



**VENDETTA**  
MINING CORP

**TSX-V : VTT**

# **Advanced Lead-Zinc Resource Development in Australia**

**August 2023**

# Important Information



## Cautionary Statement on Forward Looking Information

This presentation is not directed to, or intended for distribution to or use by, any person or entity that is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would require any registration or licensing within such jurisdiction. This presentation does not constitute or form a part of, and should not be construed as an offer, solicitation or invitation to subscribe for, underwrite or otherwise acquire, any securities of Vendetta Mining Corp., nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever.

This presentation includes certain statements that may be deemed to be “forward-looking statements” within the meaning of the applicable Canadian Securities laws. All statements in this release, other than statements of historical facts are forward looking statements, including the anticipated time and capital schedule to production; estimated project economics, including but not limited to, mill recoveries, payable metals produced, production rates, payback time, capital and operating and other costs, IRR and mine plan; expected upside from additional exploration; expected capital requirements; and other future events or developments. Forward-looking statements include statements that are predictive in nature, are reliant on future events or conditions, Forward-looking statements are often, but not always, identified by the use of words such as “seek”, “anticipate”, “plan”, “continue”, “estimate”, “expect”, “may”, “will”, “project”, “predict”, “potential”, “targeting”, “intend”, “could”, “might”, “should”, “believe” and similar expressions.

These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include, but are not limited to, changes in commodities prices; changes in expected mineral production performance; unexpected increases in capital costs; exploitation and exploration results; continued availability of capital and financing; differing results and recommendations in the Feasibility Study; and general economic, market or business conditions. In addition, forward-looking statements are subject to various risks, including but not limited to operational risk; political risk; currency risk; capital cost inflation risk; that data is incomplete or inaccurate; the limitations and assumptions within drilling, engineering and socio-economic studies relied upon in preparing the PEA; and market risks. The reader is referred to the Company’s filings with the Canadian securities regulators for disclosure regarding these and other risk factors, accessible through Vendetta Mining’s profile at [www.sedar.com](http://www.sedar.com)

There is no certainty that any forward-looking statement will come to pass and investors should not place undue reliance upon forward-looking statements. The Company does not undertake to provide updates to any of the forward-looking statements in this release, except as required by law.

This presentation presents certain financial performance measures, including all in sustaining costs (AISC), cash cost and total cash cost that are not recognized measures under IFRS. This data may not be comparable to data presented by other Silver producers. The Company believes that these generally accepted industry measures are realistic indicators of operating performance and are useful in allowing comparisons between periods. Non-GAAP financial performance measures should be considered together with other data prepared in accordance with IFRS. This presentation contains non-GAAP financial performance measure information for a project under development incorporating information that will vary over time as the project is developed and mined. It is therefore not practicable to reconcile these forward-looking non-GAAP financial performance measures.

## Cautionary Note About Mineral Resources and Preliminary Economic Assessments

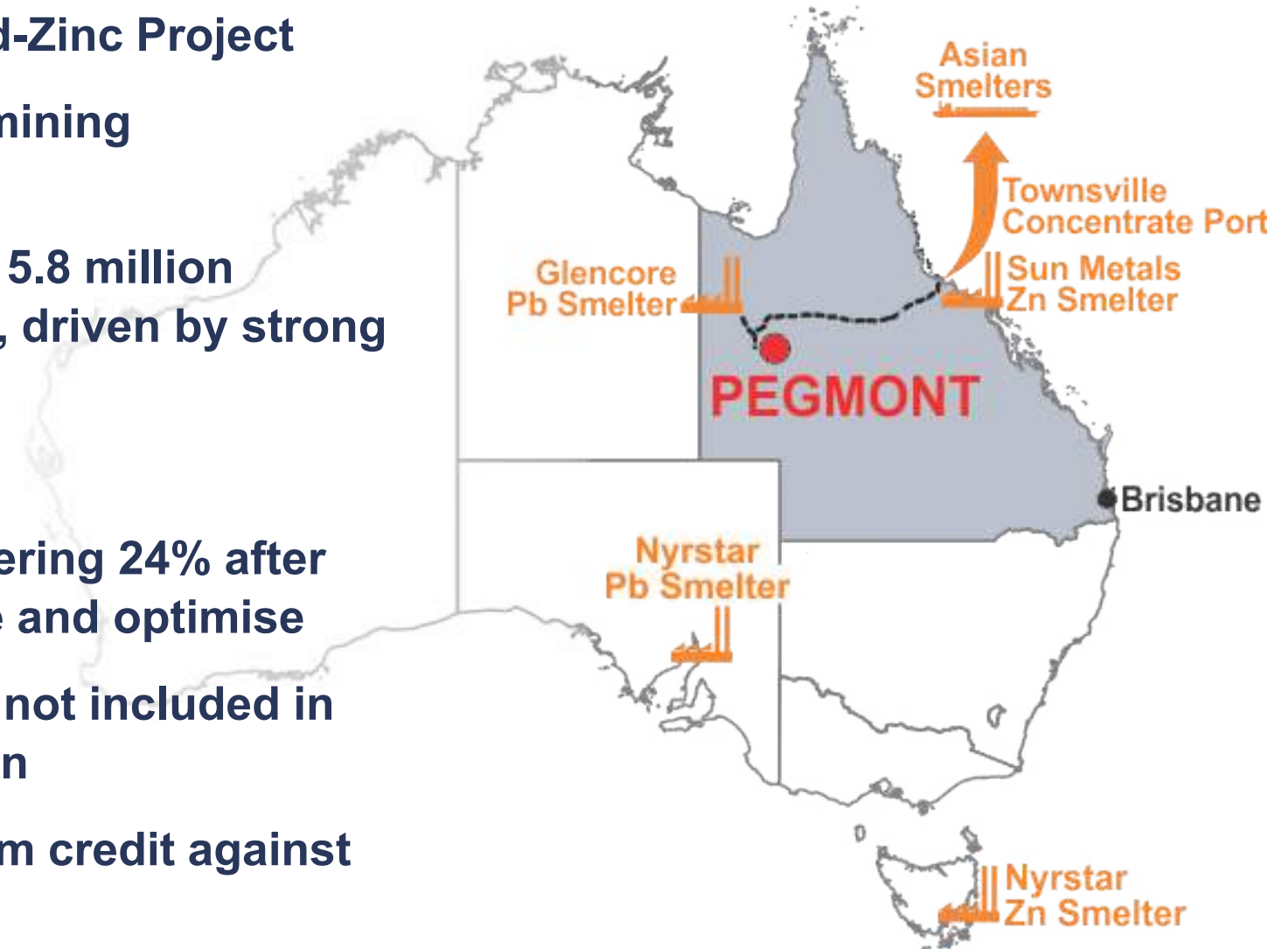
This presentation uses the terms indicated and inferred Mineral Resources as a relative measure of the level of confidence in the Mineral Resource estimate. Readers are cautioned that: (a) Mineral Resources are not economic Mineral Reserves; (b) the economic viability of Mineral Resources that are not Mineral Reserves has not been demonstrated; and (c) it should not be assumed that further work on the stated Mineral Resources will Lead to Mineral Reserves that can be mined economically. It cannot be assumed that all or any part of an inferred Mineral Resources will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred Mineral Resources may not form the basis of feasibility or pre-feasibility studies or economic studies except for certain preliminary economic assessments. Readers are cautioned that the PEA is preliminary in nature, it includes inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the PEA results will be realized. Mineral Resources that are not Mineral Reserves and do not have demonstrated economic viability. Additional work is needed to upgrade these Mineral Resources to Mineral Reserves.

## Qualified Person

Peter Voulgaris, MAIG, MAusIMM,, a Director of Vendetta, is a non-independent qualified person, as defined by NI 43-101. Mr. Voulgaris has reviewed the technical content of this Presentation and consents to the information provided in the form and context in which it appears.

# Investment Highlights

- 100% Ownership of Pegmont Lead-Zinc Project
- Queensland Australia - top rated mining jurisdiction
- To date +3 x increase in resource, 5.8 million tonnes Indicated & 8.3 Mt Inferred, driven by strong geological understanding
- Multiple exploration targets
- 2019 PEA a 10 year mine life delivering 24% after tax IRR, a sound basis to enhance and optimise
- 2.4 million tonnes Inferred Zone 5 not included in PEA mine plan, open for expansion
- No off-take encumbrances and \$5m credit against future royalties





# The Premier Base Metals Address in Australia



*Mt Isa – McArthur River Region Major Lead-Zinc Deposits*

**Mt Isa – McArthur River Proterozoic Inliers are one of the worlds premier mineral provinces with several world class Zinc / Lead & Silver deposits and significant Copper and Copper-Gold deposits.**

## **World Class Lead - Zinc - Silver Deposits / Mines**

**McArthur River – Worlds 4<sup>rd</sup> Largest Zinc Mine,**

**Mt Isa – Over 90 years of Lead - Zinc – Silver mining**

**Century – Currently a Tails Retreatment Operation**

**George Fisher & Hilton – Worlds 3<sup>rd</sup> Largest Zinc Mine**

**Dugald River – Worlds 7<sup>th</sup> Largest Zinc Mine**

**Cannington – Worlds Largest Lead and 2<sup>nd</sup> Largest Silver Mine**

**Lady Loretta – high grade producer**

## **Developing Projects**

**Teena – Teck**

**Pegmont – Vendetta**

# 2023/2024 Planned Programs

- Drilling to obtain fresh core samples for pilot scale XRT material sorting from Zone 1 transition, Zone 2-3 sulphide and Bridge Zone sulphide.
- Conduct locked cycle metallurgical flotation tests on the sorted products.
- Exploration drilling testing identified near project high priority targets at the Wills Zone, Bridge Zone extensions and at Killer Bore
- Resource development programs on Zone 5 and Zone 3
- Solar / hybrid power study
- Geo-metallurgical review of Transition material from Zone 1, infill drilling required to reclassify material types



**Cannington 3MW Solar Farm**  
(source clean-tech web page)



**Pegmont Lead Flotation Test**



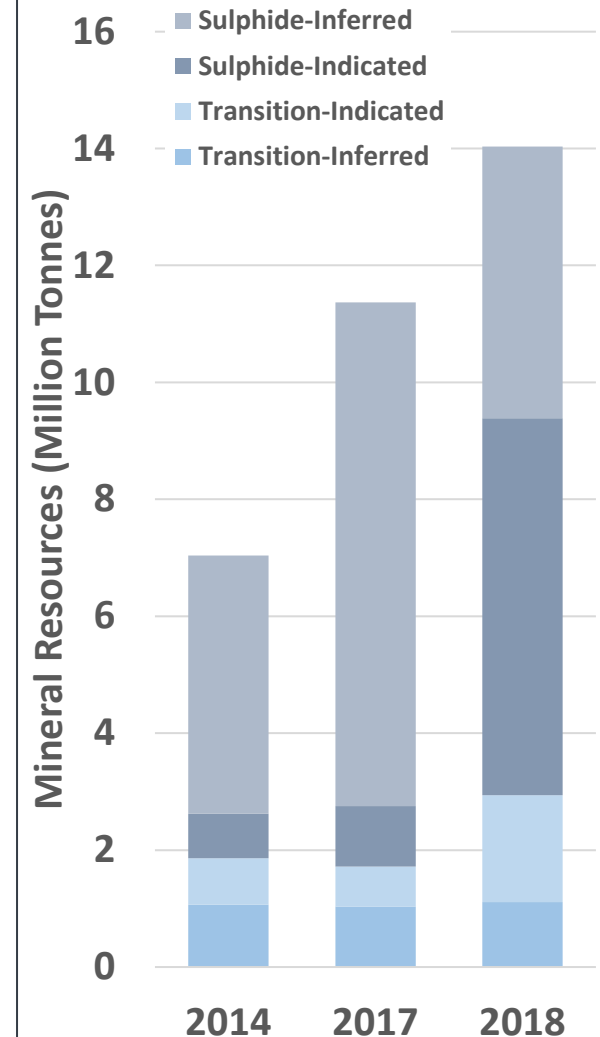
**Multipurpose Drill at Pegmont**

# Mineral Resource July 31, 2018

Area	Classification	Material type	Tonnes (kt)	Pb %	Zn %	Ag g/t
Open Pit Constrained	Indicated	Transition	1,111	4.9	2.3	8
		Sulphide	4,003	6.5	2.6	11
		<b>TOTAL</b>	<b>5,114</b>	<b>6.2</b>	<b>2.6</b>	<b>11</b>
	Inferred	Transition	1,829	5.2	2.0	7
		Sulphide	2,567	5.0	2.3	10
		<b>TOTAL</b>	<b>4,396</b>	<b>5.1</b>	<b>2.2</b>	<b>8</b>
Underground	Indicated	Sulphide	644	9.0	2.6	14
	Inferred	Sulphide	3,880	5.1	3.6	4
<b>TOTAL</b>	<b>Indicated</b>	<b>TOTAL</b>	<b>5,758</b>	<b>6.5</b>	<b>2.6</b>	<b>11</b>
	<b>Inferred</b>	<b>TOTAL</b>	<b>8,277</b>	<b>5.1</b>	<b>2.8</b>	<b>8</b>

1. Prepared by independent qualified persons (QPs) J.M. Shannon P.Geo, D Nussipakynova P.Geo, M. Angus MAIG, P. Lebleu P.Eng, of AMC and A Riles MAIG, of Riles Integrated Resource Management Pty Ltd., and has an effective date of 31 July 2018, incorporating drill results to 15 April 2018, including 22,163 m in 107 new holes drilled in 2017 and early 2018.
2. CIM Definition Standards (2014) were used to report the Mineral Resources.
2. Cut-off grade applied to the open pit Mineral Resources is 3% Pb+Zn and that applied to the underground is 5% Pb+Zn.
3. Based on the following metal prices: US\$0.95/lb for Pb, US\$1.05/lb for Zn, and US\$16.5/oz for Ag.
4. Exchange rate of US\$0.75 : A\$1.0
5. Metallurgical recoveries vary by zone and material type as follows:
  - Lead to Lead concentrate: from 80.6% to 91.3% for transition and 88.0% to 92.7% for sulphide.
  - Zinc to Zinc concentrate: from 19.3% to 75.2% for transition and 61.8% to 78.5% for sulphide.
6. Using drilling results up to 15 April 2018.
7. Mineral Resource tonnages have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.

## Resource Growth





# Resource Expansion

## Select High Grade Intersections NOT in Current Mineral Resource

Zone 3 Sulphide	➤ PVRD170 5.00 m @ 9.78% Pb, 3.31% Zn, 13 g/t Ag
	➤ PVRD194 9.02 m @ 9.05% Pb, 3.80% Zn, 14 g/t Ag
Zone 5 Sulphide	➤ PVRD194 9.02 m @ 9.05% Pb, 3.80% Zn, 14 g/t Ag
	➤ PVRD196 8.42 m @ 7.07% Pb, 5.98% Zn, 9 g/t Ag
	➤ PVRD201 6.02 m @ 6.97% Pb, 4.02% Zn, 6 g/t Ag
	➤ PVRD202 5.81 m @ 7.97% Pb, 4.92% Zn, 9 g/t Ag
	➤ PVRD203 7.97 m @ 5.92% Pb, 2.53% Zn, 10 g/t Ag
	➤ PVRD207 9.86 m @ 9.86% Pb, 5.37% Zn, 13 g/t Ag & 4.65 m @ 6.21% Pb, 6.82% Zn, 10 g/t Ag

## Select High Grade Infill Intersections

Bridge Zone Sulphide	➤ PVRD191 4.33 m @ 9.73% Pb, 2.24% Zn, 34 g/t Ag
Zone 1 Transition Main Pit 1	➤ PVD172 4.33 m @ 7.16% Pb, 1.44% Zn, 10 g/t Ag
	➤ PVD173 8.30 m @ 8.49% Pb, 1.39% Zn, 8 g/t Ag
	➤ PVRD176 5.30 m @ 10.94% Pb, 6.98% Zn, 13 g/t Ag
	➤ PVD181 5.98 m @ 7.21% Pb, 4.09% Zn, 11 g/t Ag
	➤ PVD182 9.32 m @ 10.46% Pb, 2.04% Zn, 24 g/t Ag
	➤ PVD183 5.80 m @ 10.17% Pb, 6.18% Zn, 17 g/t Ag
	➤ PVD184 4.55 M @ 9.85% Pb, 3.40% Zn, 21 g/t Ag

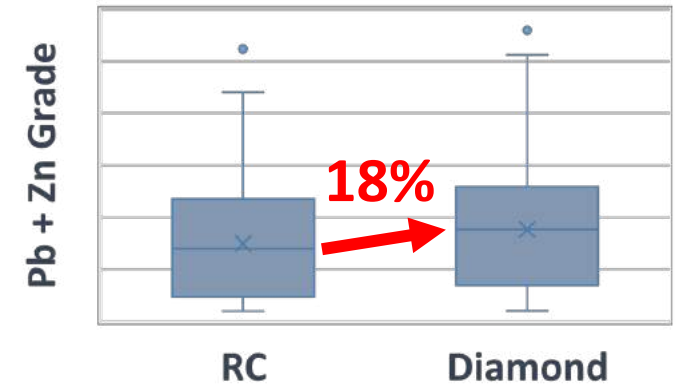


# PEA - Significant Value Levers Identified

- **Tax Cuts** : Australian Federal Announced Corporate Tax Reduction – a phased reduction from 30% to 25%, will be captured in future study updates, improving after tax NPV & IRR
- **Ore sorting test work** : the potential to reduce CAPEX, and OPEX (see Page 10)
- **Zone 5** : Inferred Mineral Resource for Zone 5 of **2.4 Mt at 4.5% Pb & 4.1% Zn NOT** included in the PEA mining inventory, independent Geological Review has been completed, tested in 2020 and 2021 with high grade intersections on new fold structure (see Page 7)
- **Over 8,000 m of drilling** to be incorporated into next Resource Update (see Page 7)
- **Resource Estimation** : Grade Boundary Definition, currently using 1% Pb + Zn, doesn't relate to geology and significantly lower than Mineral Resource cut off of 5% Pb + Zn
- **Reclassification of Transition** : Transition currently classified based on geology not metallurgical response, reclassification will result will be to some transition being classified as sulphide
- **Mine Planning** : rescheduling in-pit tails to allow earlier access to the high grade Burke Hinge Zone through the BHZ open pit
- **Hybrid Power** : 3<sup>rd</sup> Party modular, moveable solar farms of the size required for Pegmont (6MW) is now a reality, reducing CO<sub>2</sub> emissions & pre-start CAPEX. Examples: 3MW installed at Cannington Pb-Ag Mine and 10MW installed at Degussa Cu Mine

## ***Diamond Core VS RC***

**RC vs Diamond Samples Statistics**  
**Zones 1-4 & BHZ >1% Pb+Zn**



- RC = 1125 samples, mean 7.48 % Pb+Zn
- Diamond = 287 samples, mean 8.83 % Pb+Zn

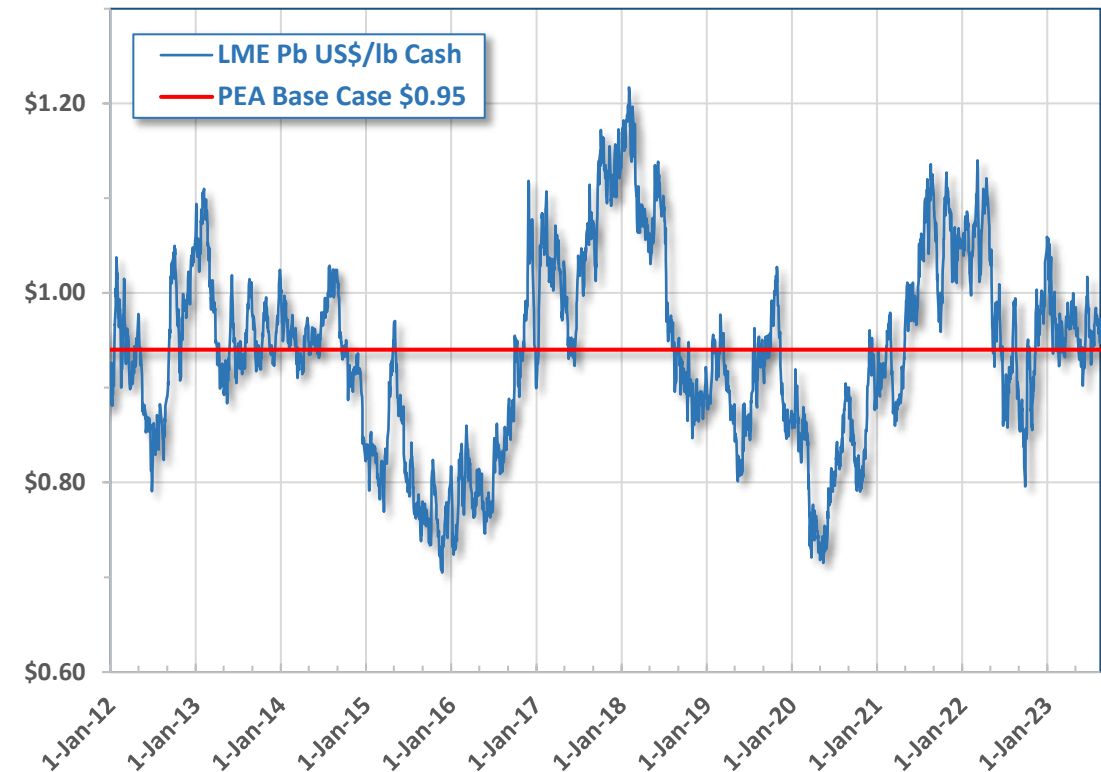
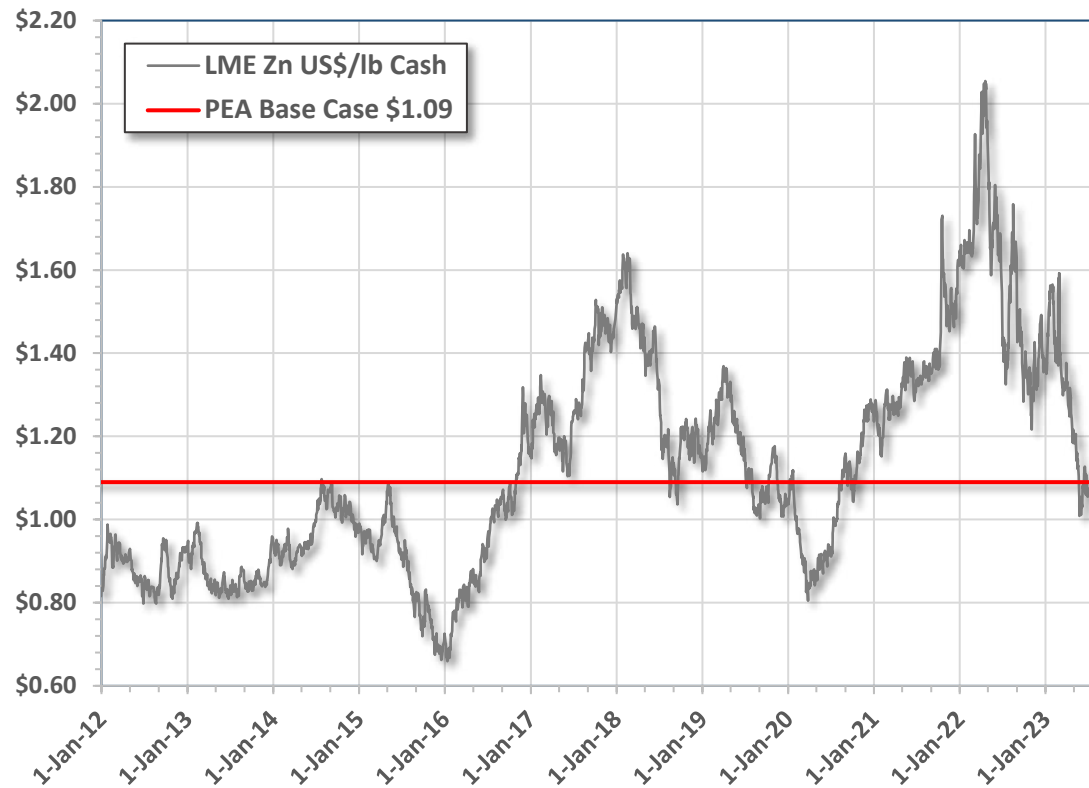
Existing RC sampling is OK, not biased, used for resource estimation.

Global statistics indicate diamond samples returns on average a 18% higher grade compared to RC.

Caused by RC sampling can only occur on regular 1 meter intervals regardless of geology / grade boundaries, it can't precisely start at the hangingwall or end at the footwall mineralized contacts like sampling or core.



# Metal Prices – Robust & Sustained



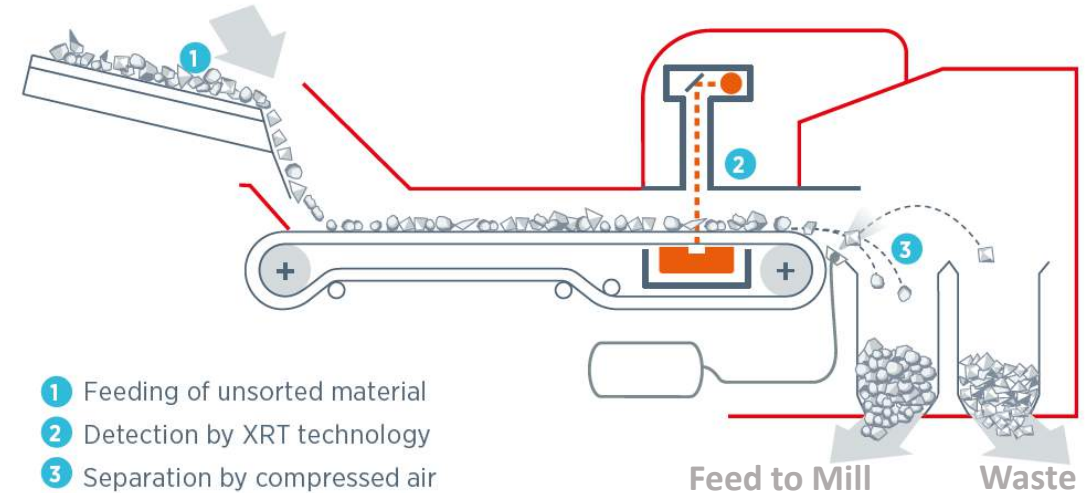
- **PEA Base Case significantly lower than current metal prices**
- **Consistent strong prices**
- **Construction, infrastructure and automobile demand driving base metal demand**
- **Mine production remains under pressure**

# Material Sorting – 2020 Test Work

- Three highly successful preliminary Material Sorting tests completed on Zone 2 (1) and Zone 5 (2) sulphide intersections at TOMRA, Sydney. Test work results on page 23
- The tests indicated that the XRT material sorter **is capable of removing external dilution**, separating diluting quartzite material from the higher grade ironstone, reducing mass and enhancing head grade.
- The tests indicated that the XRT sorter **is capable of removing internal lower grade material**, from within the higher grade ironstone interval, reducing mass and enhancing head grade.



*TOMRA COM XRT 2.0 Units at a phosphate mine (source: TOMRA)*



*Schematic of XRT Material Sorter Process (source: TOMRA)*

## Material Sorting Benefits

- Reduced mill size through mass reduction – potential reduced capital costs
- Increased head grades to mill - results in increased flotation recovery
- Reduce mill tailings – potential reduced operating costs
- Minimize water usage – potential reduced operating costs

# Exploration – Pegmont

## Bridge Zone Extensions

The highest grade zone, was a structural target discovered by Vendetta. Test possible folded or faulted down thrown block to south east block.

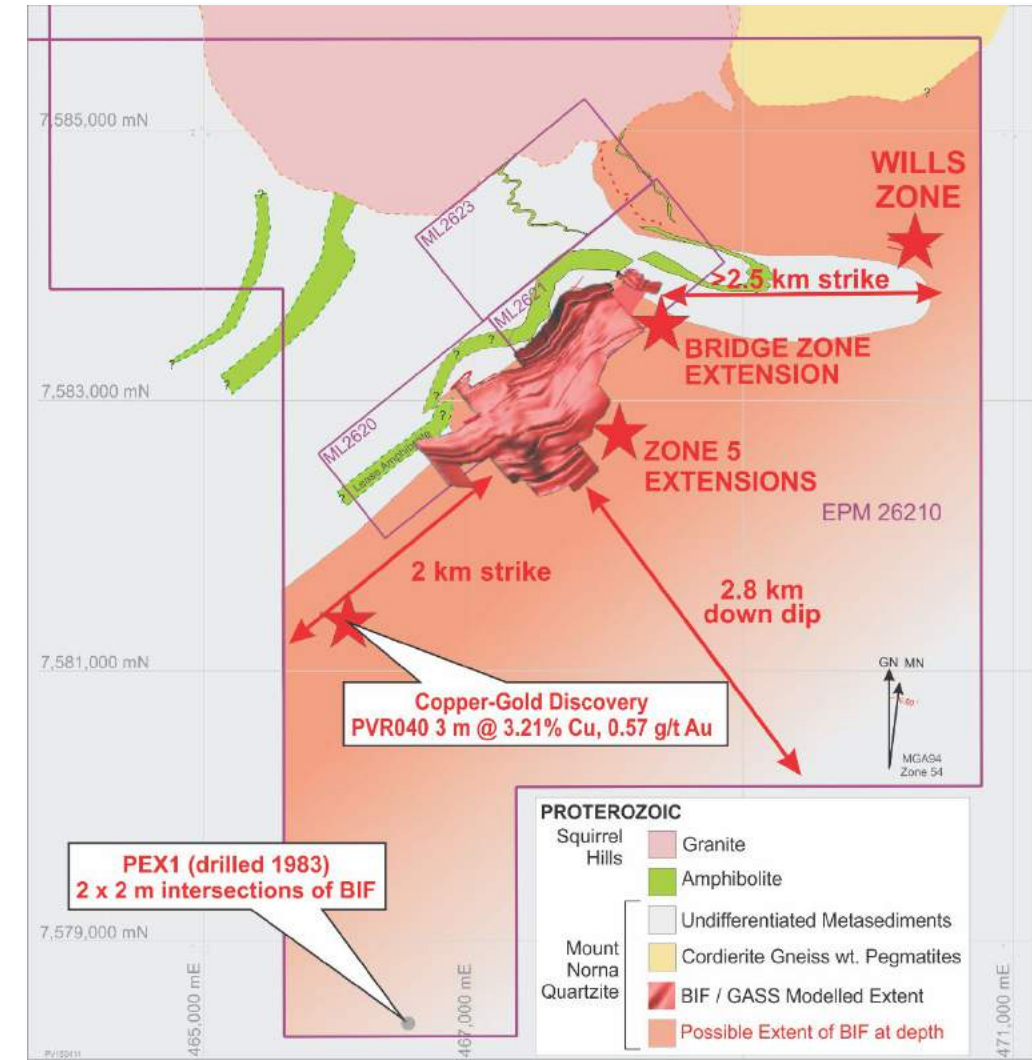
## Wills Zone

The “unfolded” position would place the Wills Zone as a down dip extension of Zone 5, supported by Pb:Zn ratios seen in the limited exploration drilling to date :

- PMRD037 5.0 m @ 3.06% Pb, 3.69% Zn
- PMRD038 3.4 m @ 2.27% Pb, 3.42% Zn

## Zone 5 Strike Extensions

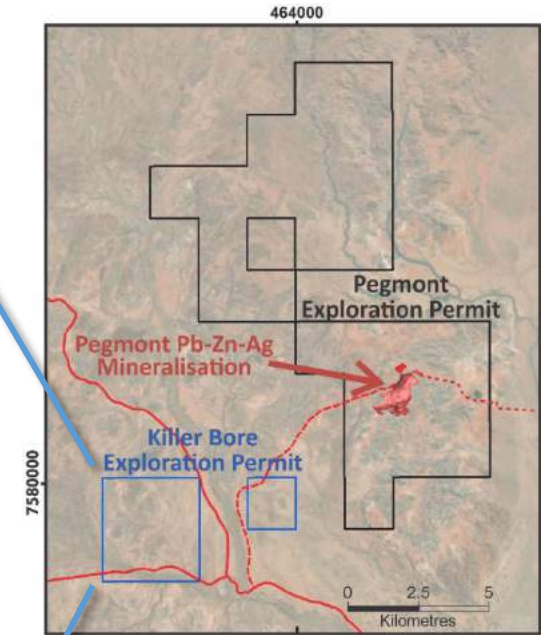
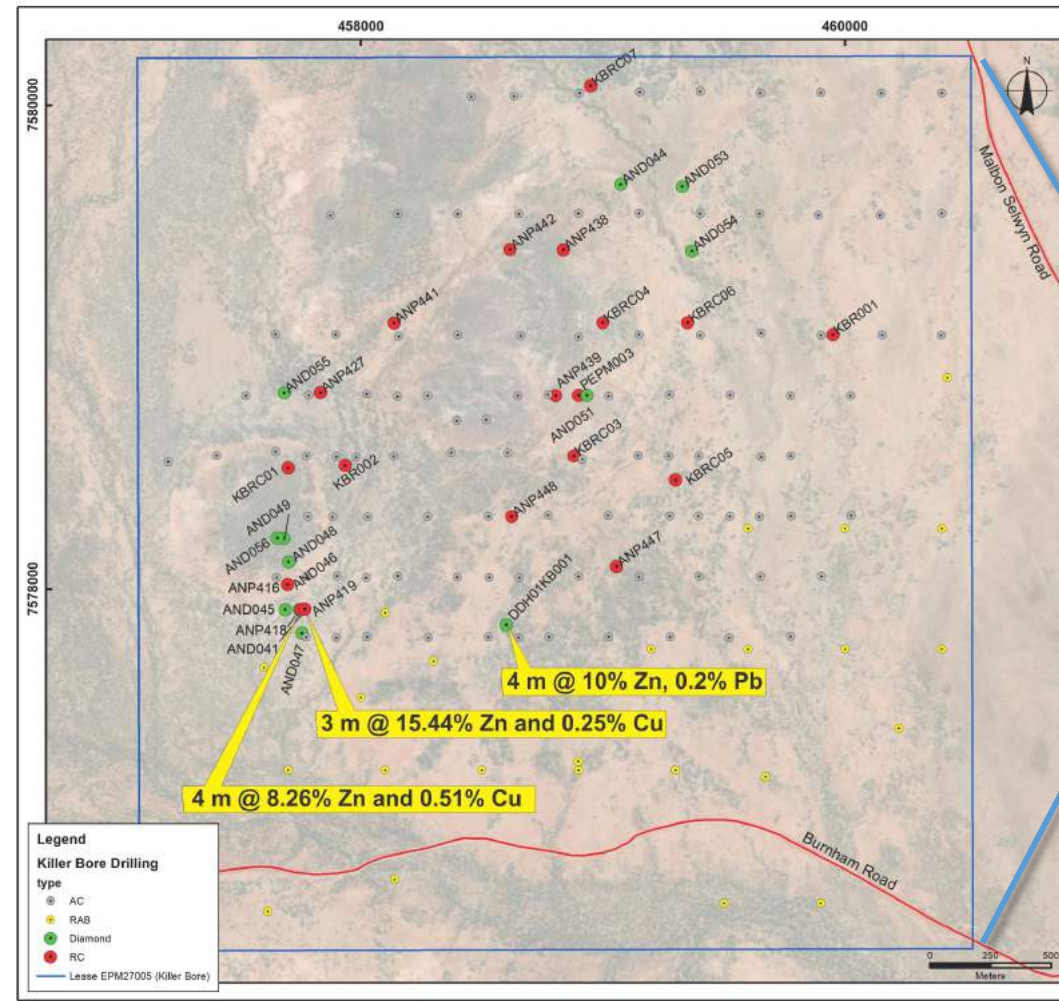
Only 500 m of a possible 2.5 km strike length has been drilled to date. New interpretation was tested in 2021 with excellent results (see page 5) building confidence in future targeting.





# Exploration – Killer Bore High Grade Zinc

- Option to acquire 100% by spending A\$602,000 over 3 years, Sandfire to retain 2% NSR Royalty
- Same style of mineralisation seen at Pegmont, interpreted to be a distal portion of the same system, closer to the vent as witnessed by high Zn, Cu and in most cases the absence of Pb
- 10 to 20 m of cover, basement geochem tested with shallow air core (AC) and rotary air blast (RAB), geochem anomalies followed up successfully by BHP and CRA with deeper RC and core holes.
- Goal is to expand on the existing high grade intersections:
  - **ANP418 4.0 m @ 8.97% Zn 0.51% Cu**
  - **AND041 3.0 m @ 15.44% Zn 0.25% Cu**
  - **DDH01KB001 4.0 m @ 10.0% Zn, 0.2% Pb**



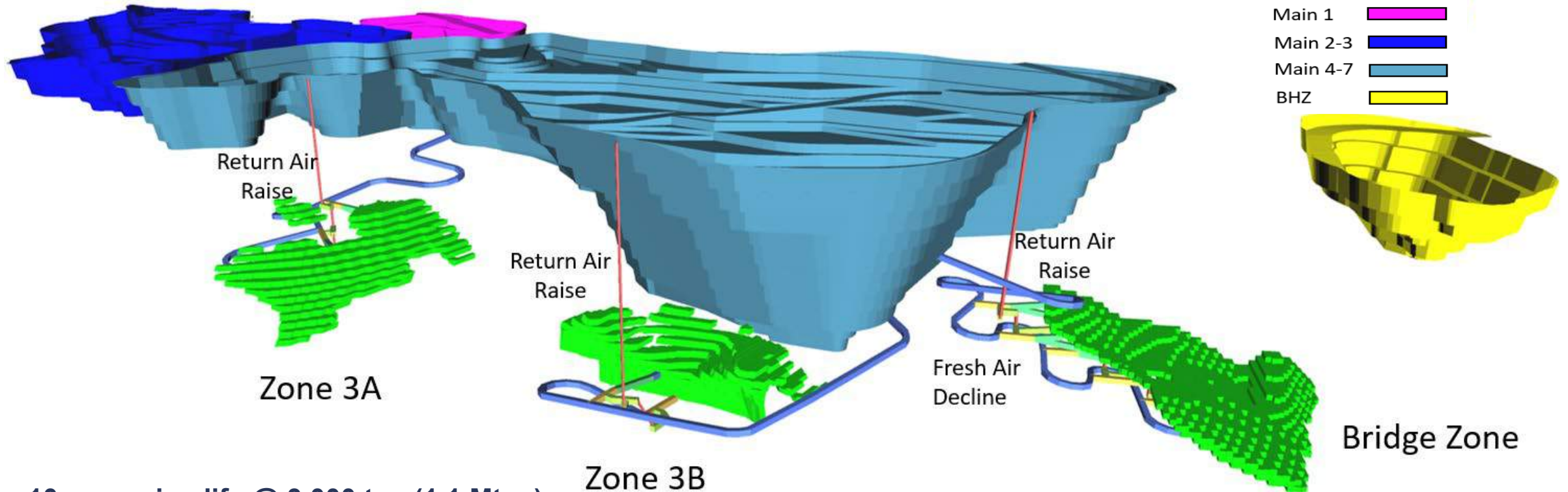
## Notes Historic Drilling

The drill data presented on this page has been prepared from annual exploration reports submitted to the Queensland Government which are now open file. The data presented, including collar locations is historical and will require verification. Past quality control measures are largely not documented in these exploration reports.

# Pegmont PEA - A Sound Basis to Enhance & Optimise

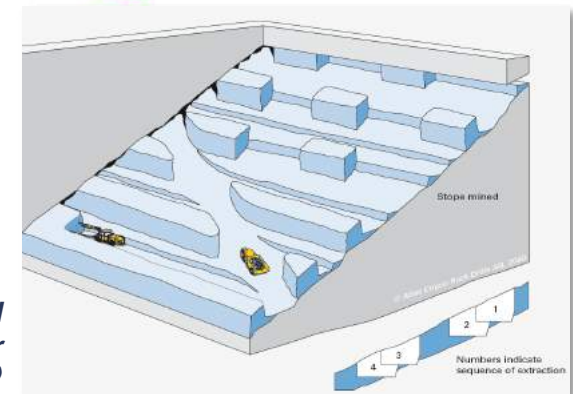


3D view of the PEA production areas, looking towards the North West



- 10 year mine life @ 3,000 tpa (1.1 Mtpa)
- 10.6 Mt Mining inventory 84% Open Pit, 16% Underground Inclined Room & Pillar
- BHZ, Main 1 & Main 2-3 used for tails storage to reduce footprint
- After tax NPV8 \$124M with a 24% IRR, value levers well understood (see page 7)
- Zone 4 & 5 not included in mining inventory

*Schematic of Inclined Room & Pillar*  
(Atlas Copco, Mining Methods)





# Corporate Structure

<b>Shares Issued and Outstanding*</b>	<b>323,189,058</b>
Warrants (\$0.09   exp. Nov. & Dec. 2023)	7,541,772
Warrants (\$0.09   exp. Feb. 2024)	5,216,667
Warrants (\$0.07   exp. Aug. & Oct. 2024)	9,282,720
Warrants (\$0.06   exp. Feb. 2025)	9,349,987
<b>Fully Diluted</b>	<b>352,580,204</b>

## **Shareholders** (estimated by management)

Management	~4%
Singapore J&Y Investment Pte Ltd.	~ 18.5%
Solitario Zinc Corp.	~4%

## **Analyst Coverage**

George Topping, Industrial Alliance

\* As at August 15, 2023



*View of Mount Lucas from the proposed processing plant location*



# Senior Management and Board of Directors

## **Michael Williams - President, CEO, Director**

Capital markets and communications. Raised significant capital funds for advanced exploration and development projects.

## **Peter Voulgaris - Director, Qualified Person**

B.Eng.(Hons), MEngSci. MAusIMM, MAIG

Geology & Mining, base & precious metal mine operations & development. Pegmont Project Manger.

## **David Baker - Director (independent)**

MBA CA

Accounting, project management, mine financing & strategic advisor.

## **Doug Flegg - Director (independent)**

MBA CFA

Capital Markets, strategic advisor.

## **Li Jiang - Director (independent , Singapore J&Y Investment Pte Ltd.)**

MBA

Private equity, finance and mining sectors.



*Refined Zinc from Korea Zinc Smelter*

# APPENDICES

- Project Comparisons
- Pegmont Geology
- Metallurgy & Material Sorting Test Work
- PEA Details



*Mt Isa, Concentrate Rail Cars*



*Mapping at Pegmont*



*Pegmont Lead Flotation Test*



*Townsville Deepsea Port*



# Clear Rerating Potential – ASX listed Peers



## Vendetta Mining Corp.

Project: 100% of Pegmont Lead-Zinc Project

**Market Capitalization: C\$19.6M**

(March 30, 2022)

**Stage: Preliminary Economic Assessment**

Category	Tonnes (Mt)	Pb (%)	Zn (%)	Ag (g/t)
Mining Inventory	10.6	5.3	2.2	8.8

### PEA 2019

- Open pit & Underground
- 1.1 Mtpa for 10 years
- CAPEX
  - Pre-start A\$170M
  - Sustaining & closure A\$59M
- OPEX \$0.71/lb payable lead
- Pre Tax: NPV8 = A\$201 IRR=31%
- Payback: 2.7 years
- Main assumptions:
  - Pb US\$0.94/lb, Zn US\$1.09/lb & Ag US\$16.50/oz
  - Exchange rate A\$:US\$ 0.75

(source: NI 43-101 compliant Technical Report titled "Pegmont Mineral Resource update and PEA" effective date 21 Jan. 2019 prepared by independent QP's J.M. Shannon P.Geo, M. Angus MAIG, D. Nussipakynova P.Geo, G. Methven P.Eng., P. Lebleu P.Eng and B. Mulvihill MAusIMM CP Met.)

## Boab Metals Ltd.

Project: 75% of Sorby Hills Lead Project

**Market Capitalization: A\$33.1M**

(March 30, 2023)

**Stage: Feasibility**

Category	Tonnes (Mt)	Pb (%)	Ag (g/t)
Proved	6.8	4.1	53.0
Probable	6.9	3.2	27.6
Total	13.6	3.6	40.2

### Pre-feasibility January 2023

- Open pit
- 2.25 Mtpa for 8 years
- CAPEX
  - Pre-start A\$2245M
  - Sustaining A\$55.2M
- OPEX: \$0.48/lb AISC
- Pre Tax: NPV8 = A\$370 IRR=35%
- Payback: 2.5 years
- Main assumptions:
  - Pb US\$1.02/lb & Ag US\$24.8 to 27.5/oz
  - Exchange rate A\$:US\$ 0.70 to 0.68

(source: ASX announcement dated 19 January 2023)

## Galena Mining Ltd.

Project: 60% of Abra Lead Project

**Market Capitalization: A\$154M**

(March 30, 2023)

**Stage: Construction Complete, first con Feb 23**

Category	Tonnes (Mt)	Pb (%)	Ag (g/t)
Proved	-	-	-
Probable	10.3	8.8	24
Total	10.3	8.8	24

### Feasibility Study 2019

- Underground
- 1.2 Mtpa for 16 years (including 33% Inferred)
- CAPEX
  - Pre-start A\$170M
  - Sustaining A\$86.8M
- OPEX C\$82/t processed
- Pre Tax: NPV8 = A\$553M IRR=39%
- Payback: 2 years
- Main assumptions:
  - Pb US\$0.92/lb & Ag US\$16/oz
  - Exchange rate A\$:US\$ 0.70

(source: Galena Mining Ltd. March 2023 Investor Presentation and Galena ASX announcement dated 22 July 2019 )



# Pegmont Geology

- Broken Hill Type Deposit : Mid Proterozoic stratiform, banded iron formation and garnet rich quartzite host, lead zinc metal zonation
- Galena and Sphalerite mineralisation, banded semi massive to massive
- Country rock is a high grade metamorphic quartzite grading out to gneisses (meta-sediments)
- Tight isoclinal folding in Zone 1 and Burke Hinge Zone
- Flat dipping through Zones 2, 3 and 4, each zone separated by large drag “Z” folds
- Zone 5, Zinc grades increasing to SW, at depth Zinc becomes dominant
- Sub-horizontal amphibolite dyke underlies Zones 1 to 4 and cuts the mineralisation at the boundary between Zones 3 and 4
- Remobilisation/concentration of Lead & Zinc mineralisation into fold structures
- Later granite intrusion in the northern end of the project area



*Sharp Contact Between Garnet Quartzite and Banded Iron Formation*

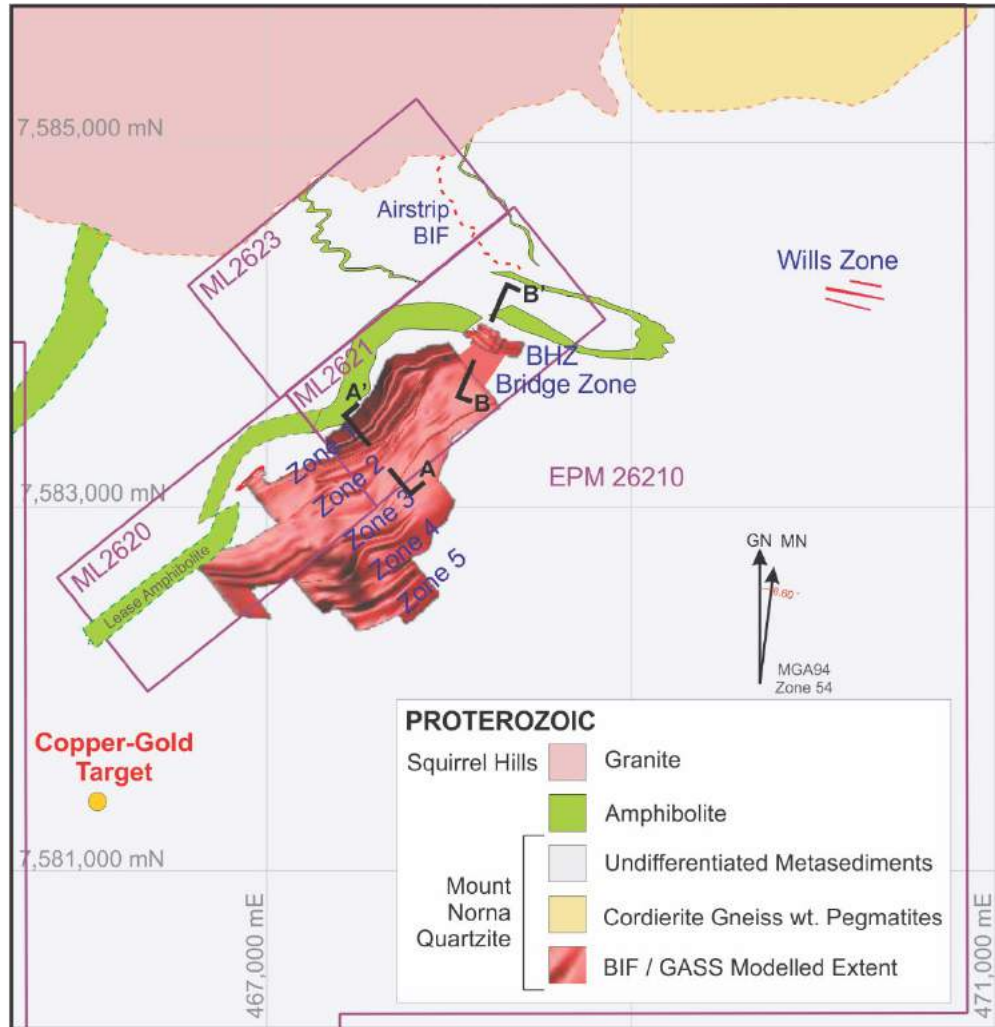


*Coarse Sphalerite –  
Zone 2 Sulphide*

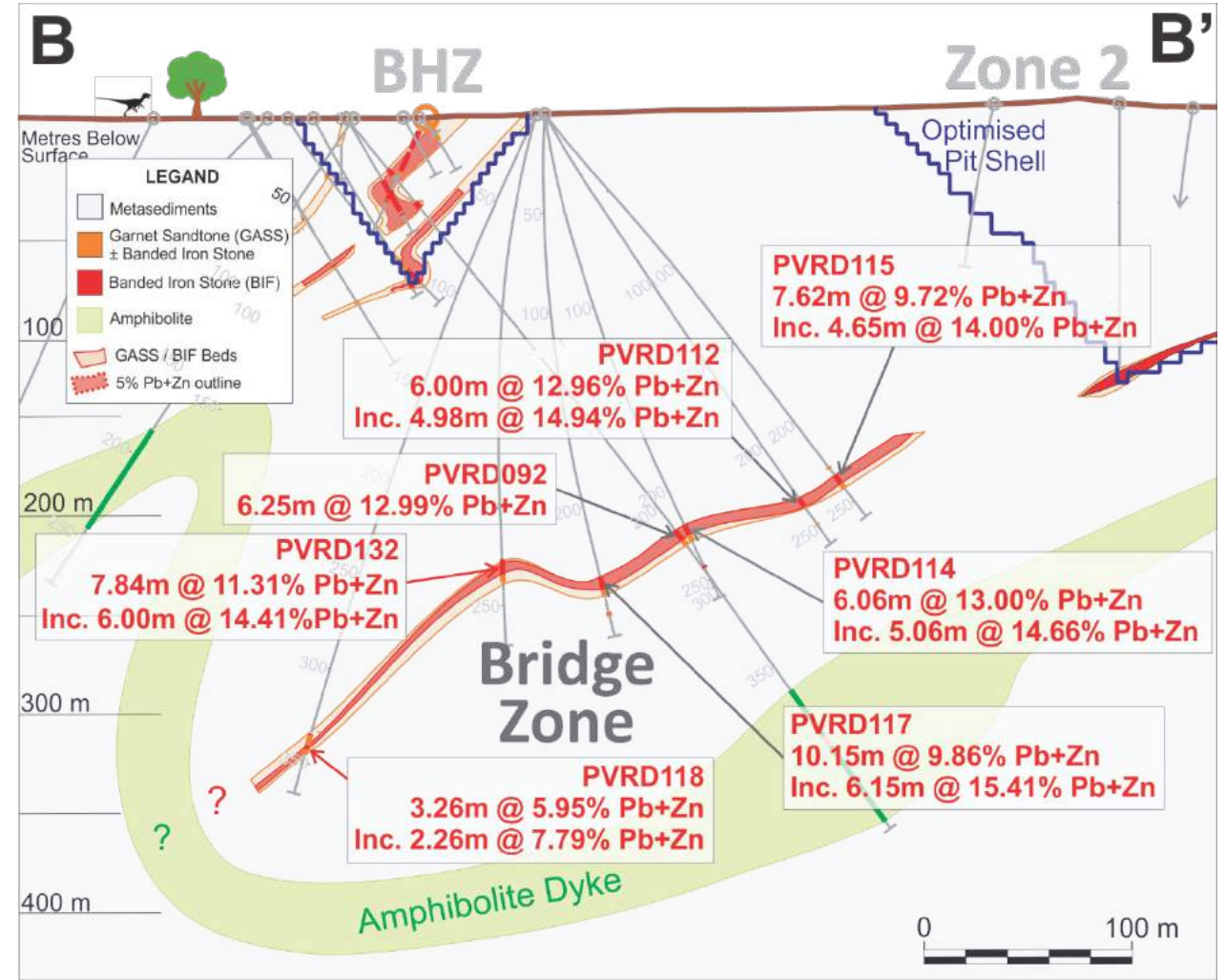


*Coarse Galena in BIF –  
BHZ Transition*

# Pegmont Geology



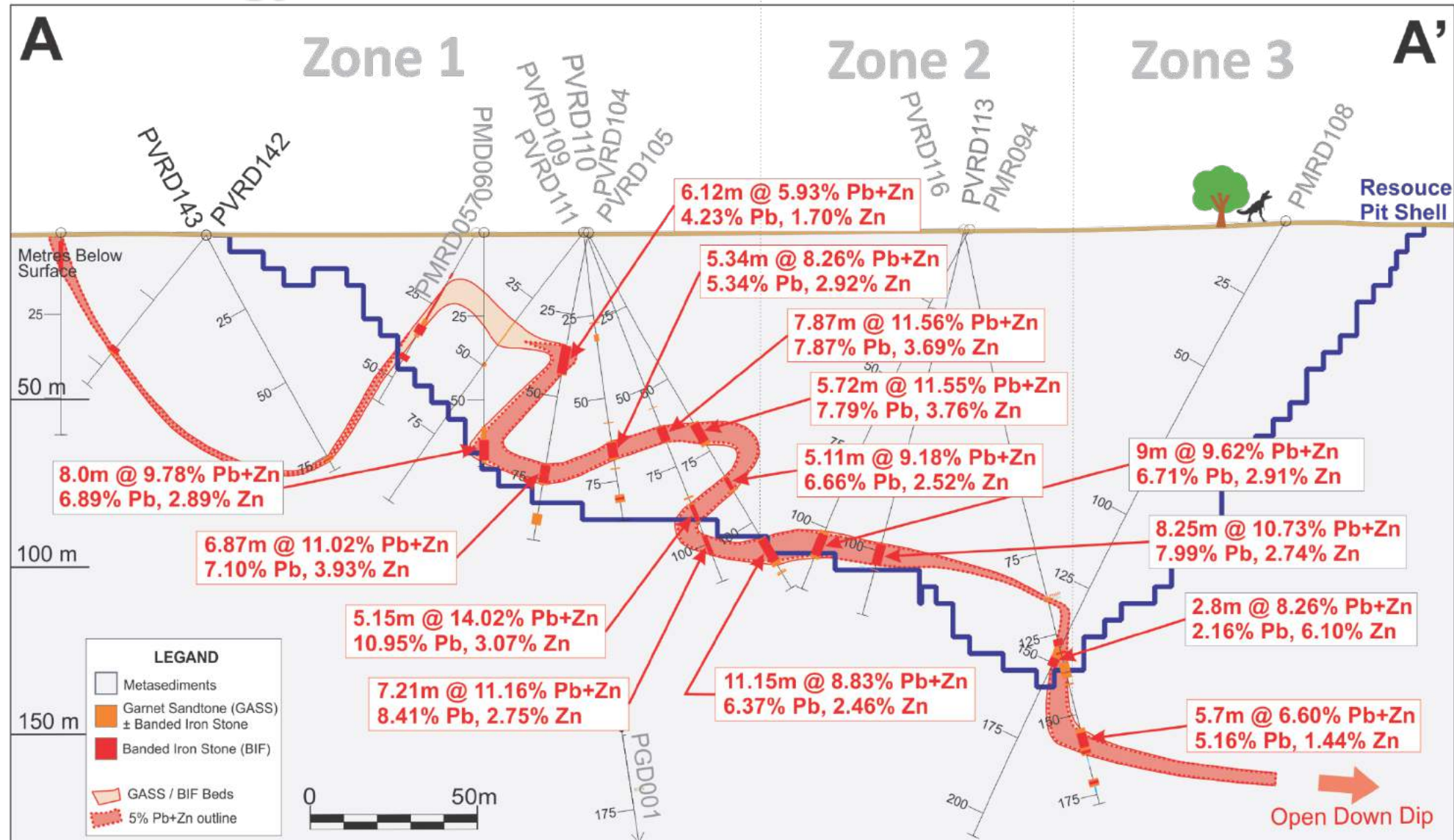
**Simplified Geology Map of Pegmont**



**Bridge Zone Cross Section Looking South East, see map page 23 for location**



# Pegmont Geology



Zones 1,2 & 3 Cross Section Looking North East, see map page 22 for location



# Metallurgy Test Work

## ALS Metallurgy Flotation Test Work

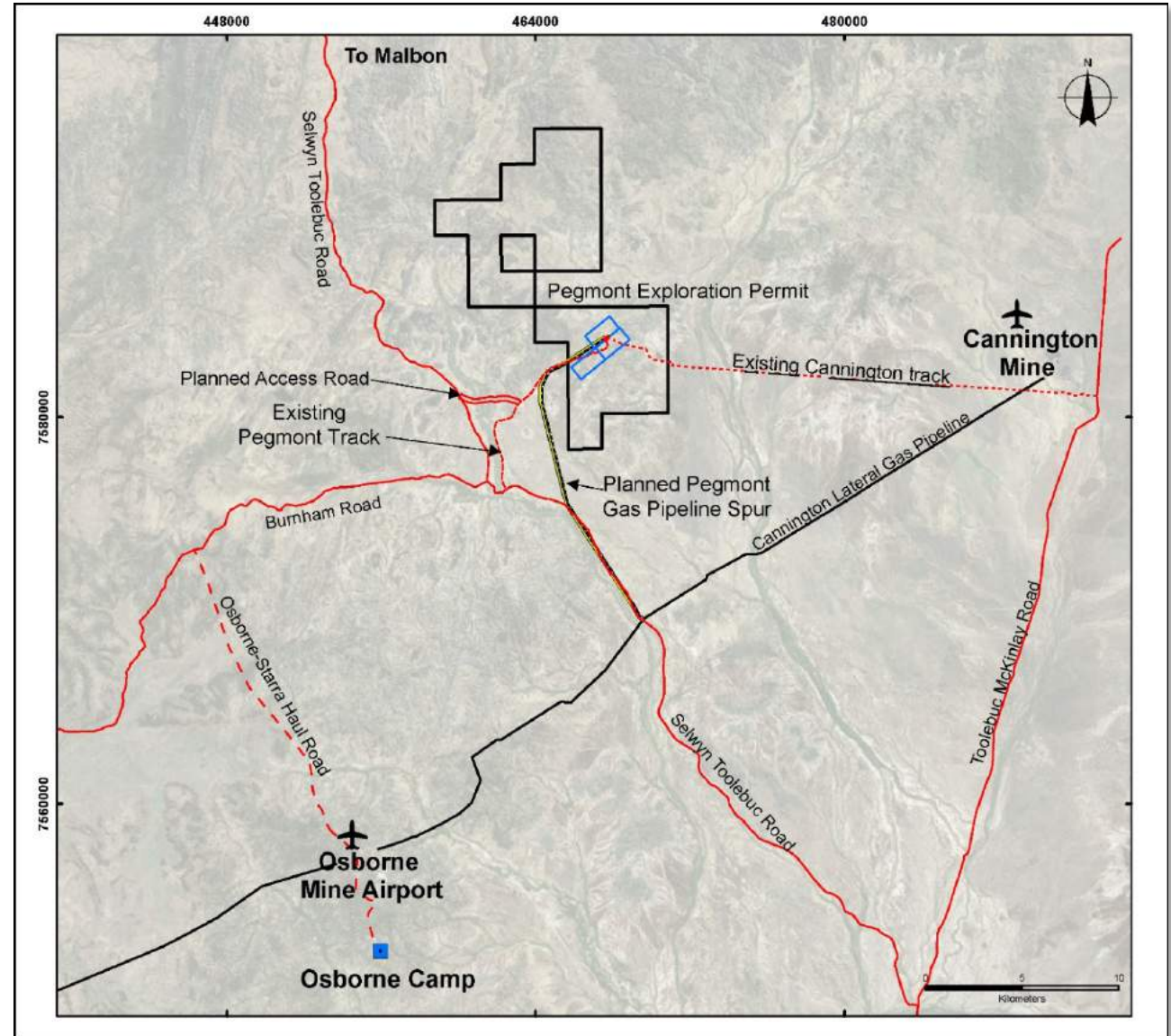
Area	Test Type	Bond Ball Mill Work Index kWh/t	Head Grades (diluted)		Lead Circuit		Zinc Circuit	
			Pb %	Zn %	Pb Recovery %	Pb Con. Grade %	Zn Recovery %	Zn Con. Grade %
Sulphide Mineralization								
Zone 1	Locked Cycle	18.4	7.92	3.34	91.8	66.3	75.5	54.5
Zone 2	Locked Cycle	20.9	7.28	3.23	90.8	67.8	71.3	54.9
Zone 3	Locked Cycle	20.1	7.42	3.04	89.7	68.2	73.7	54.8
Bridge Zone	Locked Cycle	19.1	8.80	2.49	92.7	68.0	70.4	52.3
BHZ	Locked Cycle	16.6	5.02	3.03	87.9	67.7	78.5	51.2
Zone 5 Lens B (Not in PEA Mine Plan)	Open Cycle	19.4	5.61	4.74	88.5	68.0	75.6	50.1
Zone 5 Lens C (Not in PEA Mine Plan)	Open Cycle	-	4.30	5.48	83.0	66.1	76.7	50.3
Transition Mineralization*								
Zone 1 (Stage Main Pit 4)	Locked Cycle	-	8.82	2.80	91.3	72.5	75.2	53.3
BHZ**	Open Cycle	-	3.19	2.90	80.6	57.0	19.3	48.9

## Material Sorting Preliminary Test Work

- Two holes from Zone 5, one hole from Zone 2
- Total mass tested 139.2 kg
- Mass pull (weight % of feed recovered): ranged from 44.3% to 70.6%, a weighted average of 62.3%
- Lead grade improvement : 18 to 88%, a weighted average of 42%
- Zinc grade improvement : 21 to 72%, a weighted average of 38%
- Lead recoveries ranged from 83.2% to 90.2%, a weighted average of 88.5%
- Zinc recoveries ranged from 76.4% to 92.2%, a weighted average of 85.9%

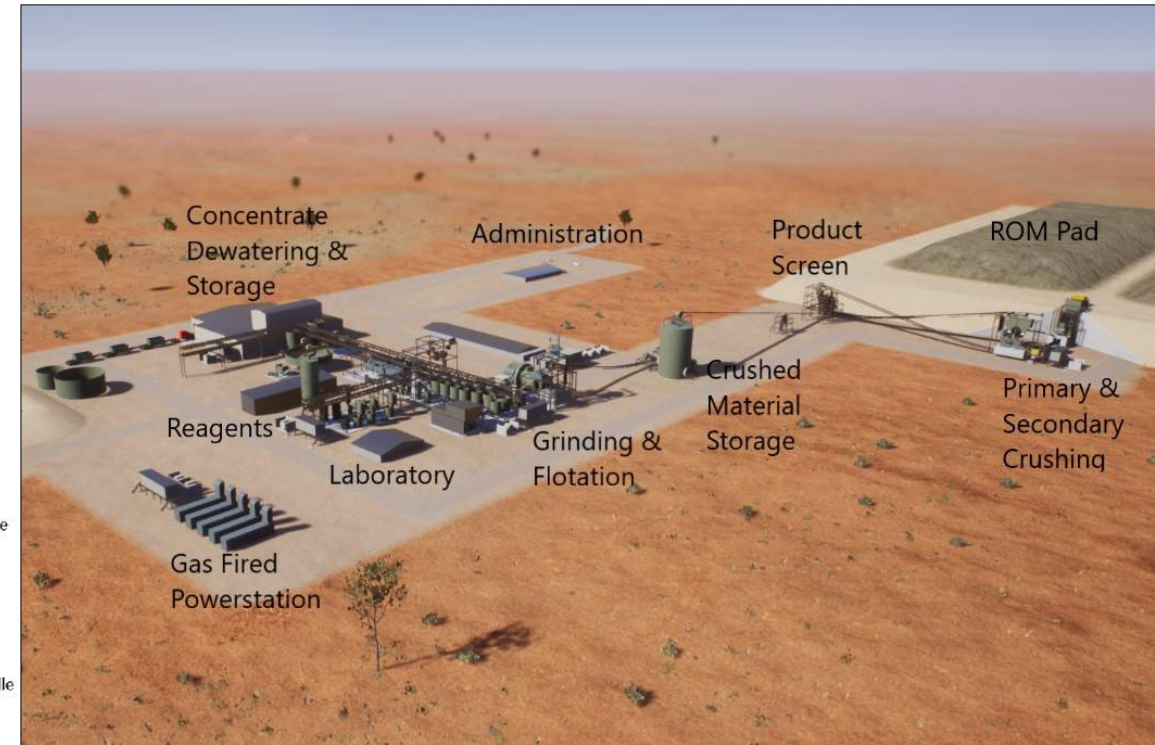
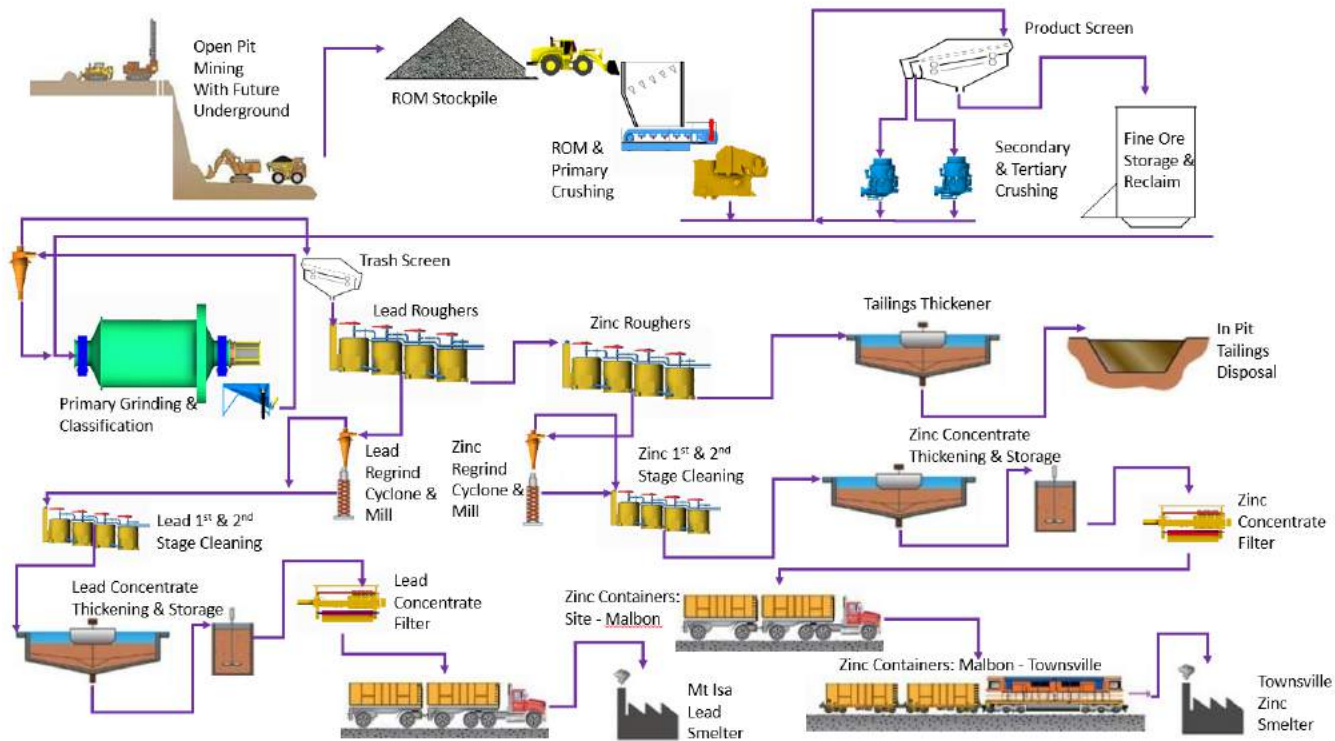
# PEA Infrastructure

- Use of Osborne Mine Camp during construction of 300 person camp at Pegmont
- Use of Osborne Mine Air Strip for Life of Operations
- Concentrate transported in half height containers, Lead to Mt Isa by road and Zinc by road to Malbon where it is loaded onto train to Townsville
- 16 km Natural Gas Pipeline Spur from Existing Cannington Lateral Gas Pipeline
- Rail line to Queensland Lead and Zinc smelters
- Maintaining optionality to transport concentrate to other Australian and Asian Lead and Zinc smelters through Townsville deep sea port
- Process water from Great Artesian Basin, 27 km south. The Great Artesian Basin is the source of process water for Cannington and Osborne.



*Project Area Infrastructure*

# PEA Process flowsheet



- GR Engineering Services design
- Conventional sulphide base metal flotation flowsheet



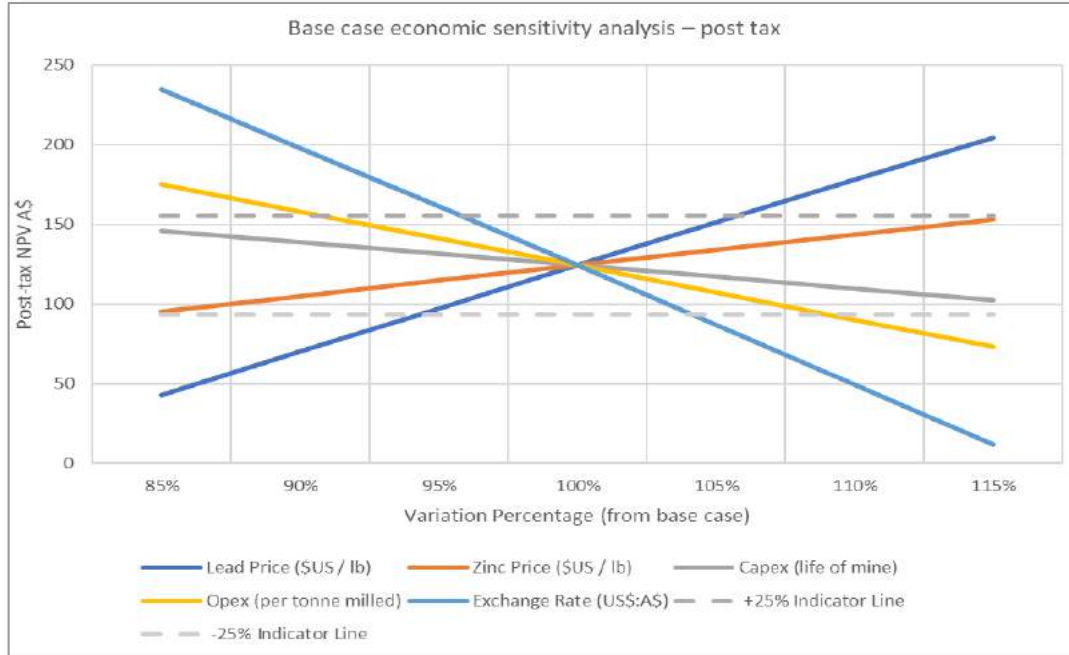
# PEA Results – A Sound Basis to Enhance & Optimise



	Base Case		Spot Case	
	Pb US\$0.94/lb, Zn US\$1.09/lb, Ag US\$16.50/oz, AUD:USD \$0.75		Pb US\$0.91/lb, Zn US\$1.18/lb, Ag US\$15.31/oz, AUD:USD \$0.71	
	Pre-Tax	Post Tax	Pre-Tax	Post Tax
NPV at 8%	\$201M	\$124M	\$249M	\$158M
IRR	31%	24%	37%	27%
Payback Period (years)	2.7	3.5	2.4	3.0
Cash cost (\$/lb payable Lead) [includes all operating costs, smelter, refining & transportation charges, net of Zinc & silver by-product revenues]	0.65		0.60	
AISC cost (\$/lb payable Lead) [includes total cash costs & all sustaining capital expenditures]	0.71		0.66	
Pre-Production CAPEX	\$170M			
Sustaining CAPEX	\$59M			
Mill throughput	1.1 Mtpa (3,000 tpd) for 10 years			
Initial Mine Life	10 years			
PEA Mine Plan Inventory	8.9 Mt Open Pit + 1.7 Mt Underground			
High rate of resource conversion to mining inventory	75%			
Average Annual Metal Production	124M lbs Lead, 50M Lbs Zinc, 298K oz Silver			
Average net smelter return (NSR)	\$135/t of material processed			

- All amounts in Australian Dollars, unless otherwise indicated

# PEA After Tax Sensitivities



**Net Present Value (\$ million) at 8% Discount**

Input	Input Factor						
	85%	90%	95%	100%	105%	110%	115%
CAPEX (life of mine)	146	139	132	124	117	110	102
OPEX	175	158	141	124	107	90	73
Exchange Rate (A\$:USD\$)	235	198	161	124	87	49	12

**Net Present Value (\$ million) at 8% Discount**

Lead Price (\$ / lb)	Zinc Price (\$ / lb)				
	0.85	0.95	1.09	1.15	1.25
0.75	(24)	(7)	16	26	43
0.85	32	49	72	82	99
0.94	84	101	124	134	151
1.05	147	164	187	197	213
1.15	204	221	244	254	270

**Base Case Net Present Value Discount Rate Sensitivities**

	NPV Before Tax (\$M)	NPV After Tax (\$M)
Undiscounted	411	288
6.0%	241	155
7.0%	220	139
8.0%	201	124
10.0%	167	99
12.0%	138	77
15.0%	103	50

# PEA Capital Expenditure & Cost

## CAPITAL EXPENDITURE

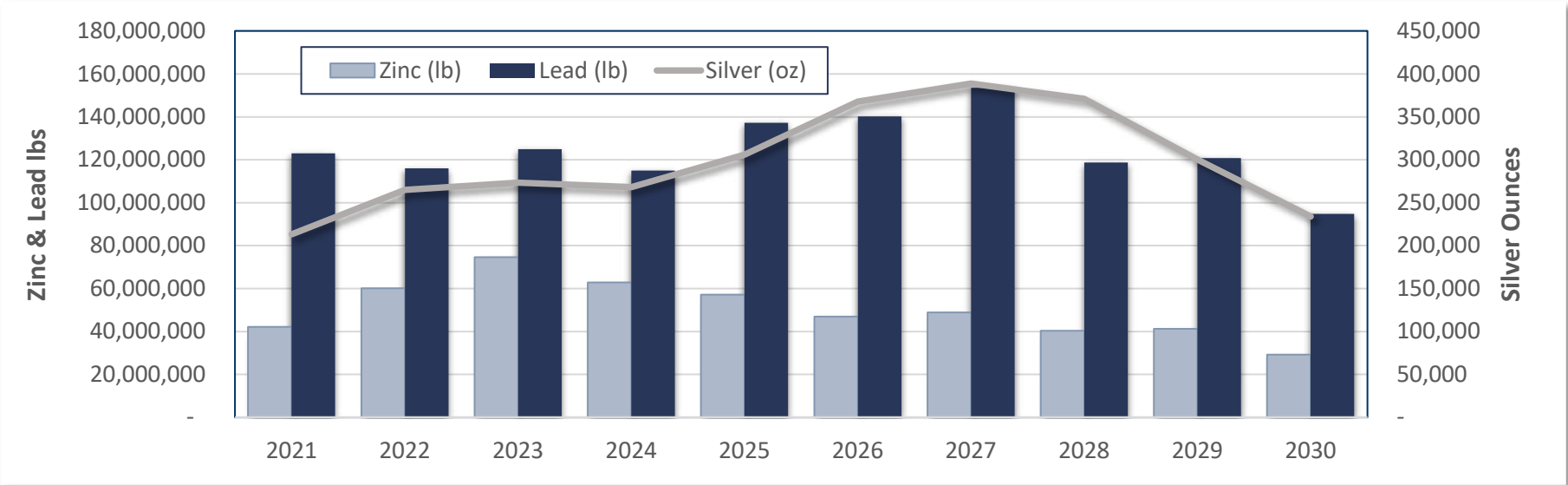
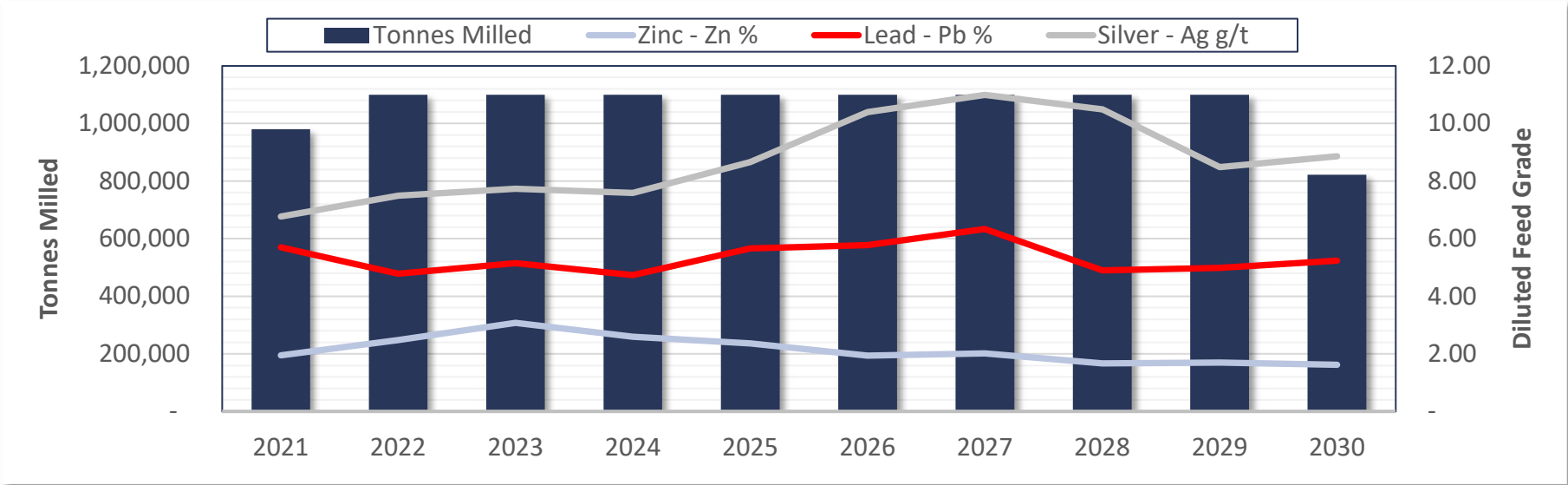
Area	Initial (\$M)	Sustaining (\$M)	Total (\$M)
Site Infrastructure (on and off site)	39.6	1.2	40.8
Mineral Processing	69.9	2.1	72.0
Mining (establishment & underground)	18.3	37.0	55.3
Project Indirects (EPCM & Owner Costs)	32.3	-	32.3
Closure	-	14.5	14.5
Contingencies (mine, process & infrastructure)	10.3	3.9	14.2
<b>TOTAL PROJECT</b>	<b>170.3</b>	<b>58.7</b>	<b>229.0</b>

## LIFE OF MINE OPERATING COST ESTIMATE

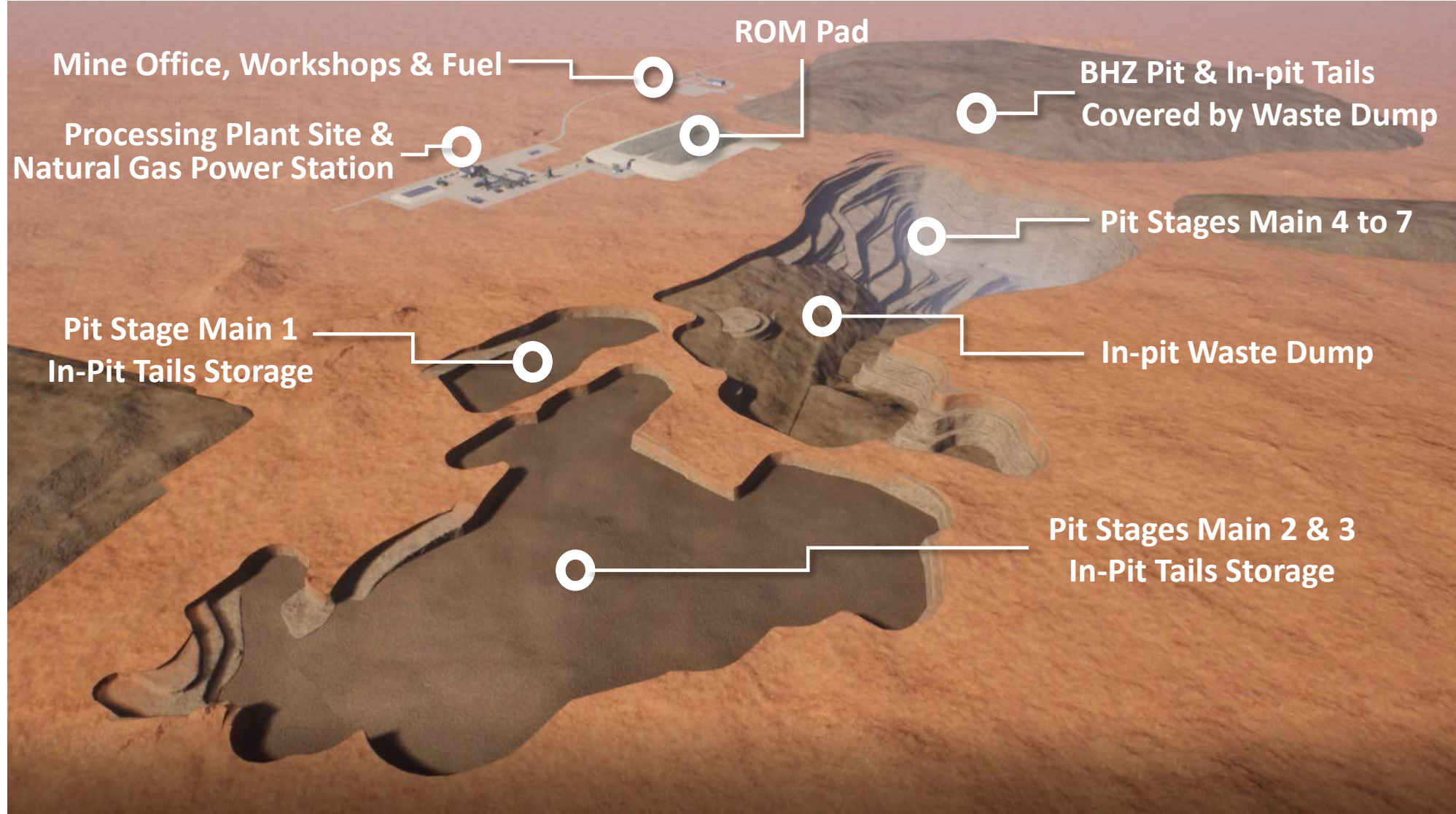
Area	Units	Cost
Open Pit Mining	\$/tonne mined	\$3.08
Underground Mining	\$/tonne mined	\$50.00
Processing	\$/tonne milled	\$26.30
Common Site G&A	\$/tonne milled	\$6.24
<b>All-In OPEX</b>	<b>\$/tonne milled</b>	<b>\$74.30</b>



# PEA Production Summary



# PEA Proposed Pegmont Site Layout at Closure



*Rendered View Looking North East*



**VENDETTA**  
MINING CORP

**TSX-V : VTT**

## **Advanced Lead-Zinc Resource Development in Australia**

[www.vendettaminingcorp.com](http://www.vendettaminingcorp.com)

Phone : +1 604 484 7855