	-64	45.5
PN305	153.6	531,187	6,453,618	246	-69	45.5
PN306	120.5	531,187	6,453,618	246	-60	45.5
PN307	112	531,087	6,453,789	249	-60	328.5
PN308	60	531,126	6,453,751	248	-80	327.5
PN309	48	531,124	6,453,754	248	-80	308.5
PN310	76.8	531,125	6,453,754	248	-62	318.5
PN311	44.6	531,120	6,453,760	248	-60	318.5
PN312	53.45	531,126	6,453,752	248	-70	318.5
PN313	47.7	531,112	6,453,768	249	-60	293.5
PN313-A	100.7	531,118	6,453,759	248	-60	293.5
PN314	44	531,115	6,453,767	249	-60	318.5
PN315	38.4	531,106	6,453,775	249	-60	318.5
PN316	35	531,096	6,453,782	249	-60	308.5
PN317	71	531,105	6,453,774	249	-68	283.5
PN318	63.08	531,099	6,453,863	244	-60	318.5
PN319	78.7	531,111	6,453,850	244	-65	318.5
PN320	39.39	531,102	6,453,848	244	-60	288.5
PN321	137	531,140	6,453,815	245	-60	318.5
PN322	217.54	531,158	6,453,788	245	-78	318.5
PN323	141	531,148	6,453,805	245	-80	318.5
PN324	98.3	531,125	6,453,835	245	-70	318.5
PN325	268.6	531,175	6,453,738	244	-80	43.5
PN326	300	531,191	6,453,753	243	-75	44.5
PN327	268.9	531,221	6,453,797	243	-75	48.5

Table 2 – Drillhole Locations (GDA94-Z54)

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Diamond drilling was used to obtain drill core ranging from HQ size to NQ size core samples. • Drill core was cut and sampled using an electric 3 phase Clipper Core Saw. • Core samples predominantly consisted of NQ drill core, with some HQ core size samples. • Drill core sampling is by sawn half HQ and NQ core. Sample intervals range from 5m composites (in poorly mineralised areas) with smaller intervals ranging from 1.95m 0.16m. All samples submitted to ALS Orange for preparation and assay. • Samples were then placed into calico bags that were pre-numbered using a unique sample identifier. • Certified reference material (CRM) were inserted every 24 samples. • Duplicate sampling was conducted by the laboratory. • Each sample was dried, crushed and pulverised as per standard industry practice. Drill core composite sample intervals were collected from up to 5m composites (in poorly mineralised areas) with smaller intervals ranging from 1.95m 0.16m. All samples submitted to ALS, Orange for preparation and assay. Half core was dried, crushed using to 70% passing 2mm, and pulverised to 85% passing 75 microns. • Gold (Au) was determined by 50g fire assay (method Au-AA26) with a detection limit 0.01ppm. • Multielement assaying was completed for 33 elements by 0.4g four-acid digest with ICPMS determination (method ME-ICP61). Overlimit triggers for Silver, Lead, Zinc and Sulphur (Ag >200ppm, Pb >100000ppm, Zn >100000, S >10.0%) were determined using OG62.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Diamond core drilling was completed using HQ core in some drillholes but predominately NQ coring for most of the 27 drillholes.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Diamond drill core recovery recorded against intervals drilled as part of geotechnical logging to determine recovery. Recoveries are greater than 97%. • Diamond drilling utilising triple tube drilling and short drilling runs employed to maximise core recovery. • There is no known relationship between sample recovery and grade. Where samples recoveries are less than 97% there is no relationship observed between grade and sample recovery. Relationships between sample recovery and grade are not considered significant where recoveries exceeded 97% in fresh rock.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• 27 Drillholes have been logged and processed analytically by a trained geologist. Drill core was then prepared, cut, sampled and transported to ALS Orange for analysis. • 2,542m of core was logged using the logging techniques below: - Core trays were meter marked and orientated using orientation lines where possible. - Density (specific gravity) was measured across differing geological units, increased number of samples in intervals in and around lead-zin-silver mineralisation. - Lithological units and associated alteration assemblages were logged and noted. Units were bulk logged according to changes in lithologies. - Veining characteristics was logged in percentages (%) in 1m intervals along with associated minerals. - Mineralisation was logged in percentages (%) in 1m intervals. - Structural measurements were obtained where important geological boundaries, veining, mineralised lodes, general rock characteristics, and structures were encountered. - Magnetic Susceptibility measurements were obtained in 1m intervals for each drillhole using a hand-held KT-9 Kappameter field magnetic susceptibility device. - Geotechnical data was measured and obtained from each drill run highlighted from core blocks. - Fracture Frequency was measured in 1m intervals, and where rubble zones of intense fracturing occurred, 5 fractures were

Criteria	JORC Code explanation	Commentary
		measured every 10cm, allowing for no more than a maximum of 50 fractures per meter. - Rock hardness was noted and analysed using a tungsten scribe. - Orientation intervals were noted where orientation lines were present. Orientation line confidence was determined from whether previously drilled runs and orientation lines were able to be connected down-hole/up-hole, or in some cases, structural measurements using foliation and bedding planes were proven to be consistent throughout a drillhole. - Tray intervals were noted using the start and end meter for each tray. - Photographs of all core trays were obtained in both WET and DRY conditions using a digital camera. • Both qualitative and quantitative data is collected. Half core (HQ) & half core (NQ) samples are retained in trays for future reference. All core photographed both dry and wet prior to cutting. • All core was geologically and geotechnically logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Certified Reference Material (CRM) were inserted every 17 samples to assess the accuracy and reproducibility of the drill core results. The results from CRMs are within acceptable limits. • 27 blanks were submitted to the lab for analysis. Blanks were inserted at the beginning of each drill hole to determine if pre-examined samples were potentially contaminating future samples. Results were within acceptable limites. • Half core samples were cut using a Clipper Core Saw. Core samples predominantly consisted of NQ drill core, with some HQ core being prepared for lab analysis. Samples were then placed into calico bags that were pre-numbered using a unique sample identifier. • Blank samples consisted of a limestone carbonate – calcium carbonate and were submitted at the beginning of every drillhole. • Certified reference materials were obtained from OREAS sample list register, and a total of 5 standard ID's were issued and used for QAQC purposes. • Core samples were dried crushed and pulverised to 85% passing 75 microns.

Criteria	JORC Code explanation	Commentary
		• No field duplicates were taken for core samples. ½ core was retained for future reference.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Standard assay procedures performed by a reputable assay lab, (ALS Group), were undertaken. Gold (Au) was determined by 50g fire assay (method Au-AA26) with a detection limit 0.01ppm. • Multielement assaying was completed for 33 elements by 0.4g four-acid digest with ICPMS determination (method ME-ICP61). Overlimit triggers for Silver, Lead, Zinc and Sulphur (Ag >200ppm, Pb >100000ppm, Zn >100000, S >10.0%) were determined using OG62.Techniques are considered total.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Drill Hole Data including: collar data, lithological, veining, mineral, structure, survey, sampling, density, magnetic susceptibility, and geotechnical data was collected and stored electronically. When completed were loaded into a master database. Assay data was provided by ALS via .csv spreadsheets. The data was validated using the results received from the known certified reference material. • Assay data is not adjusted.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Final collar coordinates were obtained using DGPS (± 0.1m accuracy), PN308, PN326 and PN327 coordinates are hand held GPS (±3m accuracy). • All coordinates are based on Map Grid Australia Zone 54, Geodetic Datum of Australia 1994. • No downhole surveys were collected on the drillholes. One deeper drillhole was re-entered with a gyro survey tool and found that there was little downhole deviation. It is expected that as many of the holes are shallow and core, deviation is considered to be minimal.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Data spacing is variable. Drilling used variable downhole dip angles, some holes have similar collar locations with varied dips and azimuths in order to gain a better understanding of complex folding. • Recent drilling results are within the previously reported Mineral Resource Estimate (MRE) but have not been used to update the MRE. • Sample compositing was applied in zones considered to have low levels of mineralisation.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drilling was designed to intersect perpendicular to the known orientation of mineralisation as possible but due to the complex folding, several holes will have intersected oblique to the mineralisation. True widths of mineralisation are unknown. There is no known sample bias due to drilling orientation.
Sample security	• *The measures taken to ensure sample security.*	• Sample chain of custody has been managed by the employees of Coolabah Metals Limited, who analysed and processed samples onsite and transported them to the assay laboratory. All samples are bagged in tied numbered calico bags, grouped and placed in a stillage crate and transported to ALS in Orange by Coolabah personnel. All sample submissions are documented via ALS tracking system and all assays are reported via email. Sample pulps are returned to site and stored for an appropriate length of time. The Company has in place protocols to ensure data security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Data and sampling techniques have not been reviewed or audited by a third party.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Pinnacle Mines Pty Ltd currently holds 100% of 6 contiguous Mineral Leases covering a total area of 142.02 hectares. All six MLs currently have an expiry date of 20 June 2040. Tenement details are tabulated below: • Together the tenements are known as the Pinnacles Mine and are

Tenement Number	Originally Granted	Latest Renewal	Expiry	Area (Ha)
ML870	27/08/1980	24/09/2019	20/06/2040	29.8
ML4436	25/05/1938	1/10/2019	20/06/2040	3.29
ML5627	25/05/1938	1/10/2019	20/06/2040	12.12
ML5835	16/08/1962	1/10/2019	20/06/2040	32.37
ML5836	13/08/1962	1/10/2019	20/06/2040	32.17
ML5849	16/08/1962	24/09/2019	20/06/2040	32.27
Total				142.02

Criteria	JORC Code explanation	Commentary
		located approximately 15km southwest from the city of Broken Hill in Far-Western New South Wales, and only 11km southwest of the southern end of the Broken Hill OreBody. • The area is subject to a Native Title Claim by the Wilyakali Group. Pinnacle Mines has a native title agreement with the Wilyakali for access. An Aboriginal Place was declared on 5/7/1996. The Aboriginal Place impacts part of ML5835 (Middle Pinnacle) and a strip of land adjacent to the eastern boundary of ML5836 and ML 5849. The reservation is restricted to a depth of 200m below surface. • The area is subject to a Native Title Claim by the Wilyakali Group. Pinnacle Mines has a native title agreement with the Wilyakali for access. An Aboriginal Place was declared on 5/7/1996. The Aboriginal Place impacts part of ML5835 (Middle Pinnacle) and a strip of land adjacent to the eastern boundary of ML5836 and ML 5849. The reservation is restricted to a depth of 200m below surface. • All mining and treatment operations are currently on Care and Maintenance. • All tenements are in good standing. • The Pinnacles Mine is subject to a binding Heads of Agreement with Broken Hill Mines Pty Ltd (BHM) leading to a Standard Operating Agreement (SOA) establishing a 70/30 profit share arrangement for mining at Pinnacles with ore to be processed at the Rasp Mine (held by BHM). • Coolabah Metals Limited (CBH) has a binding Share Purchase Agreement (SPA) to purchase 100% of BHM.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Mining, prospecting and exploration have been conducted at the Pinnacles Mine and surrounding area since 1884, a period of 140 years. • Modern exploration including extensive diamond drilling and geophysics was undertaken under joint venture arrangements, most notably by CRAE in the period 1976-1986 and Pasminco Mining in the period 1992 to 1998. This work was all conducted and recorded in accordance with the typical procedures of the time. • Pinnacle Mines undertook a major resource drill out predominantly on the Consols Limb and exploration drilling on the Perseverance Limb, between 2001 and 2007. Industry standard QA/QC protocols were

Criteria	JORC Code explanation	Commentary
		introduced for drilling from 2007.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Pinnacles Pb-Ag-Zn-Cu-Au deposit is silver rich Broken Hill Type sulphide deposit which lies approximately 15km southwest of the main Broken Hill Lode. • The deposit lies in the Proterozoic rocks of the Broken Hill Block which forms part of the Willyama Supergroup (Stevens et al., 1983; Willis et al.,1983). It is regarded as one of the largest Broken Hill-type orebodies in the area after the Broken Hill deposit itself. • Regionally the Pinnacles lodes are considered to lie stratigraphically below the main Broken Hill orebodies, hosted by the Cues Formation of the Thackaringa Group. The sequence is characterised by a set of upright southeast plunging folds and a series of subvertical retrograde shear zones. • The stratigraphy of the Pinnacles Mine Area comprises multiple lode horizons comprising garnet quartzite, blue quartz gahnite lode, pyritic biotite garnet lode, and magnetic iron formation (mif). All of these lodes are Pb, Zn, Ag, Cu and Au bearing. The lode horizons are hosted in intermediate composition sillimanite rich gneisses, quartzitic gneisses, and felspathic gneisses. Albite gneiss, amphibolite and granite gneiss occur as distinctive stratigraphic marker units. • The stratigraphy of the Pinnacles Mine Area comprises multiple lode horizons comprising garnet quartzite, blue quartz gahnite lode, pyritic biotite garnet lode, and magnetic iron formation (mif). All of these lodes are Pb, Zn, Ag, Cu and Au bearing. The lode horizons are hosted in intermediate composition sillimanite rich gneisses, quartzitic gneisses, and felspathic gneisses. Albite gneiss, amphibolite and granite gneiss occur as distinctive stratigraphic marker units. • The stratigraphy of the Pinnacles Mine Area comprises multiple lode horizons comprising garnet quartzite, blue quartz gahnite lode, pyritic biotite garnet lode, and magnetic iron formation (mif). All of these lodes are Pb, Zn, Ag, Cu and Au bearing. The lode horizons are hosted in intermediate composition sillimanite rich gneisses, quartzitic gneisses, and felspathic gneisses. Albite

Criteria	JORC Code explanation	Commentary
		gneiss, amphibolite and granite gneiss occur as distinctive stratigraphic marker units.

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*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• See body of announcement.
		• All historic drillholes report to the Mineral Resource Estimate (MRE).

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Grades of intercepts are calculated using length weighted average and reported intercepts are those >2m in length with a cutoff of 4.0% zinc equivalent (ZnEq) with a maximum internal dilution of 2m. • ZnEq% = Zn% + Pb% x 0.754 + Ag g/t x 0.028 with metal price & (recovery) assumptions. Zn - US$2,650/t (88.4%); Pb - US$2,000/t (88.3%); Ag – US$27/Oz (75.0%)
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Drilling was designed to intersect perpendicular to the known orientation of mineralisation as much as possible but due to the complex folding, several holes will have intersected oblique to the mineralisation. True widths of mineralisation are unknown. There is no known sample bias due to drilling orientation.
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.*	• See body of announcement.

Criteria	JORC Code explanation	Commentary
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.*	• See body of announcement. • All drillholes are reported in the significant intercepts table.
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; potential deleterious or contaminating substances.*	• In 1993-1994 Pasminco Exploration undertook a detailed channel sampling program on all available underground level development, utilising a jack hammer to generate 260 samples. • In 1993 Pasminco Exploration commissioned a high definition ground magnetic survey over the entire tenement area. • Sporadic excavation and geological mapping and sampling of costeans (trenches) culminated with a detailed surface mapping and sampling program by consultant Dr Tim Hopwood from 2004 to 2007. Hopwood also produced detailed geological maps of all four main levels of underground development for Pasminco in 1993.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• It is recommended that further drilling is undertaken to better define the high-grade mineralized lodes at Pinnacles with a focus on further developing the understanding of the structural complexity and adding to the existing MRE.