**ASX Announcement** 



**5 August 2024** 

# SIGNIFICANTLY IMPROVED ENDEAVOR SILVER LEAD ZINC MINE PLAN

Updated mine plan; stronger financial metrics with production to commence H1 CY2025.

# HIGHLIGHTS

- 10-year Mine Plan: Pre-tax NPV<sub>8%</sub> = \$414m and IRR = 345%.
- Free Cashflow = \$609m and EBITDA = \$89m/annum during first 5 years.
- Payable metal: Zinc 260kt, Silver 10.6Moz and Lead 90kt.
- Pre-production CAPEX = \$28m and Maximum cash drawdown = \$30m.
  - 9-months pre-development with first production planned H1 CY2025.

Polymetals Resources Ltd (ASX: **POL**) (**Polymetals** or the Company) is pleased to announce the results of its optimised Mine Plan at its Endeavor Silver Lead and Zinc mine located north of Cobar, NSW. The Mine Plan follows the Mine Restart Study (**MRS**) released to the ASX on 16<sup>th</sup> October 2023.

The Endeavor Mine Plan (**EMP**) demonstrates that the project will generate outstanding financial returns and create substantial value for Polymetals shareholders and the Cobar Region; with significant increases in Ore Reserves, Mine Production, Free Cashflow, Net Present Value (NPV) and Internal Rate of Return (IRR) compared to the MRS.

# Polymetals Executive Chairman Dave Sproule said:

"The work completed by the technical team has generated impressive outcomes for the Endeavor Mine Restart. It epitomises the Polymetals can-do and innovative approach to mining projects and the Board has little doubt on delivery of the practical and timely path to cash flow.

"In addition to this great value, we are also moving to test several ideas to unlock contained gold and silver from the existing stored tailings using hydrometallurgical techniques, and we are actively engaged in exploration to expand the mineral resource of the deposit to extend mine life.

"The quality of Endeavor Mine asset, our Cobar Basin operational familiarity, the significant remaining metal endowment and enormous exploration potential, provides a platform for substantive and long-term returns for our shareholders and the Region.

The Company would like to thank its staff and consultants who assisted with the extensive work behind the EMP and we look forward to returning the Endeavor Mine to a profitable and long-term operation."

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# **Polymetals**

#### **NEXT STEPS**

Following a recent successful capital raising in June, Completion of the Endeavor Mine acquisition in July and Mine Plan during August, the only remaining corporate requirement is to now finalise the \$30 million debt facility to support the project redevelopment to positive cashflow in H1 CY2025.

Polymetals has already commenced critical path site refurbishment activities, mainly relating to underground infrastructure; being the Level 6 Substation and Surface ventilation Fan. Immediately following finalisation of the debt facility, the planned and relatively modest site refurbishment tasks will be ramped up to meet the scheduled mining and processing timeline.

In the meantime, Polymetals is progressing near mine exploration activities with further drilling at its Carpark Prospect underway.

# **ENDEAVOR MINE PLAN**

#### **EXECUTIVE SUMMARY**

Polymetals Resources Ltd (ASX: POL) is a New South Wales based mining company, its core project being the Endeavor silver, lead and zinc mine located 40km to the north of Cobar, NSW (Figure 4). Polymetals operational history within the Cobar Basin commenced in 1992 having processed high-grade silver and gold tailings sourced from the Endeavor Mine.

Following extensive due diligence, which included near surface drilling of the high grade Upper North Lode (**UNL**), Polymetals has now acquired 100% of the historic Endeavor silver, lead and zinc mine. The Company completed a Mine Restart Study (MRS) during 2023 which was published via an ASX Release entitled; "Endeavor Silver Lead Zinc Mine Restart Study completed" on 16 October 2023. Since release of the MRS, Polymetals has continued to work on optimising the mine plan which has included updating current costs, geotechnical drilling of the UNL, further conversion of Mineral Resources to Ore Reserves and completion of detailed mine planning and engineering.

- The Endeavor Mine Plan (EMP) delivers an increase in mining and production rates (compared to the October 2023 MRS) over a 10-year mine life which is forecast to generate revenue of \$1.9 billion and a pre-tax cash flow of \$609 million from the sale of 260,000t of zinc, 90,000t of lead and 10.6Moz silver.
- The Endeavor Mine Plan (EMP) shows an impressive pre-tax internal rate of return and net present value (IRR of 345% and NPV<sub>8%</sub> of \$414m), low capital cost of mining recommencement (\$28m) in a short payback period of 14 months.
- The Company's Board and Senior Management have extensive experience in exploring for minerals, developing mines and producing metal from mining projects.
- Mr Matt Gill (a seasoned metalliferous underground mining engineer) has commenced his role as General Manager of the Endeavor Mine and will reside in Cobar during his tenure.



### **FINANCIAL SUMMARY & KEY OUTCOMES**

A summary of the various EMP input variables and financial outputs are presented in Table 1.

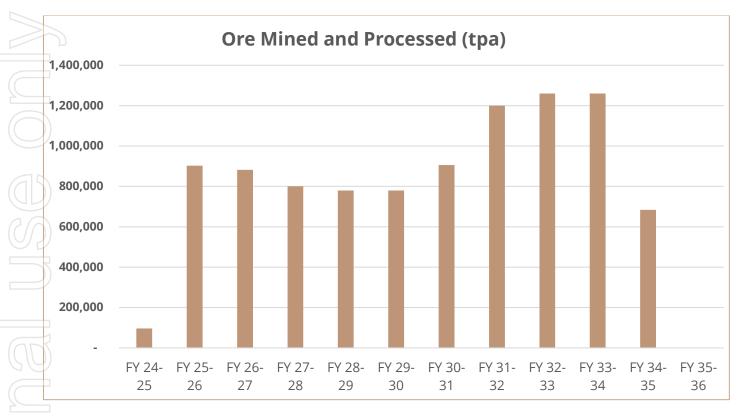
Table 1 - Financial Model Outputs

	1	
	Physicals	
	Life of Mine Ore	9.55Mt = Underground 4.7 Mt, Tailings 4.8 Mt
	Initial Project Life	10 years
	Average annual Processing Rate	<b>970ktpa</b> = Underground 0.83Mtpa, Tailings 1.2Mtpa
	Payable Zinc	260,000 t
	Payable Lead	90,000 t
	Payable Silver	10.6 million oz
	Financials	
	Mine Plan Revenue (real)	\$1,856 million
	Pre-Tax Free Cashflow	\$609 million
	NPV @ 8% discount (Pre-tax real)	\$414 million
	IRR (Pre-tax real)	345%
	Pre-Production Capital	\$28 million
	Maximum Cash Drawdown	\$30 million
	Payback	14 months
	Average Annual EBITDA (Years 1-5)	\$89 million
	Input	Price
	Zinc (Zn) US\$ / t	2,860
),	Lead (Pb) US\$ / t	2,160
	Silver (Ag) US\$ / oz	28.00
	AUD:USD	0.67

Figures 1, 2 and 3 and Table 2 summarise Life of Mine (LOM) Production and cashflow.



Figure 1 - Mine Plan Production



Endeavor production schedule tonnes and grade are highlighted in Table 2.

Table 2 - Endeavor Production Schedule Tonnes & Grade (EMP)

Source	Ore Tonnes Mined	% Measured and Indicated	Zn %	Pb %	Ag g/t
Upper Main Lode	268,454	96%	5.66	4.24	370
Main Ore Body	2,175,979	82%	5.65	3.28	47
Deep Zinc Lode	2,272,744	53%	7.01	0.64	37
Tailings	4,833,413	73%	2.12	1.55	79
Total	9,550,590	71%			

The Production Target underpinning financial forecasts included in the updated mine plan comprises 71% Ore Reserves, including 71% Measured & Indicated Resources, and 29% Inferred Resources. The first 12 and 36 months of the Production Target are underpinned by 93% and 86% respectively of Measured and Indicated Resources.

The estimated Ore Reserves and Mineral Resource underpinning the EMP Production Target have been prepared by a Competent Person in accordance with the requirements in the JORC Code.

There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the conversion of Inferred Resources to Indicated Resources or return the same grade and tonnage distribution.



Figure 2 - Mine Plan Concentrate Output

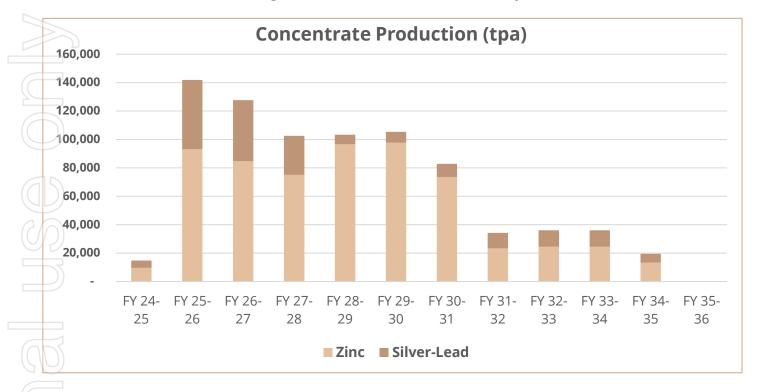
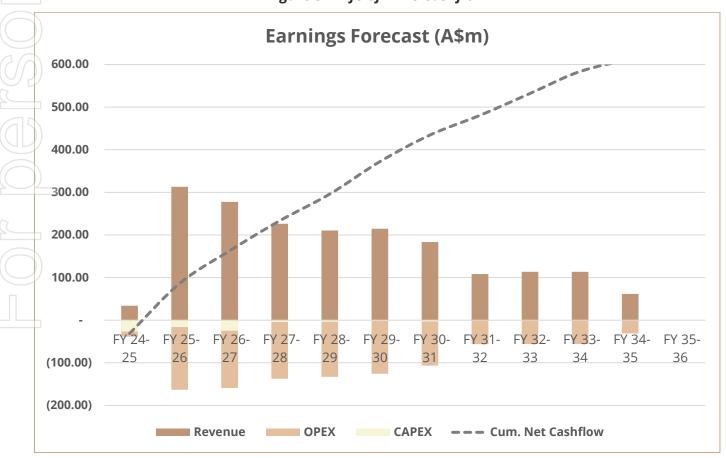


Figure 3 - Life of Mine Cashflow



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#### **ENDEAVOR MINE PLAN**

The Polymetals Endeavor Mine Plan (EMP) work followed on from the Mine Restart Study completed in October 2023. The EMP has been completed to a high standard by Polymetals Technical staff and Management as well as with assistance from well recognised independent external consultants including:

- Mine Engineering, design and scheduling Xenith Consulting
- Process Plant and Infrastructure Polymetals and AMC Consultants
- Historical and recent metallurgical test work and recoveries ALS Metallurgy, AMC Consultants, CBH Resources and Polymetals
- Geology, Resources and Geotechnical Polymetals and Xenith Consulting

#### **ORE RESERVES**

The EMP updated Ore Reserve estimate (Table 3) has been compiled from the Measured and Indicated Mineral Resources announced in May 2023 (refer ASX release dated 23 May 2023) and is supported by the EMP outlined in this document. The Underground Ore Reserves have increased 45% with an overall 18% increase in Ore Reserve tonnes from the previous October 2023 MRS estimate (refer ASX release dated 16 October 2023).

Table 3 - Endeavor Mine Ore Reserve Summary August 2024\*

Category	Source	Mt	Zinc (%)	Lead (%)	Silver (g/t)
Proved	Underground	0.9	6.17	3.82	92
Drobable	Underground	2.3	6.80	2.07	55
Probable	S1 Tailings	3.4	2.14	1.56	80
Total Pro	ved and Probable Reserves	6.6	4.32	2.04	73

<sup>\*</sup>Discrepancies may occur due to rounding

#### **Endeavor Mine Background**

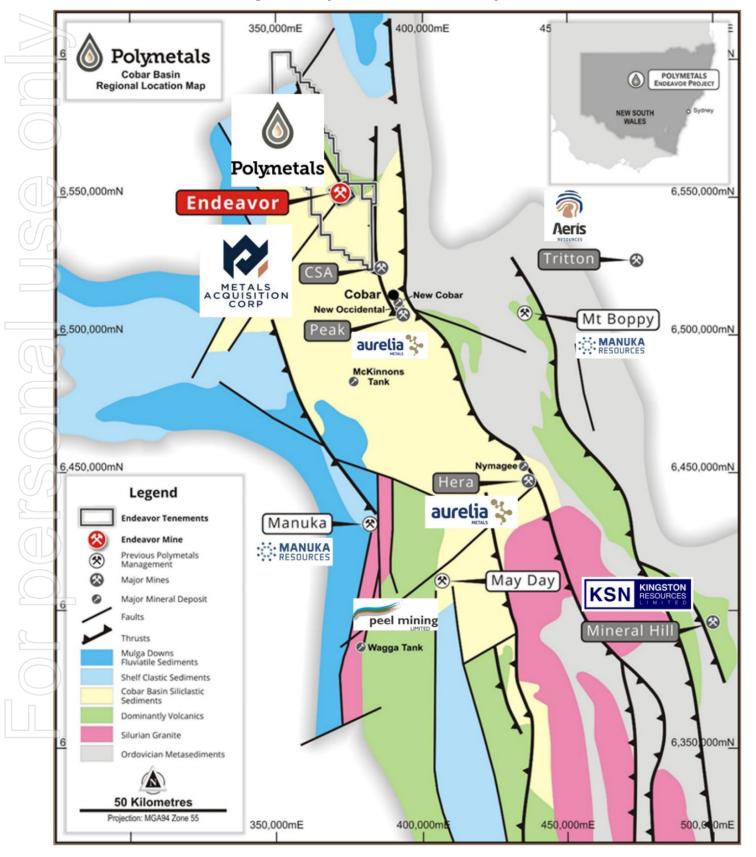
The Endeavor Mine is located 40km north of Cobar, within regional NSW (Figure 4).

The Elura deposit (now known as Endeavor) was first discovered in 1974. The project was designed and constructed by Fluor Daniel, commissioned in 1982 and operated continuously over 38 years and placed in care and maintenance during December 2019.

Polymetals secured the mine in 2023 following extensive due diligence over the previous 12 months and has recently Completed the acquisition (refer ASX announcement dated 1<sup>st</sup> August 2024). The Company is now proceeding to restart operations with concentrate production planned to commence during H1 CY2025.



Figure 4: Project Location and Nearby Mines

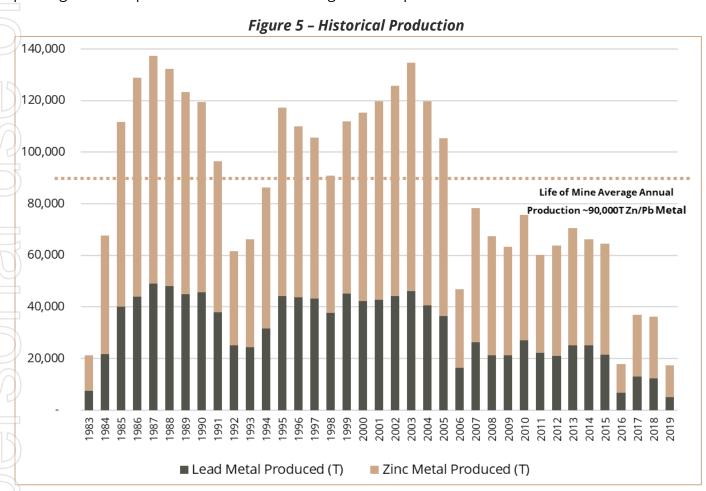


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#### **Previous Endeavor Mine Production**

A total of 32Mt ore has been mined from the Endeavor deposit containing average grades of 8.0% Zn, 5.0% Pb and 89.2 g/t Ag. Contained metal in concentrates produced was 2.0Mt Zn, 1.2Mt Pb and 41.6Moz Ag. Metal output varied over the life of the mine (refer Figure 5) with Mine production peaking at 1.25Mtpa with an annualised average of 874ktpa.



#### SUSTAINABILITY AND COMMUNITY

Since securing the project in 2023, Polymetals' main focus for the site has been to determine how the remaining resources and significant infrastructure can be most optimally utilised to establish a long term and sustainable project. This work has prioritised operational planning through the lens of mining and concentrate production but has also extended to Post-mining Land Use (PMLU) options. These various options currently include; unlocking precious metals value from tailings, evaluation of waste to energy potential, and also permanent storage possibilities given the stable geology and extensive mined volume available. The quality and location of the Endeavor Mine infrastructure provides enormous potential to establish possible contemporaneous and sustainable commercial activities which might extend the life of the project well beyond mining.

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Bringing the Endeavor Mine back online will have a significant impact on the Cobar Region with some 230 new jobs created over the next 18 months of redevelopment and operations. If, however, the Post Mining Land Use options are feasible they could have a very positive intergenerational impact with respect to employment in the region.

#### Mine Tenure

The Endeavor Mine is covered by five granted Mining Leases covering 30km<sup>2</sup>, three Exploration Licences covering 1,100km<sup>2</sup> and a Western Lands (Pastoral) Lease covering 30km<sup>2</sup> (Table 4).

Table 4 - Relevant Mining Leases, Exploration Licences and Pastoral Lease

	Title	Holder	Expiry Date	Purpose
	ML 158	Cobar Operations Pty Ltd	12/03/2028	
	ML 159	Cobar Operations Pty Ltd	12/03/2028	Surface and underground mining activities for minerals
4	ML 160	Cobar Operations Pty Ltd	12/03/2028	Surface and underground mining activities for minerals.
	ML 161	Cobar Operations Pty Ltd	12/03/2028	
	ML 930	Cobar Operations Pty Ltd	20/05/2028	Underground mining activities (surface exclusion of 10m)
	EL 5785	Cobar Operations Pty Ltd	05/10/2027	
	EL 8583	Cobar Operations Pty Ltd	02/06/2029	Mineral Exploration Licences
	EL 8762	Cobar Operations Pty Ltd	27/06/2030	
7	WLL 13839	Cobar Operations Pty Ltd	Perpetual	Western Land Lease - Pastoral land holding

#### **GEOLOGY & MINERALISATION**

Mineralisation within the Endeavor deposit is hosted by a fine grained turbidite sequence of the Cobar Basin and comprises multiple sub-vertical elliptical shaped pipe-like pods that occur within the axial plane of an anticline and are surrounded by an envelope of sulphide stringer mineralisation, in turn surrounded by an envelope of siderite alteration extending for tens of metres away from the sulphide mineralisation. Around 150m below the base of the main mineralised pods/lodes, mineralisation is hosted within the western limb of a folded limestone unit, occurring in veins and fractures. A zone of supergene enrichment occurs at the top of the Main Lode.

# Mineral Resources (JORC 2012)

There are two Mineral Resource estimates which form the basis of the EMP: namely the Endeavor Mine In-situ Mineral Resource and the TSF Sector 1 Tailings Mineral Resource. Summaries of the Insitu and Tailings Mineral Resource Estimates are provided in Tables 5 and 6.



Table 5 - Endeavor Mine Underground Mineral Resource May 20231

Category	Mt	Zinc (%)	Lead (%)	Silver (g/t)
Measured	4.4	8.3	5.1	93
Indicated	8.8	7.9	4.6	82
Inferred	3.1	7.7	3.7	78
Total <sup>2</sup>	16.3	8.0	4.5	84

<sup>1.</sup> Reported using NSR cut-off values of \$190/t for mineralisation above 10,080mRL, and \$150/t for mineralisation below 10,080mRL

The Endeavor Mine in situ Mineral Resource was first published by the Company in the ASX release "Endeavor Mine Acquisition Final" (28 March 2023) and an updated Mineral Resource estimate published in the ASX release "Endeavor Near Surface Resource 94% Measured & Indicated" (23 May 2023).

Table 6 - Endeavor Mine TSF Sector 1 Tailings Mineral Resource September 2023

Category	Mt	Zinc (%)	Lead (%)	Silver (g/t)
Indicated	3.6	2.14	1.56	80
Inferred	1.6	2.07	1.53	77
Total <sup>2</sup>	5.2	2.12	1.55	79

<sup>1.</sup> Reported without use of cut-off grade

The Endeavor Mine TSF Sector 1 Tailings Mineral Resource estimate was presented by the Company in the 16 October 2023 Mine Restart Study.

The Mineral Resources for the Production Target and Ore Reserves for the mine plan were compiled by Competent Persons in accordance with guidelines set out in the 2012 edition of the JORC Code.

#### UNDERGROUND MINING

Underground mining at the Endeavor Mine will be undertaken applying industry standard methods, most of which were previously utilised for production at the mine. Extraction of ore will be by a combination of Long Hole Open Stoping (LHOS) in the Main Ore Body, the recovery of remnant "skins" material adjacent to previously mined stopes, Sub Level Stoping (SLS) in the Deep Zinc Lode and Cut & Fill (C&F) in the high grade Upper Main Lode.

Mining costs were generated from first principles based on an owner-operator model.

### **Net Smelter Return (NSR) Calculation and Stope Optimisation**

Stope optimisations were based on Net Smelter Return (NSR) values that have been assigned to each block in the block model, based on calculations using the assumptions shown in Table 7.

<sup>2.</sup> Discrepancies may occur due to rounding

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Table 7 - NSR Calculation Assumptions

		Metal	Evehango	Flotat	ion Recovery	Smelting	Smelting and	
	Metal	Price	Exchange Rate	Below 10080mRL	Above 10080mRL	DZL	Recovery	Freight costs per tonne concentrate
	Pb	US\$2,076/t	41144	75%	77%	-	95%	
	Zn	US\$2,915/t	AU\$1= US\$0.70	84%	76%	90%	85%	\$523
=	Ag	US\$22.4/oz	0340.70	52%	57%	52%	95%	

An NSR value of \$150/t, based on historic mining and processing costs on site, was utilised for the stope optimisation process. The stope shapes were generated using Deswik Stope Optimiser (SO) and using a minimum strike of 5m and attempting to align the height of the stopes with the existing level intervals. Post processing was completed to eliminate shapes with a volume below 500 m<sup>3</sup> and any part of the stope shape within 5m of a previously mined stope not backfilled with loose waste rock.

# **Mining Methods**

The Endeavor Mine utilised a long hole open stoping mining method to extract high grade ore. This method varied when mining primary or secondary stopes and when mining remnants (rib pillars, crown pillars and halos).

Rib pillars and crown pillars were often left when mining remnant stopes to avoid dilution from previously mined surrounding stopes. Pillar extraction between levels and between existing filled stopes was undertaken routinely. Cemented paste fill was utilised to fill stopes where it was deemed necessary for maintaining access to other stoping areas. Loose waste rock was utilised where paste fill was not considered necessary.

The Level 1 (Upper North Lode) Sulphide ore is planned to be mined primarily by cut and fill methods. Geotechnical drilling has been completed with results still outstanding. Pending these geotechnical results, the mining method for this area may be improved which might further increase ore reserves.

Sub-Level stoping will be utilised as the mining method in the Deep Zinc Lode, using cemented fill to reduce the number of pillars and enable the maximum recovery of ore.

It is planned to use larger capacity trucks when mining resumes in the main ore body and Deep Zinc Lode. Smaller jumbos, loaders, and trucks will be used in the Level 1 Sulphide area due to the reduced size of the openings to access this area.

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# Mining

Mining is consistent with previous studies, with extra ore in the updated mine plan being sourced from remnant areas (Figure 6) adjacent to loose rock filled stopes ("Skins"). The loose rock fill will be stabilised by grouting prior to mining of the remnant material.

The updated mine plan incorporates additional equipment dedicated to mining of the Level 1 Sulphides which will accelerate mining rates in this area. The cut and fill levels have been redesigned to align better with the ore body, slightly increasing the mined grade. The mine schedule has also been smoothed resulting in a consistent production profile for the underground operations.

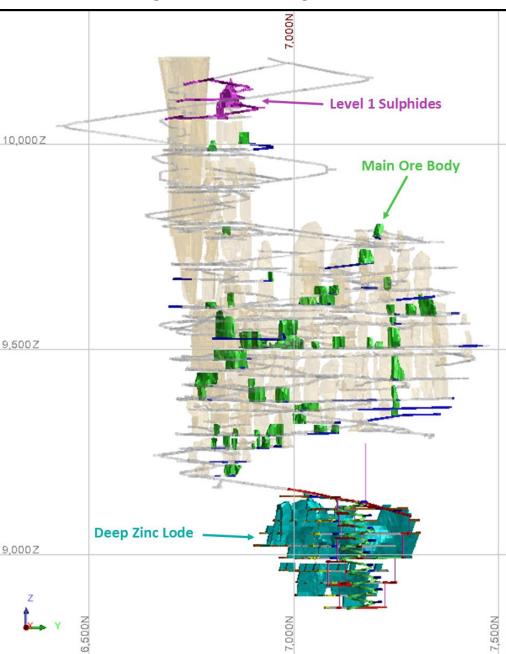


Figure 6: Mine Plan Long Section

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#### **METALLURGY & PROCESSING**

The Endeavor processing plant was designed as a standard, differential silver-lead & zinc flotation circuit. It was engineered and constructed by Fluor Daniel and commissioned in 1982.

Nameplate capacity of the Endeavor mill is 1.2Mtpa, although throughput has been largely mine constrained. A total of 32 million tonnes of ore has been processed over 38 years of operations, with an average annual throughput of 850ktpa. The mill remains in excellent condition with a number of process item modifications from the original design made over the years to enhance efficiency. Notable changes have been the replacement of concentrate regrind mills with Svedala Sand Detritors to enhance concentrate grades.

Primary Endeavor ore historically mined and processed consisted of galena (~13 %wt) and sphalerite (~14 %wt) with pyrite and pyrrhotite being the main floatable gangue.

Whilst the ore is considered complex, historical metallurgical recoveries of lead, zinc, and silver continued to improve with time, which was likely a combination of improved metallurgy, attention to optimal grind size, improved reagents, better process control and more experienced float operators.

Internal and third-party reviews of the previous metallurgical performance of the Endeavor Processing Plant as well as historic and recent metallurgical test work has validated forecast estimates of metal recoveries from the different ore sources. Underground ore is planned to be mined and processed at an average rate of 830ktpa with reprocessing of the high-grade tailings at 1.2Mtpa.



Figure 7: Endeavor Mine Processing Plant

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# **Metallurgical Recoveries**

A review of the historic metallurgical studies and processing plant performance was undertaken by AMC Consultants Pty Ltd on behalf of Polymetals Resources. The review was intended to assess the estimates for recoveries from the following areas of the ore body:

- The historically mined areas which are predominantly siltstone hosted Pb/Zn/Ag ore. The focus is on pillar recovery and remnant ores.
- Ores close to surface in the Upper North Lode. This is a silver-rich zone with lower lead and zinc grades.
  - Unmined limestone hosted Zn/Pb/Ag ore from the Deep Zinc Lode and

The various ore sources at the Endeavor Mine have slightly differing metallurgical characteristics which have a bearing on historic and forecast metal recoveries and concentrate grades.

Table 8 provides a summary of the estimated achievable process recoveries. Several metallurgical recoveries and concentrate grades have been estimated for the Deep Zinc Lode and Tailings, which are the subject of ongoing or planned flotation test work.

Table 8 – Summary Metal Recoveries and Concentrate Grades

Ore Source	Metallur	Metallurgical Recovery			Pb Concentrate Grade		Zn Concentrate Grade	
	Pb (%)	Zn (%)	Ag (%)	Pb (%)	Ag (g/t)	Zn (%)	Ag (g/t)	
Historic Areas	77.4	86.8	71	49.5	625	49.8	94	
Deep Zinc Lode	75*	90	70*	48*	1,800*	50	100*	
Upper North Lode	62	76	66	48	1,500	48	200	
Tailings	30*	46	40*	50*	1,500*	50	-	

<sup>\*</sup>Estimated recoveries and grades

#### LOGISTICS & TRANSPORT

Road access to the Project is via the sealed Cobar - Louth Road to the mine gate.

All concentrates are transported from the mine by rail. A spur railway line runs from the mine to Cobar and connects with the main east-west transcontinental rail line from Sydney to South Australia, facilitating the transport of concentrate from the mine to either a ship loading terminal at Newcastle port or Port Pirie.

Ocean Partners was engaged by Polymetals to complete a review of the supply chain from mine to market for Endeavor concentrates. Based on current market conditions all concentrate will be exported through the Newcastle Port in 5,000t or 10,000t parcels.

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#### **COST ESTIMATION**

The Endeavor Mine Restart Study in 2023, and this subsequent Endeavor Mine Plan have been compiled during a period of high inflationary pressure, due to global factors, that has impacted most aspects of the industry. Where possible, up to date quotes have been requested from suppliers and used in the estimates.

Capital and operating costs have been estimated to accuracies of +/- 15%.

# **Capital Cost Estimate**

The estimates of Capital Expenditure (CAPEX) were compiled by Polymetals, where possible using rates and quotes received from contractors and suppliers and are quoted in Australian dollars (AUD).

The total pre-production capital estimated to be required for the recommencement of operations at the Endeavor Mine is **\$28M**, including a 15% contingency.

Table 9 - Endeavor Mine Restart Total Capital Estimate

Cost Area	Cost (A\$M)					
Pre-Production						
Processing Fixed Plant	3.88					
Mining Fixed Plant	2.86					
Mobile Plant	6.38					
Site Establishment	11.17					
Contingency	3.72					
Total Pre-Production Capital	28					
Operating						
Tailings Storage Capacity Increase	4.15					
Deep Zinc Lode	9.50					
Tailings Mining	2.60					
Upper North Lode	1.29					
Sustaining & Development Capital	29.82					
Total Operating Capital	47.36					
Total LOM Capital	75.36					

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# **Operating Cost Estimate**

The Operating Expenditure (OPEX) for the Project, summarised in Table 10, has been estimated from first principles in an operating cost model that incorporates input costs from mining, processing, maintenance, administration, health, safety, environment, training & stores and housing costs.

Life of Mine (LOM) OPEX, which includes all costs of mining, processing, site administration, royalties, selling and transportation costs, but excluding corporate costs Company are calculated at \$1,215 million.

Table 10 - Endeavor Mine Restart Operating Cost Estimates

Cost Area	Ore Source	Cost (A\$M)	Cost per tonne ore (A\$/t)
NA:	Underground	329.80	69.92
Mining	Tailings	10.49	2.17
Dynasasina	Underground	117.43	24.89
Processing	Tailings	88.82	18.38
Maintanan	Underground	80.67	17.10
Maintenance	Tailings	32.71	6.77
General Admin	Underground	68.92	14.61
	Tailings	23.57	4.88
TC/RC, Transport,	Underground	245.66	52.08
Shipping	Tailings	58.06	12.01
Davidia a	Underground	80.97	17.17
Royalties	Tailings	23.59	4.88
Caraltal	Underground	47.33	10.03
Capital	Tailings	6.99	1.45
	Underground	970.79	205.80
Totals	Tailings	244.22	50.53

#### FINANCIAL EVALUATION

A financial analysis of the Project was carried out using outputs from the LOM scheduling process, CAPEX and OPEX estimates, various industry standard assumptions, factored historic operating costs and first principles generated costs. An owner / operator mining model was developed, with a gradual ramping up of personnel numbers over the first 12 months to match the production profile of the mine. Mining costs were also derived from first principles (estimated & validated by a third party) using up to date quotations for consumables and the supply and maintenance of mobile plant.

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The analysis is based on a mine life of 10 years, with mining of underground ore from Years 1 to 7 and re-treatment of Sector 1 tailings from Years 6 to 10.

The financial model estimates monthly pre-financing cashflows for the LOM in Australian dollars, with the evaluation reported on a pre-tax basis. Net present Value (NPV) is calculated using a Pre-tax and Post-tax discount rate of **8%**.

A summary of the key economic outcomes from the financial analysis of the re-commencement of mining and processing at the Endeavor Mine are shown in Tables 11 and 12.

Table 11 - Key Economic Outcomes

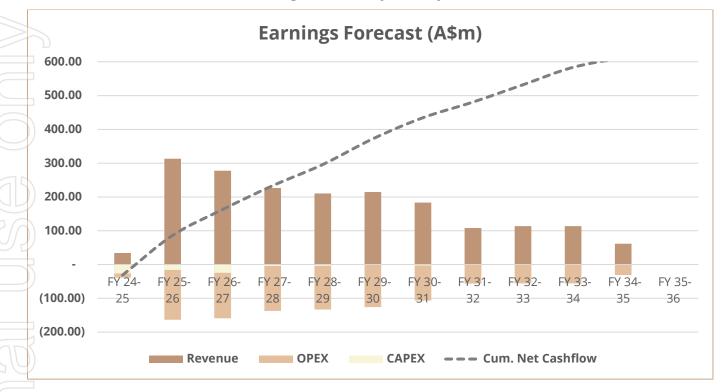
Output Metric	Unit	Outcome
Project Revenue (real)	A\$M	1,856
Free Cashflow	A\$M	609
Pre-Production Capital	A\$M	28
NPV <sub>8%</sub> Pre-Tax (real)	A\$M	414
IRR	%	345
Payback	Months	14
Maximum Cash Drawdown	A\$M	30

Table 12 – Key Physical Outcomes

Output Metric	Unit	Outcome
Mined Ore Tonnes	Mt	9.55
Nominal Throughput	Mtpa	0.97
Life of Mine	Years	10
Processed Tonnes	Mt	9.55
Avg. Zn Grade	%	4.19
Avg. Pb Grade	%	1.80
Avg. Ag Grade	g/t	70
Payable Zinc Metal	Kt	260
Payable Lead Metal	Kt	90
Payable Silver Metal	Moz	10.6



Figure 8 - Cashflow Profile



# **Commodity Price and Exchange Inputs**

Polymetals completed a comparison of five recent Australian and International Banks and brokerage firms forecast metal price and exchange prices. An average was taken over the FY24 – FY28 forecasts and rounded down to reach the following input prices used in the financial modelling. Price Inputs were run flat across life of mine.

Table 13 - Commodity Price and Exchange Inputs

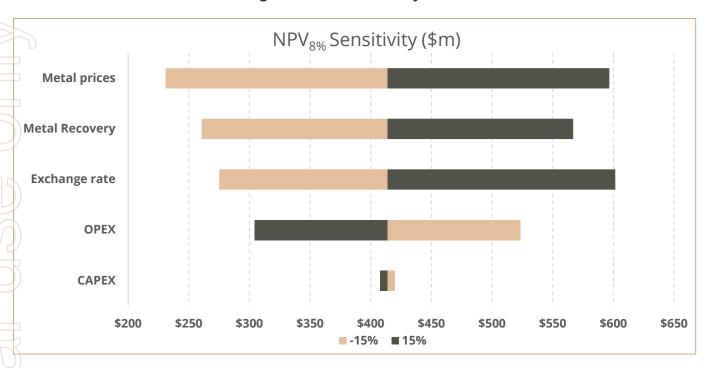
Input	Price
Zinc (Zn) US\$ / t	2,860
Lead (Pb) US\$ / t	2,160
Silver (Ag) US\$ / oz	28.00
AUD:USD	0.67

# **Sensitivity Analysis**

Sensitivity analysis demonstrates that the project is resilient to changes in CAPEX and OPEX and most sensitive to the AUD:USD foreign exchange rate and metal prices.



Figure 9 - NPV Sensitivity Table



#### **CAUTIONARY STATEMENTS**

The Endeavor Mine Plan discussed herein has been undertaken to explore the technical and economic feasibility of restarting production at the Endeavor Mine. The updated mine plan builds confidence on the Endeavor Mine Restart Study completed and announced to the ASX on 16 October 2023. The Production Target and financial forecasts presented in the updated mine plan are shown on a 100% Project basis. The Production Target underpinning financial forecasts included in the updated mine plan comprises 70% Ore Reserves including 72% Measured & Indicated Resources, and 28% Inferred Resources. The first 12 and 36 months of the Production Target are underpinned by 93% and 86% respectively of Measured and Indicated Resources. The estimated Ore Reserves and Mineral Resource underpinning the Base Case Production Target have been prepared by a Competent Person in accordance with the requirements in the JORC Code. There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the conversion of Inferred Resources to Indicated Resources or return the same grade and tonnage distribution.

The stated Production Target is based on the Company's current expectations of the future results or event and should not be solely relied upon by investors when making investing decisions. The economic outcomes associated with the MRS and this EMP are based on certain assumptions made for commodity prices, concentrate treatment and recovery charges, exchange rates and other economic variables, which are not within the Company's control and subject to change from time to time. Changes in such assumptions may have a material impact on economic outcomes. To achieve the range of outcomes indicated in the updated mine plan, debt and equity funding will be required. Investors should note that there is no certainty that the Company will be able to raise the amount of funding when needed and/or reach a Final Investment Decision by the date proposed in this EMP.

This announcement contains forward-looking statements. Polymetals has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes it has a reasonable basis to expect it will be able to fund the development of the project. However, several factors could cause actual results, or expectations to differ materially from the results expressed or implied in the forward-looking statements. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the updated Mine Plan. This announcement has been prepared in compliance with the JORC Code (2012) and the current ASX Listing Rules.

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#### <ENDS>

This announcement was authorised for release by Polymetals Resources Ltd Board.

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#### **ABOUT POLYMETALS**

Polymetals Resources Ltd (ASX: POL) is a mining company developing the high-grade Endeavor silver zinc lead mine located within Australia's premier polymetallic mineral province the Cobar Basin, New South Wales, Australia. Polymetals is on track to become a long term, profitable base and precious metal producer. Polymetals holds a strong exploration portfolio for organic growth with excellent potential for discovery of copper, gold, silver and zinc orebodies. For more information visit <a href="https://www.polymetals.com">www.polymetals.com</a>

#### REFERENCES

The information in this report references the following ASX announcements:

- ASX Announcement "Endeavor Silver Lead Zinc Mine Restart Study completed" dated 16 October 2023

  ASX Announcement "Endeavor Near Surface Resource 94% Measured & Indicated" dated 23 May 2023
- ASX Announcement "Endeavor Mine Acquisition Final" dated 28 March 2023
  - ASX Announcement "Endeavor Silver Zinc mine acquisition accelerated" dated 14 May 2024
- ASX Announcement "ENDEAVOR SILVER ZINC MINE PLAN OPTIMISATION" dated 29 May 2024
  - ASX Announcement "Completion of Endeavor Mine Acquisition" dated 1 August 2024

The Company confirms that it is not aware of any information or data that materially affects the information included in the relevant market announcement and all material assumptions and technical parameters underpinning the estimates in the Original Announcement continue to apply and have not materially changed.

#### COMPETENT PERSONS STATEMENT

The information supplied in this release regarding Mineral Resources of the Endeavor Project is based on information compiled by Mr Troy Lowien, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy. Mr Lowien is a full-time employee of Polymetals Resources Ltd 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". Mr Lowien consents to the inclusion of matters based on information in the form and context in which it appears.

The information supplied in this release regarding Ore Reserves of the Endeavor Project is based on information compiled by Mr Matthew Gill, a Competent Person who is a Fellow of the Australian Institute of Mining and

# **Polymetals**

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Metallurgy. Mr Gill is a full-time employee of Polymetals Resources Ltd 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". Mr Gill consents to the inclusion of matters based on information in the form and context in which it appears.

#### FORWARD LOOKING STATEMENT

This announcement contains "forward-looking information" that is based on POL's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the mine restart study, POL's business strategy, plan, development, objectives, performance, outlook, growth, cashflow, projections, targets and expectations, mineral resources, ore reserves, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that POL's actual future results or performance may be materially different.

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause POL's actual results, level of activity, performance, or achievements to be materially different from those expressed or implied by such forward-looking information. Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices and demand of iron and other metals; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list and the further risk factors detailed in the remainder of this announcement are not exhaustive of the factors that may affect or impact forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information.

POL disclaims any intent or obligations to revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law. Statements regarding plans with respect to POL's mineral properties may contain forward-looking statements in relation to future maters that can only be made where POL has a reasonable basis for making those statements. Competent Person Statements regarding plans with respect to POL's mineral properties are forward looking statements. There can be no assurance that POL's plans for development of its mineral properties will proceed as expected. There can be no assurance that POL will be able to confirm that any mineralisation will prove to be economic or that a mine will successfully be re-developed.



# JORC Code, 2012 Edition – Table 1

# **Section 1 Sampling Techniques and Data**

	this section apply to all succeeding sections.)		
Criteria	JORC Code explanation	Commentary	
Sampling techniques	<ul> <li>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.</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 (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.</li> </ul>	<ul> <li>Underground Resource</li> <li>Diamond drilling was carried out to define the mineralisation from which variable length samples (predominantly 1 or 2m) were obtained which were crushed, pulverized and split to 200 – 300 ml aliquots for assay by Aqua Regia digest followed by AAS.</li> <li>Sludge samples were taken during underground percussion drilling to determine mineralized extents. These samples were used as a guide only for interpretation and not used in grade estimation.</li> <li>During Feb-March 2023 reverse circulation percussion drilling was carried from the surface to target the Upper North Lode. Samples were all collected by qualified geologists or under geological supervision. Representative samples of the material drilled were collected for every metre drilled. 2 x 2-4kg samples (one for assay and a duplicate) and a bulk sample of the remainder of each metre was collected directly from the rig cyclone.</li> <li>Tailings Resource</li> <li>2014 Drilling – Air core drilling was used to obtain 1m samples from which 2m composite samples were created for assay by acid digest.</li> <li>2015 Drilling – Push tube drilling was used to obtain an average sample length of 1.2m from which sub samples were collected for assay by acid digest.</li> <li>2017 Drilling - Push tube drilling was used to obtain an average sample length of 1m from which various composites were created for metallurgical test work.</li> </ul>	
Drilling techniques	Drill type (eg core, reverse circulation, openhole 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).	<ul> <li>Underground Resource</li> <li>Diamond Drilling has been carried out from surface and underground locations, with the majority having been drilled from underground development.</li> <li>Overall, there are 2,538 diamond drill holes in the database, totaling 402,359m of drilling. Of those, a total of 2,459 holes totaling 389,697m of drilling were used in the Mineral Resource estimation</li> <li>Holes drilled prior to 2011 (1,648 holes for 297,896m) were predominantly BQ in size with some AQ size core. Holes drilled post 2011 varied in size from BQ up to HQ, with the majority LTK60.</li> <li>No core orientation has been recorded.</li> <li>Reverse circulation drilling was carried out in Feb-March 2023 and consisted of 21 drill holes, using a Schramm 1200 with an onboard 350 psi/900 cfm compressor. An auxiliary air booster was used on all</li> </ul>	

holes. The drill string utilised standard 6m rods and a 5 ½ inch face sampling hammer.



Criteria	JORC Code explanation	Commentary
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>Tailings Resource</li> <li>2014 Drilling - Aircore methods were carried out where a 100mm cutting bit with a hollow centre is pushed through unconsolidated material using rotation. Air is pumped through an annulus between the inner and outer tubes of the drill string and out through orifices in the cutting head. Sample is returned up the centre of the drill string and collected in a cyclone.</li> <li>2015 and 2017 Drilling - Push tube methods where casing is advanced down the hole and a solid "core" of unconsolidated material is extracted from within the casing encased in a rigid plastic sleeve</li> <li>Underground Resource</li> <li>The core trays were laid out along racking systems, washed down and metre marked by the field technician using a chinagraph pencil and/or permanent marker and then measured for recovery and RQD information.</li> <li>Diamond Drilling - Core recovery (total core recovery) averaged &gt;98% and the average RQD was 61%.</li> <li>Recovery in the March 2023 reverse circulation percussion holes was visually estimated and was generally close to 100% apart from voids encountered due to underground development and vughs in the supergene zone. The average recovery of samples in the supergene zone was 83%.</li> <li>There is no apparent relationship between sample recovery and grade. The ore is competent with no apparent loss of fine or coarse material that would introduce bias.</li> <li>Tailings Resource</li> </ul>
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>No recovery information is available.</li> <li>During the 2014 air core drilling program the sample collection cyclone was vigorously cleaned after each 1m interval to ensure complete sample recovery.</li> <li>Underground Resource</li> <li>All diamond drill core was delivered to the core yard compound on surface at the end of each shift by the drilling contractor where it was then prepared for logging and sampled by the geologist and field technician. The core trays were laid out along racking systems under cover that provided adequate working conditions in all weather. The core was washed down and metre marked by the field technician using a chinagraph pencil and/or permanent marker and then measured for recovery and RQD information. The geologist then followed by logging the core using coloured chinagraph pencils to mark-up structures, mineralised domains and sampling intervals.</li> <li>Core was routinely photographed and stored in racking systems or on pallets in a core farm.</li> <li>A recent review of the core storage by the CP has revealed a high degree of oxidation and destruction of core that has been exposed to the elements.</li> <li>Reverse circulation percussion drill chips were logged for lithology, mineralisation, weathering, alteration, colour, and any other relevant characteristics. Geological logging conformed to the standardised system adopted by the previous operators of the project.</li> <li>Logging was both qualitative of quantitative depending on the characteristic being recorded. Small</li> </ul>



Criteria	JORC Code explanation	Commentary
		representative samples of chips are stored in chip trays for reference. The whole length of each hole was logged.  Tailings Resource
		<ul> <li>Detailed logging of the tailings is considered impractical and unnecessary as the tailings have been homogenised from processing and deposition. Material changes were noted when drill holes intersected the base of the tailings dam</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core 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>Underground Resource</li> <li>Diamond Drilling - Core was cut down the structural long axis using a fully automated Almonte Core Saw. Core samples were half cut or alternatively, quarter cut if the sample is submitted as a duplicate.</li> <li>Historically, most sample preparation was carried out at the onsite laboratory with overload sent to ALS Orange.</li> <li>Samples were crushed in a small jaw crusher and a split was placed into the pulveriser.</li> <li>Samples were then pulverized to pass 38 micron and split to usually a 200-300ml aliquot.</li> <li>Sample sizes are appropriate for the grain size of the material being sampled.</li> <li>No systematic collection of field duplicate or second half sampling was recorded.</li> <li>RC Drilling - The top 12m of each hole were not sampled as this interval was predominantly fill material. Due to the closely spaced nature of the drill holes, only selected holes were sampled above the mineralised domains (above 72mRL). These samples were composed of 4m composites, collected from each 1m interval using spear methods. Below 72m samples were collected on an individual 1 metre basis directly from the on-rig cone splitter. Samples were all collected by qualified geologists or under geological supervision. Representative samples of the material drilled were collected for every metre drilled. 2 x 2-4kg samples (one for assay and a duplicate) and a bulk sample of the remainder of each metre was collected directly from the rig cyclone.</li> <li>Tailings Resource</li> </ul>
		<ul> <li>During the 2014 air core drilling, 2m composites were taken from 1m samples intervals by spear method., as the material was too puggy for a riffle splitter.</li> <li>Push tube samples were split laterally down the hole with one side used to create metallurgical sample composites and the other side for assay.</li> <li>Sample preparation was carried out at the onsite laboratory for the 2014 program and ALS Orange for the 2015 program. Sample preparation of the metallurgical composites was carried out at ALS Burnie.</li> <li>Field duplicate sampling results indicate no issues with the methods used for collection of sub samples.</li> <li>Sample sizes are appropriate for the grain size of the material being sampled.</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</li> </ul>	<ul> <li>Underground Resource</li> <li>Samples were assayed at the Endeavor laboratory using an Aqua Regia digest with atomic absorption spectrometry (AAS) for lead, zinc, silver, iron and copper analyses.</li> <li>Sample sent to ALS-Orange were assayed by an Aqua Regia digestion using AAS (ICP-AES) analysis for lead, zinc, silver, iron and copper. The prepared sample is digested in 75% aqua regia for 120 minutes</li> </ul>



Criteria	JORC Code explanation	Commentary
	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.	and after cooling, the resulting solution is diluted to volume (100mL) with de-ionised water, mixed and then analysed for inductively coupled plasma-atomic emission spectrometry or by atomic absorption spectrometry.  Assay techniques are considered total and appropriate for the mineralisation style.  There is no documentation of the systematic collection of field duplicates.  Quality Control procedures appear to have been implemented at the Endeavor Mine in 2005 with the accuracy of the assay data and the potential for cross contamination of samples during sample preparation assessed based on the assay results for the field standards and blanks. Standards (including blanks) have been inserted at the rate of approximately one in 20 samples  During 2018-2019 all four of the standards used during the year performed better than the previous 12 month although Ag continued to produce some variability (with 4 outliers from 93 samples) in the low grade OREAS 131B. A total of 367 CRM samples were assayed throughout 2018-2019 with 277 going to the mine lab and the remaining 90 going to ALS/Orange. Of the 11 outliers greater than 10% above or below the expected value, three were analysed at ALS and eight analysed at the mine lab. The 11 outliers comprised six Ag (1.6% of total CRM analyses), two Pb (0.5%) and three Zn (0.8%) assays.  A total of 364 blanks were added to the sample stream during the 2018-2019 drilling programs. A small percentage of samples reported Pb and Zn grades above the level of detection (BLD), but these were considered to be well within acceptable limits given the low grades being reported  Previous reporting on internal laboratory accuracy and precision has not raised any significant issues.  Samples from the March 2023 drilling program were sent to North Australian Laboratories in Pine Creek NT. Base metals including Pb, Zn, Cu and Ag were determined by 1 four-acid digest procedure. Initial charge weight is 0.5g with metal concentrations determined by 1 CP analysis of final diluted solutions. If C
10		<ul> <li>2014 Drilling - Samples were assayed at the Endeavor laboratory using an Aqua Regia digest with atomic absorption spectrometry (AAS) for lead, zinc, silver, iron and copper analyses.</li> <li>2015 Drilling – Samples were sent to ALS-Orange were assayed by an Aqua Regia digestion using AAS (ICP-AES) analysis for lead, zinc, silver, iron and copper. The prepared sample is digested in 75% aqua regia for 120 minutes and after cooling, the resulting solution is diluted to volume (100mL) with de-ionised</li> </ul>



	Criteria	JORC Code explanation	Commentary
	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>	water, mixed and then analysed for inductively coupled plasma-atomic emission spectrometry or by atomic absorption spectrometry.  Assay techniques are considered total and appropriate for the mineralisation style.  The quality control regime used in the 2014 drilling program consisted of Certified Reference Material (CRM) and Blanks inserted into the sample stream, field duplicate samples, and re-assays of laboratory pulp samples. The insertion rate of QC samples into the submission stream was 1 in 6 samples.  The quality control regime used in the 2015 drilling program consisted of CRM and Blanks inserted into the sample stream at a rate of about 1 in 10 samples. However, these samples were not assayed at the laboratory due to insufficient sample quantities according to the results certificate. Instead, assay accuracy and precision were assessed based on CRM and pulp duplicates inserted in the sample stream by the laboratory.  No recorded quality control samples were included in the submission of the 2017 samples to the metallurgical laboratory.  Assessment of the QC data from the 2014 drilling indicate acceptable levels of precision but an issue with the accuracy of Pb assays, showing a significant bias to lower grades.  Acceptable levels of precision and accuracy have been established for the 2015 assays.  Underground Resource  The Competent Person inspected mineralised intervals in core and underground exposures during site visits. A selection of original laboratory certificates were also located and verified against database entries. No errors were found.  No twinned holes were assessed. There are a number of drill holes that have intercepted mineralisation within relatively close proximity to each other and these drill holes have been investigated. Holes located less than 10m apart were assessed and found to have satisfactory levels of similarity and acceptable to be used in Resource estimation.  The geology department kept written procedures for data collection and storage. A user manual was written for
	) ) 5)		<ul> <li>There are no records of independent or alternative verification of significant intersections.</li> <li>The 2015 drill holes were drilled as twins of selected holes from the 2014 program. The results show overall increase in grades for Zn, Pb and Ag, up 112%. Further investigation has ascertained that the magnitude of the differences for each element do not corelate with any particular holes or areas of the TSF. This indicates an issue with the 2014 sample representivity and therefore have been rejected for use in resource estimation.</li> <li>The geology department kept written procedures for data collection and storage. A user manual was</li> </ul>



	Criteria	J	ORC Code explanation		Com	mentary		
				•		Drilling Management syst s not aware of any adjustr	em (MS Access Database) nent to assay data.	
	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.	<ul> <li>The Endeavor Mine is situated within Zone 55 of the MGA94 grid coordinate system. A local m was established for the site. All drill hole and undergound development survey data was collecte this local grid.</li> <li>The MRE estimate uses the local mine grid, which relates to MGA94 using the following transform</li> </ul>			ey data was collected using	
			Specification of the grid system used.  Quality and adequacy of topographic				MGA94	Local Mine Grid
2			control.		Doint 4	Northing	6551419.471	6451.175
					Point 1	Easting	372517.808	5231.564
					Point 2	Northing	6551409.739	6452.863
					ronit 2	Easting	371884.310	4597.827
					Elevation 0	orrection	+10	,000
7					nderground Resource		L DTI(ODO (	
				•	Holes paths were survey every 30 metres downline The level of accuracy for A reasonably detailed su	ed using a downhole gyro le. drill hole locations is cons rface topographic survey	sidered appropriate for Res was supplied. This Resour	down-hole camera at least ource estimation purposes. ce estimate is not impacted occur approximately 100m
9				•	illings Resource Drill hole collars were su There were no downhole relatively short (<15m de location of datapoints.	pth), and therefore any do	ne drill holes. All holes were by anhole deviation would ha	e drilled vertically and were ve negligible effects on the
				•				2015 by Arvista Pty Ltd at a c format was supplied and
	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	•	Underground drill fans he predominantly (80%) 1 to The data spacing and continuous transfer of the transfer of	ave resulted in closely spo 2m in length.	establish grade continuity	and in the dip direction.  Ile sampling intervals were appropriate for the Mineral



		ORC Code explanation	Commentary
	•	applied. Whether sample compositing has been applied.	<ul> <li>Sample composites of 2m were predominantly used in the MRE. 1m composites were used in one domain where the majority of sampling was over intervals of 1m or less.</li> <li>Tailings Resource</li> </ul>
			<ul> <li>Drilling density is on a notional 50m x 50m grid with those holes used in the resource estimate on 100m x 200m grid. Down hole sampling intervals were on average around 1m in length.</li> <li>The data spacing and distribution is sufficient to establish grade continuity appropriate for the Indicated Resource estimation category after all other confidence factors are applied.</li> <li>Sample composites of 2m were used in the MRE.</li> </ul>
Orientation of data in relation to geological structure	•	orientation and the orientation of key mineralised structures is considered to have	<ul> <li>Underground Resource</li> <li>The mineralization occurs as sub-vertical pipe-like structures with concentric grade zoning. Drill holes have been collared from the surface and multiple underground drill platforms resulting in a wide range of intercept angles from opposite sides. The majority of intercepts are at a high angle (orthogonal) to principal direction of mineralisation. This reduces the likelihood of biased sampling.</li> <li>Tailings Resource</li> </ul>
		assessed and reported if material.	<ul> <li>Tailings were deposited sub-aerially forming beaches with a slight slope towards the perimeter of the storage facility. Therefore, any grade variations over time will be represented by sub-horizontal layering.</li> <li>Drilling of vertical drill holes ensures sampling is undertaken as close as possible orthogonal to the direction of maximum grade continuity.</li> </ul>
Sample security	•	The measures taken to ensure sample security.	<ul> <li>All samples were collected and sub-sampled on site by company staff. Samples were either submitted to an internal on site laboratory or off site laboratory.</li> <li>Samples were collected and placed in numbered and ticketed calico bags that were securely fastened. Sample intervals were marked on the preserved core. Samples batches were kept to approximately 30 submitted samples at any one time to avoid overloading the lab.</li> <li>A dedicated geologist and field assistant were in attendance at all stages of drilling of the tailings.</li> </ul>
Audits or	•	The results of any audits or reviews of sampling techniques and data.	Underground Resource
reviews			<ul> <li>Previous reporting on internal laboratory accuracy and precision has not raised any significant issues.</li> <li>In the twenty years of the mine's history mining reconciliation and metallurgical balances have not identified any serious systematic problems with the prediction of ore grade. This reflects the fact that the Elura ore has low internal grade variability. The massive ore has an average grade of composite assays of around 10% zinc with a standard deviation of around 2. At the current very close drill spacing there is very little risk that assay error will significantly over value the Resource and historically no bias has been detected</li> <li>Tailings Resource</li> <li>There are no records of any audits or reviews of the sampling techniques or data.</li> </ul>
	data in relation to geological structure  Sample security  Audits or	data in relation to geological structure  Sample security  Audits or	Orientation of data in relation to geological structure  • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.  • The measures taken to ensure sample security.  • The results of any audits or reviews of sampling techniques and data.



# **Section 2 Reporting of Exploration Results**

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

	,	1 117	
	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 project is located within granted Exploration Licence EL5785 Mining leases ML158, ML159, ML160, ML316, ML161, and ML930 with the earliest expiry date of 12 March 2028. The leases are held by Cobar Operations Pty Ltd.</li> <li>Metalla Royalty and Streaming Ltd have a royalty based a flat rate of 4% on payable Pb, Zn and Ag.</li> <li>All tenements are in good standing.</li> </ul>
$\bigcup$	Erminuation	Acknowledgment and appraisal of exploration by other parties.	Underground Resource
	Exploration done by other parties		Exploration of the Elura deposit has been carried out by various companies since the early 1970's using surface and underground mapping and sampling, geophysical investigations, diamond and reverse circulation drilling. Previous exploration appears to have been performed to industry standards.  Tailings Resource
U	9		<ul> <li>The tailings in Sector 1 were drilled in 2014, 2015 and 2017 by CBH Resources.         The drilling was undertaken by standard methods and the results used to generate an approximate tonnage and grade     </li> <li>Exploration appears to have been performed to industry standards.</li> </ul>
	Z .	Deposit type, geological setting and style of mineralisation.	Underground Resource
	Geology		<ul> <li>Mineralisation at the Elura deposit is hosted by fine grained turbidite sequence of the Cobar Basin and comprises multiple sub-vertical elliptical shaped pipe-like pods that occur within the axial plane of an anticline and are surrounded by an envelope of sulphide stringer mineralisation, in turn surrounded by an envelope of siderite alteration extending for tens of metres away from the sulphide mineralisation.</li> </ul>
			<ul> <li>Around 150m below the base of the main mineralised pods/lodes, mineralisation is hosted within the western limb of a folded limestone unit, occurring in veins and fractures.</li> </ul>
			<ul> <li>Recent reviews favour a syngenetic formation model of an original stratiform deposit that was later emplaced by tectonic force into a favourable structural site during deformation.</li> </ul>
	2)		The zonation of mineralisation types has been categorised with abbreviations as follows:
	5		<ul> <li>PO – massive pyrrhotite-pyrite-galena-sphalerite ore, with pyrrhotite predominant, forming the central core of all zones, typically averaging about 9% Zn and 6% Pb.</li> </ul>
M			<ul> <li>PY – massive pyrite-pyrrhotite-galena-sphalerite ore, with pyrite</li> </ul>



Criteria	JORC Code explanation	Commentary
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.	predominant, commonly surrounding the pyrrhotitic core or at the outer margin of massive mineralisation, again typically averaging about 9% Zn and 6% Pb.  SIPO — siliceous pyrrhotite-pyrite-galena-sphalerite ore, with inclusions of silicified country rock and some quartz veining; pyrrhotite is the predominant sulphide; occurs at the margin of PO and PT mineralisation; typical ore grade averages around 12% combined Pb+Zn.  SIPY — siliceous pyrite-pyrrhotite-galena-sphalerite ore, with inclusions of silicified country rock and some quartz veining; similar to SIPO but pyrite is the predominant sulphide.  VEIN — lower grade mineralisation comprising a stockwork of quartz and sulphide veins within silicified siltstone, around the edges of mineralised pods.  MINA — mineralised altered siltstone.  SG — Supergene enriched zone at the top of the Main Lode.  Tailings Resource  Mineralised material in the tailings storage facility consists of clay to fine sand sized particles deposited in sub-horizontal layers from centrally located outflow sites. The particles contain remnant sulphides that were not captured during processing of the Endeavor Mine silver-zinc-lead ore.  The primary lead and zinc bearing minerals from all orebodies processed are galena (~13%wt) and sphalerite (~14%wt). Pyrite and pyrrhotite (~60 to 70%wt in total) are the main floatable gangue in the ore. Tetrahedrite is the major host of silver, apart from galena and chalcopyrite.



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>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.</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>	<ul> <li>Exploration results are not the subject of this report.</li> <li>A net smelter return (NSR) value was applied to the MRE for reporting purposes.         A detailed description of the NSR calculation is provided in the report and in Section 3 of this table.     </li> </ul>
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 (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Underground Resource</li> <li>The geometry of the mineralisation (vertical pods and tabular, steeply dipping limestone-hosted) has been well defined from diamond drilling and underground development. Drill hole intercepts are predominantly at a high angle (orthogonal) to main mineralisation directions.</li> <li>Tailings Resource</li> <li>Holes were drilled vertical, intersecting the direction of main grade continuity at approximate right angles.</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.	Exploration results are not the subject 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.	Exploration results are not the subject of this report.
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.	<ul> <li>The project is a mature stage development with the bulk of drilling undertaken for grade control purposes.</li> <li>Bulk density measurements and metallurgical test results are discussed in Section 3 of this table.</li> <li>The CP considers there is no other meaningful and material exploration data in relation to this report.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Underground Resource</li> <li>Further exploration work planned includes drilling remaining upper Main Lode southern pod, drilling for potential economic gold and copper mineralisation, and investigation of potential nearby (&lt;5km) mineralisation using drilling and geophysical methods.</li> <li>Tailings Resource</li> <li>No further work planned</li> </ul>



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

(Criteria listed in section 1, and where relevant in section 2, 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>	<ul> <li>The following database validation activities have been carried out:</li> <li>Ensure compatibility of total hole depth data in the collar and assay drill hole database files.</li> <li>Check for overlapping sample intervals.</li> <li>Checking of drill hole locations against the surface topography.</li> <li>Visual validation in Surpac software.</li> <li>A selection of laboratory assay certificates were checked against database entries.</li> <li>No issues were found with the database.</li> <li>Underground Resource</li> </ul>
		• The data used in this Mineral Resource estimate was provided in a Microsoft Access database and was originally managed using a Drilling Management System (DMS) that utilised. Microsoft Access to enter and store data. The system was set up with data security protocols that restricted access and ability to edit based on security levels.
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>	<ul> <li>The Competent Person has visited the Endeavor Mine on numerous occasions.</li> <li>The first visit was in 2010 to undertake a review of the Mineral Resources. During this visit inspections were carried out on mineralised intercepts in drill core and underground exposures. Observations were made of drilling, logging, sampling, QAQC, data handling procedures.</li> <li>The second visit was in February 2023 whilst the mine was in care and maintenance to collect data and observe drilling, logging, sampling and QAQC procedures for the drilling program that was underway targeting supergene mineralisation.</li> <li>Since June 2023 the CP has visited the site on a regular basis every month.</li> <li>The Competent Person regards the procedures and protocols observed during the site visits to be of a good standard.</li> </ul>
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>	<ul> <li>Underground Resource</li> <li>Confidence in the geological interpretation is high as the deposit has been the subject of nearly 50 years of investigations and mining.</li> <li>Data from sampling of diamond drill holes and underground exposures has been used in the interpretation and modelling of geological and grade domains.</li> <li>There are currently no alternative geological interpretations as the current interpretation is the result of many years of geological investigations. Any changes to the interpretation would not significantly change the MRE due to the density of data.</li> <li>The Elura deposit comprises multiple zones of mineralisation styles based on mineralogy,</li> </ul>



	Criteria	JORC Code explanation	Commentary
			grade, veining etc. that typically transition from a massive sulphide core to an altered siltstone and veined outer halo. These zones were, from high to low grade:  • Supergene Enrichment (SG)  • Pyrrhotitic (PO)  • Pyritic (PY)  • Siliceous Pyritic (SIPY)  • Siliceous Pyrrhotitic (SIPO)  • Vein (VEIN)  • Mineralised Altered Siltstone (MINA  • Another style of mineralisation is located about 150m beneath the siltstone-hosted mineralisation which is hosted in limestone.  • Domain boundaries of the siltstone-hosted mineralisation were interpreted on 5m elevation intervals for the entire deposit using drill-hole data, geological interpretation and back mapping from all the underground levels. The grade domains were further divided into lode domains for estimation  • The contact of the limestone and the surrounding sediments was modelled on ~10 m sections using all the available drillholes. This wireframe was not used for the grade estimation however was used to help define the mineralised domains within the Limestone domain  • The mineralised domain for the limestone-hosted mineralisation was interpreted using a combination of cross-sections and level plans.  Tailings Resource
37		The extent and variability of the Mineral Resource expressed	<ul> <li>There is no geological interpretation of the tailings deposits, and it is assumed the tailings were deposited in sub-horizontal layers.</li> <li>The volume of tailings is constrained by surveys of the topography prior and subsequent to the deposition of the tailings.</li> <li>The style of deposit (tailings) does not allow for alternative interpretations.</li> <li>The mineralisation within the TSF is considered highly continuous with low variability.</li> <li>Underground Resource</li> </ul>
	Dimensions	as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>The sub vertical high-grade pods occur in the axial plane of an anticline and progressively decrease in size towards the northwest. The Main Lode occurs at the southern end of mineralisation, extending from near-surface to approximately 1,000m depth, with lateral extents of between 50m and 120m. The Northern Lodes extend northwest from the Main Lode, generally occur only below a depth of 400 – 500m and have lateral extents typically between 30 – 50m.</li> <li>The top of the limestone-hosted mineralisation occurs approximately 1,050m below the surface. The mineralised zone is broadly tabular in form and currently measures 300m long by 250m high with widths ranging between 10m and 30m, dipping around 70°</li> </ul>



Criteria	JORC Code explanation	Commentary
		towards the southwest.  Tailings Resource  Tailings Resource estimate entails the bulk of Sector 1 of the CTD TSF, which measures approximately 550m by 850m and an average depth of 7m
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>Vulcan and Surpac software was used for data validation, analysis, geological and mineralized domain modelling, sample compositing, and grade interpolation.</li> <li>Grade domains for constraining Resource estimation were interpreted and modelled based on geological logging and assay results. Six grade domains and five lode domains were modelled.</li> <li>The resource model is based on statistical and geostatistical investigations generated using 1m (Main Lode Deeps) and 2m (all other domains) composited sample intervals. Assessment of the data suggested requirement for high-grade cutting for the input datasets to be used for resource estimation of Ag in some domains. The estimate search distance for Au in the supergene zone was controlled by grade restriction. Otherwise the composite data sets for other metals displayed low coefficients of variation.</li> <li>The modelled variography for Pb, Zn and Ag in all domains display low relative nugget values. The variograms have short range structures that account for between 30% (Zn-MLDeeps) and 80% (Ag-DZL) of the total variance including nugget effect, with ranges of between 10m (Zn-MLDeeps) and 55m (Ag-ML). Overall ranges range from 15m (Pb, Zn-WM) to 500m (Ag-ML).</li> <li>Rotated, sub-celled block models were constructed using parent block dimensions of 5m East by 5m North by 10mRL in the upper siltstone-hosted model and 5m East by 10m North by 5mRL in the limestone-hosted model, with sub-blocking for the purpose of providing appropriate definition of the grade domain boundaries. Data spacing ranged from 10-15m in densely drilled areas to 80m in parts of the deep zinc lode</li> <li>Resource estimation was carried out for lead, zinc, silver and gold (Upper North Lode only) on the basis of analytical results available up to May 2023. Ordinary Kriging (OK) was selected as an appropriate estimation method based on the quantity and spacing of available data and style of deposit under review. A three-pass strategy was employed to generate the grade estimat</li></ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Comparison of the estimated grades and mill production for the calendar year 2019 revealed a reconciliation of 102% of expected Pb+Zn% grade.</li> <li>No assumptions of byproduct recovery have been made.</li> <li>Iron content was estimated using the same process as the other metals.</li> <li>No assumptions have been made regarding underground mining selective units.</li> <li>No assumptions about correlation between variables has been made.</li> <li>Validation of the estimate was completed and included both interactive and statistical review. The validation methods included: -</li> <li>Visual comparison of the input data against the block model grade in plan and cross section.</li> <li>Comparison of global statistics.</li> <li>Swath plots, comparing the composite grade and the estimated grade grouped by intervals in plan and section</li> <li>The model was found to be robust.</li> </ul>
35)		Tailings Resource
		The resource model is based on statistical and geostatistical investigations generated using 2m composited sample intervals of the holes drilled in 2015. Assessment of the data suggested no requirement for high grade cutting. The composite data sets displayed low coefficients of variation.
		<ul> <li>A sub-celled block model was constructed using parent block dimensions of 50m East by 50m North by 2mRL. Block sizes were based on average drill hole spacing of 100m.</li> <li>Resource estimation was carried out by Ordinary Kriging (OK) method using multi-pass-pass strategy, with the first pass set at a distance less than the total range of the</li> </ul>
		variogram. The number of composites for a successful estimate was restricted to a minimum of 3 and a maximum of 12 for the first pass and a minimum of 2 and a maximum of 10 for the second pass. The search axes were aligned with directions of maximum continuity derived from variographic analyses of the data set. Surpac mining software was used carry out the estimation.
		The estimated tonnes and grade have been compared to historical tailings deposition records and are within 4% of the tonnes and 0.5% of the Zn grade. The grades also compare well with global metallurgical composite head grades.
P		<ul> <li>The tailings are contained within a licensed facility and will be re-processed and deposited into another facility that is licensed to handle potential acid forming material.</li> <li>The maximum extrapolation distance from known data points was around 150m.</li> </ul>
15		<ul> <li>No assumptions of byproduct recovery have been made.</li> <li>No assumptions about correlation between variables has been made.</li> <li>The search radii were aligned to reflect the sub-horizontal nature of tailings deposition</li> </ul>



	Criteria	JORC Code explanation	Comm	entary								
			<ul> <li>with blocks and composite selection confined to within the Sector 1 bound modelled top and base of tailings.</li> <li>Validation of the estimate was completed and included both interactive and review. The validation methods included: - <ul> <li>Visual comparison of the input data against the block model grade in plant section.</li> <li>Comparison of global statistics.</li> <li>Swath plots, comparing the composite grade and the estimated grade grade intervals in plant and section</li> <li>The model was found to be robust.</li> </ul> </li> <li>vith <ul> <li>The tonnages were estimated on a dry basis.</li> </ul> </li> </ul>							statistical and cross		
	Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• The	tonnages we	re estimat	ed on a dı	ry basis.					
	Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>Underground Resource</li> <li>The MRE has been reported using a net smelter return (NSR) value cut-off determined from mining, processing, and overhead costs per tonne of material milled.</li> <li>The NSR is defined as the return from sales of concentrates, expressed in dollars per tonne of ore, excluding mining and processing costs.</li> <li>An NSR value was calculated for each block in the model using the following parameters:</li> </ul>									
	<u>)</u>		Metal	Metal Price	Exchange	Flotation R Below 10080mRL	Above	Smelting	and Freight costs per tonne	Below 10080mRL	Above 10080mRL	
			Pb	US\$2,050/t		74%	62%	95%		TOODOTTIKE	TOOODIIIKE	
			Zn	US\$3,000/t	AU\$1=	83%	75%	85%	<u>\$523</u>	5.15	5.36	
(			Ag	US\$22.50/oz	US\$0.69	51%	66%	95%				
			1000 cost cut-of high accord	NSR value of 30mRL and rest since the conference of value for rest ount for increase to no selection of grade h	epresents essation of eporting m g costs to ased grour vity is assu	a 25% ind f mining in aterial abo achieve nd support	crease to a 2019. A cove 10080 acceptable trequired a the pros	mining, pronunced mining, pronunced mining pronunced mining minin	ocessing and ue of \$190/t el 1 Sulphide es and high material.	I general was choses) and is er mining romining)	overhead sen as the based on g costs to	



	Criteria	JORC Code explanation	Commentary
	Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	<ul> <li>Underground Resource</li> <li>It is understood similar scale mechanised mining to what was used previously would be carried out once operations recommenced on site.</li> <li>The Elura deposit is extensively developed by underground openings and the base of the main decline has reached a depth equal to the top of the deep zinc lode.</li> <li>No mining dilution has been applied to the MRE.</li> <li>The Mineral Resource Statement also includes 5m skins surrounding existing stoped areas. The mine has a history of using paste fill to backfill stope voids, allowing the recovery of pillars and other remnant material. Some of this material may be excluded from Ore Reserve estimations if assessed as being non-recoverable. Information is not available at this stage of Mineral Resource estimation to determine the extent of recovery of remnant material. However, there is a reasonable prospect for eventual extraction of remnant material.</li> <li>Tailings Resource</li> </ul>
			The tailings is proposed to be mined by hydraulic mining methods, where water cannons liquify and push the tailings into a collection drain which runs to a sump where a pump delivers the slurry to the processing plant.
9 9 9	Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>Underground Resource</li> <li>The ore from the Endeavor Mine is processed through a conventional Pb/Zn/Ag flotation plant with a demonstrated capacity of 1.2 Mtpa.</li> <li>The mill has demonstrated recoveries of 74% for Pb, 83% for Zn and 51% for Ag which have been factored in to the calculation of NSR values.</li> <li>Adjusted flotation recoveries have been applied to reporting material in the marcasite-rich Level 1 Sulphides (&gt;10080mRL).</li> <li>Tailings Resource</li> <li>Metallurgical test work has indicated saleable Zn and Pb/Ag concentrates can be obtained</li> </ul>
	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.	from processing the tailings through the existing flotation process on site.

Criteria	JORC Code explanation	Commentary
Bulk density	<ul> <li>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.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Underground Resource</li> <li>Historically, Bulk Density had been assigned to the block model on a domain by domain basis. Work completed by H&amp;S Consulting in 2015 recommended that a calculated density value be used. Since calculated bulk densities have been used, stopes tonnes have generally reconciled well, which has been attributed to the change to the use of calculated densities.</li> <li>The formula used to derive the calculated densities involves a number of steps: <ol> <li>gn = Pb x 100/86.6 where Pb &gt; 0.0</li> <li>sp = Zn x 100/67.1 where Zn &gt; 0.0</li> <li>po_pot = Fe x 2</li> <li>fe_gangue = (30-Fe)/60, with a minimum of 5% (0.05)</li> <li>py = fe x 100/46.5 x (100 - po_pot) x (1- fe_gangue)/100</li> <li>po = fe x 100/60.4 x po_pot x (1- fe_gangue)/100</li> <li>total_sulph_1 = gn + sp + py + po</li> <li>if total_sulph_1 &gt; 95%, total_sulp_2 = 95%, otherwise total_sulph_2 = total_sulp_1</li> <li>py_final = py x (total_sulp_2 - gn - sp)/(total_sulp_1 - gn - sp)</li> <li>po_pofinal = po x (total_sulp_2 - gn - sp)/(total_sulp_1 - gn - sp)</li> <li>po_final = po x (total_sulp_2)</li> <li>density_calc = (gn x 7.5 + sp x 4.0 + po x 4.6 + py x 5.02 + gangue_pot x 2.5)/100</li> </ol> </li> <li>Tailings Resource</li> <li>During the 2014 drilling program, 551 samples for density analysis were taken from each 1m interval by firmly compressing the material into a grout sampling and levelling the top off. Each sample was stored in zip-lock plastic bags and taken to the site laboratory for</li> </ul>
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 (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>wet weight and dry weight measurements. The average dry density value was 1.74 t/m3.</li> <li>Underground Resource</li> <li>The Resource has been classified as Measured, Indicated and Inferred with the key parameters considered during the resource classification being: <ul> <li>Geological knowledge and interpretation.</li> <li>Deposit style.</li> <li>Confidence in the sampling and assay data.</li> <li>The spacing of the exploration drill holes.</li> <li>Variogram model ranges in relation to the local data spacing and the estimation variance.</li> <li>Prospects for eventual economic extraction.</li> </ul> </li> <li>The exploration data used for the MRE is robust and appropriate for resource estimation purposes, with the current data spacing sufficient to generate robust mineralisation interpretations. The geology of the project area has been studied in detail over numerous</li> </ul>



Criteria	JORC Code explanation	Commentary
		years, providing confidence in the interpretation of mineralisation style. Historical mining records give further confidence in the existence of economic mineralisation.  • Prospects for eventual economic extraction are high as the deposit is highly developed, metals are beneficiated using standard methods and there is an existing processing plant on site.  • Based on the consideration of items listed above, and review of the resource block model estimate quality, classification criteria were determined as summarised in the following:  • Measured  • Blocks that were estimated in the first pass (except for SG and VEIN domains and DZL).  • Indicated  • Blocks that were estimated in the second pass (or first and second pass in the SG domain and first pass in the VEIN domain).  • Blocks in DZL domain estimated in first or second pass and a slope of regression greater than 0.3.  • Inferred  • Blocks that were estimated in the third pass (or second pass in the VEIN domain).  • Blocks in DZL domain estimated in first or second pass and a slope of regression less than 0.3, or estimated in the third pass.
		Tailings Resource
		The Resource has been classified as Indicated and Inferred with the key parameters considered during the resource classification being:  Geological knowledge and interpretation.  Deposit style.  Confidence in the sampling and assay data.  The spacing of the exploration drill holes.  Variogram model ranges in relation to the local data spacing and the estimation variance.  Prospects for eventual economic extraction.  The exploration data used for the TSF Sector 1 Resource estimate is robust and appropriate for resource estimation purposes, with the current data spacing sufficient to generate robust grade estimates. Confidence in the estimate is increased by good comparisons to historical tailings deposition records and head grades from global metallurgical composite samples.  There are reasonable prospects for the eventual economic extraction of the resources



Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	because of proximity to an existing floatation processing plant and metallurgical test work indicates economic recoveries for Zn, Pb and Ag.  Based on the consideration of items listed above, and review of the resource block model estimate quality, classification criteria were determined as summarised in the following:  Indicated  Blocks in the tailings domain that occur between drill holes or no more than 50m from a drill hole.  Inferred  Blocks that were estimated in the third pass (or second pass in the VEIN domain).  All remaining blocks in tailings domain no assigned Indicated.  The classification reflects the Competent Person's view of the deposit.  Underground Resource  Numerous audits of data collection, geological interpretation and domaining, data quality assurance, and MRE methodology have been undertaken in the past by internal company personnel and external consultants. No major issues were identified.  Tailings Resource
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>	<ul> <li>The Mineral Resource was reviewed by AMC consultants in late 2023. No major issues were identified</li> <li>There has been no attempt to apply geostatistical methods to quantify the relative accuracy of the Mineral Resources to within a set of confidence limits.</li> <li>The Competent Person believes the Mineral Resource estimates provide a good estimate of global tonnes and grade.</li> <li>Higher local variances in tonnes and grade can be expected in areas classified as Inferred due to lower data density.</li> <li>No change of support adjustment has been made to the block estimates.</li> <li>The accuracy and confidence of this Mineral Resource estimates are considered suitable for public reporting by the Competent Person.</li> <li>Previous Mineral Resource estimates of underground material have reconciled well with mill production.</li> </ul>

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	J	ORC Code explanation	Comr	mentary	/						
	Mineral Resource estimate for	•		Or	The Mineral Resource estimates used as a basis for the conversion to an Ore Reserve are the Main Ore Body and Deep Zinc Lode estimates, last reported by Polymetals on 23 May 2023, and the TSF Sector 1 Tailings estimate, first reported by Polymetals in this announcement.							
	conversion to	are reported additional to, or inclusive of, the Ore Reserves.			Endeavor Mine In Situ Mineral Resource May 2023							
	Ore Reserves			Cate	egory		Mt	Zinc (%)	Lead (%)	Silver (g/t)		
				Mea	Measured		4.4	8.3	5.1	93		
				Indic	cated		8.8	7.9	4.6	82		
				Inferred		3.1	7.7	3.7	78			
				Tota	al²		16.3	8.0	4.5	84		
						ng NSR cut-off values of \$ s may occur due to round		ation above 10,080m	RL, and \$150/t for m	nineralisation below 10	0,080mRL	
						Endeavo	r Mine TSF Secto	or 1 Mineral Reso	urce October 20	23		
1					Ca	ategory	Mt	Zinc (%)	Lead (%)	Silver (g/t)		
1					Ind	dicated	3.6	2.14	1.56	80		
1					Inf	ferred	1.6	2.07	1.53	77		
					То	otal <sup>2</sup>	5.2	2.12	1.55	79		
					1. Reported without use of cut off grade 2. Discrepancies may occur due to rounding							
						ates were based o ed using Ordinary k			d from block r	nodels with blo	ck grades	
7					•	esources are repor			S.			
7	Site visits	•	Comment on any site visits undertaken by the	• Mr	r Matthe	ew Gill is the compe	etent Person f	or the Ore Res	erves in this ar			
		•	Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	co	mpilatio	e site on numerous on of the Ore Resel d to be in good ord	rves. Mr Gill i	nspected surfa	ce and underg	round infrastruc	ture which	
	Study status	•	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. 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.	• Th	ne Ore F easibility	a to be in good ord Reserves reported relevel of accuracy. ting suitable mine d	in this announ The study ir	cement are su ncluded econor	pported by a s nic analyses b	tudy undertaker ased on a mine	to a Pre-	



									Polymetal
Criteria	JORC Code explanation	Commenta	ry						
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The mine schedule and Ore Reserve estimate for in situ material use a Net Smelter Return calculation as a cut-off for reporting purposes. NSR values were assigned to each block in the resource block model based on calculations using the assumptions shown below:							
				Exchange	Flot	ation Recovery	•	Smelting	Smelting and
		Metal	Metal Price	Rate	Below 10080mRL	Above 10080mRL	DZL	Recovery	Freight costs per tonne
		Pb	US\$2,076/t		75%	77%	-	95%	
		Zn	US\$2,915/t	AU\$1= US\$0.70	84%	76%	90%	85%	\$523
		Ag	US\$22.4/oz		52%	57%	52%	95%	
		Where: x1. r1. p1. V1. Cs K  An NSR processi study pro the prop	Floatation Smelting Value of smelting Tonnes of value of \$150 ng costs on soccess. erves for the osed mining r	metal 1, etc n Recovery of Recovery of metal 1, etc and freight cof f ore required by twas used site, as well TSF Sector nethod.	metal 1. etc metal 1. etc ests per tonne to make one for in situ m as updated 1 Tailings a	of concentrationne of cor aterial, base I mining and re reported	ate ncentrate ed on a c d proces with no	combination of ssing costs of cut-off due to	of historic mining and calculated during the colack of selectivity in
Mining factors or 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> <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> </ul>	detailed developi using De were rur Tailings batters, and the Company of the Comp	stope designment to accessive swik. Sched un to find the operation of a central conterground minor hole open routing of uncast recovery oub Level Operation up in the	s were geness stoping a underground otimal produnine designs ainment pillating methods stoping with consolidated of "Skins" man Stoping, we Deep Zincod with pilla	erated from reas. Under scheduling ction sequels were based ar, catchmer are: a minor amo fill in select aterial adjactith a combir Lode.	the optimiserground mine procing and model on a hydront gullies and unts of uncested previousent to these nation of lood drives, is to	sed stop ne produ planning nining rate omining d mining onsolidate sly mine stopes. se and co	e shapes ald uction schedus software. A te for maximumethod with g sequence. ted rock fill for d stops, followers	er (SO). Preliminary ong with designs for ules were generated number of scenarios um project NPV. allowances for berm of the Main Ore Body. The

Lode) due to potentially poor ground conditions.

						Polymetals
Criteria	JORC Code explanation	Commentary				
	<ul> <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>	defined by the rock st control drilling to increcommencement of a Stope optimisation was of the stopes with the with a volume below 5. The Mineral Resource Zinc Lode block mode.  • Mining dilution and reconciliations at the light control of the stopes with the stopes with the stopes with the stopes.	mining was chosen after been guided by gerength characteristics crease the confidence perations. It is carried out using a received intervals and any part of a models used for the cells.  The core loss assumption and any part of the cells.	ter comparise otechnical activities within the imperimental management of the stope shoptimisation particular are base on has been	on to a dredging no dvice and consider mediate area of the grades will come where the first one of the grades within 5m of a process were the first on historical coassumed to have	
5			Stope Type	Recovery	Total Dilution	
			Primary Stopes	95%	5%	
			Secondary Stopes	90%	5%	
(2)			Tertiary Stopes	90%	5%	
7			Remnant Stopes	90%	5%	
$\bigcirc)$			6/6 Stope Recovery	70%	5%	
			Development	98%	12%	
S		Tailings and is schedu	d material (94%) in the uled to be mined at the underground infrastruc	e mine plan of back end of cture is alread	occurs in the Deep the mine plan.	lineral Resources. The Discription Zinc Lode and Sector 1 is been kept in good order
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <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 to which such samples are</li> </ul>	<ul> <li>a conventional Pb/Zn mine plan will utilise the The metallurgical prodused successfully on There has been a wineralisation at the E of mill performance concentrate grades for</li> </ul>	Ag flotation plant with his process. cess is a common on the site for almost 40 yeast amount of metal indeavor Mine over its have enabled the areach metallurgical does have been estimated.	e for base myears. lurgical test long history. assessment omain as sho	rated capacity of a netal sulphide mir work that has b This test work, a of recommended wn below. Severa	been processed through 1.2 Mtpa. The proposed neralisation. It has been been carried out on the long with historic records did metal recoveries and I metallurgical recoveries did Tailings, which are the



	Criteria	JORC Code explanation	Commentary								
		<ul> <li>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</li> </ul>	Ore Source	1	/letallurg Recover			ncentrate irade	Conce	Zn entrate ade	
		appropriate mineralogy to meet the specifications?		Pb (%)	Zn (%)	Ag (%)	Pb (%)	Ag (g/t)	Zn (%)	Ag (g/t)	
			Historic Area	77.4	86.8	71	50	625	50	94	
			Deep Zinc Lo	de 75*	90	70*	48*	1,800*	50	100*	
			Upper North	Lode 62	76	66	48	1,500	48	200	
$(\Box$			Tailings	30*	46	40*	50*	1,500*	50	-	
				coveries and gra							
			<ul><li>Historically there have been to deleterious elements.</li><li>Metallurgical factors and as:</li></ul>	umptions be	nefit fr	om a	long hi	story of	actua	mill p	erformance records.
	Environmenta	<ul> <li>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.</li> </ul>	Numerous environmental studies have been undertaken over the years to support mining approvals and regulatory compliance.  • Waste rock could be regarded as predominantly potentially acid forming (PAF) due the presence of authoride minerals. All DAE weste rock will be required in the underground mine as lease or computed.								
	Infrastructure	<ul> <li>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.</li> </ul>	<ul> <li>The Endeavor Mine project utilised once refurbishment infrastructure includes a 1.3 and electricity connections of a laboratory. The Company away. A 100-person camp in Underground infrastructure shaft for hauling ore to the surface), underground crustefuge chambers and reticular</li> </ul>	works have Mtpa proces to local grids, has an option contemplat includes a hurface, a truching station,	been ssing p works n over ed to b eadfra k haula	compolant, shops, 42 ho be build me mage deshops	leted prail load partly uses a t, fully ounted	orior to nading face stocked and 46 ur catered, friction rom surf	nining cility f store nits in and r wind ace to	recor or con es ward the Co manag er ove 9135	nmencing. Surface centrate, raw water chouse, offices, and obar township, 47km ed by the operation. r a 300 metre deep mRL (1,065m below
1 PO 1	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</li> </ul>	<ul> <li>The estimates of capital exp quotes received from con refurbishment made by inde</li> <li>Operating costs have been for mining, processing, m Environment, Training &amp; Sto third-party mining cost estin</li> </ul>	ractors and pendent inspectimated from aintenance, res), and ho	suppl ection m firs admin	iers a s. t princ nistrat	ind us	ing reco	omme del tha cial,	endation at inco HSET	rporates input costs S (Health, Safety,



						Polymetals
Criteria	JORC Code explanation	Commentary				
	refining charges, penalties for failure to meet specification, etc.  The allowances made for royalties payable, both Government and private.	<ul> <li>No allowances have been made for deleterious elements as this has not been an issue historically at the mine.</li> <li>Exchange rates used in the study were derived from analysis of historic trends, consensus outlooks, spot rate and peer assumptions.</li> <li>Transportation rates were derived from previous costs and provider quotes.</li> <li>Benchmark treatment charges and refining charges (TC/RC's) have been used for the study. For Zinc, the Teck/KZ Red Dog Benchmark TC's are applied, and for Lead-Silver the Cannington/KZ Benchmark TC/RC's. Historically, concentrates from Endeavor have never exceeded contained metal above upper threshold of 54% with LOM historic grades being 50.13% Zn &amp; 50.74% Pb respectively.</li> <li>Allowances have been made in the study to account for State Royalties (4%) as well as the third-party royalty payable to Metalla Royalty and Streaming (4% Net Smelter Return).</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>	Assumptions of metal price and peer assumptions to for	es and exchange orm a view. Assu ark costs. The st dule as shown be	e rates were mumptions of tra udy assumes elow.	nade using, cor ansportation, tre flat metal price	ly mining schedule output. nsensus outlooks, spot prices eatment and refining charges es and exchange rates across
			Zinc	US\$/t	2,860.00	
			Lead	US\$/t	2,160.00	
			Silver	US\$/oz	28.00	
			Exchange Rates	AUD:USD	0.67	
		Overall payabilities were calculated individually for each of the Project ore sources based on the concentrate specifications, minimum deductions and payability thresholds provided by Ocean Partners. Average payabilities from concentrates produced over the LOM are:  • 84.04% Zinc.  • 94.09% Lead.  • 94.86% Silver.  Realisation costs used in the study were:				
				Zinc	Silver-Lead	
20				Concentrate	Concentrate	
		F	Rail & Loading	A\$72/wmt	A\$72/wmt	
		,	Assay	A\$1/wmt	A\$3.03/wmt	
65			hipping	US\$35/wmt	-	
		Treatment and refining cha	arges used in the	e study remai	n commercial i	n confidence.



Criteria	JORC Code explanation	Commentary
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> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	Polymetals engaged with Ocean Partners, a global base & precious metal trading firm, to assess the marketability of the concentrates which will be produced from the Endeavor Mine.
Economic	<ul> <li>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.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul> <li>A financial analysis of the Project was carried out by a cashflow model using outputs of the LOM scheduling process, CAPEX and OPEX estimates, and economic assumptions. The analysis is based on a mine life of 10 years, with mining of underground ore from Years 1 to 7 and re-treatment of Sector 1 tailings from Years 6 to 10. Mining is scheduled to commence 8 months after site establishment begins, with processing to commence 2 months after mining starts. The financial model estimates monthly pre-financing cashflows for the LOM in Australian dollars, with the evaluation reported on a pre-tax basis with no account for inflation. Net present Valus (NPV) is calculated using a pre-tax and post-tax discount rate of 8%.</li> <li>The sensitivity of the Project NPV<sub>8</sub> to variations in metal grades, metal prices, metal recoveries, foreign exchange rate, CAPEX and OPEX have been modelled with the NPV most sensitive to metal prices giving a range of NPV's between A\$230M and A\$596M for a +/-15% variation in the prices.</li> </ul>
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	<ul> <li>The Endeavor Mine has had a long history in the Cobar region, having operated continuously for almost 40 years. In that time the mine has made a significant contribution to the local community in the form of employment opportunities, economic growth, and community investment.</li> <li>Polymetals has presented the plan for resumption of operations at the Endeavor Mine to the local Cobar Shire Council which stated it's ongoing support for the Project.</li> </ul>
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>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.</li> </ul>	<ul> <li>Polymetals has not identified any naturally occurring risks to the Project.</li> <li>A \$15 million Concentrate Pre-Payment Facility has been secured with Ocean Partners.</li> <li>All mining leases are current, with no outstanding government approvals required to restart mining operations.</li> </ul>



		<u> </u>
Criteria	JORC Code explanation Co	ommentary
Classification	<ul> <li>into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	The classification of the Endeavor Mine Ore Reserves have been carried out in accordance with the guidelines contained within the JORC Code (2012). Classifications are based on data density, geological knowledge, historical mine performance and proposed mining methods. Measured Mineral Resources were converted to Proven Ore Reserves while Indicated Mineral Resources were converted to Probable Ore Reserves.  The results of the Ore Reserve estimate appropriately reflect Competent Person's view of the deposit.  All of the Probable Ore Reserves have been derived from Indicated Mineral resources.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	There have been no audits of the Ore Reserve estimate.
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 quantify 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>	The Mineral Resource Estimate and hence the Ore Reserve Estimate relate to global estimates. The Ore Reserve Estimate is derived from the Mine Restart Study which was prepared to a Pre-Feasibility level of accuracy. Capital and operating costs have been estimated to accuracies of +/-15% to +/- 25%. Modifying factors for mining are based on actual historical site performance. There has been an appropriate level of consideration given to all modifying factors to support the declaration and classification of Ore Reserves.